College of Graduate and Professional Programs

Introduction

The University
Founded in 1908 and located in the center of Virginia’s famous Shenandoah Valley, James Madison University is a public, comprehensive university. The university offers programs on the bachelor’s, master’s, educational specialist and doctoral levels. The total enrollment for fall 2002 session was 15,612. This total included 14,402 undergraduate students and 1,210 students taking graduate courses or other classes beyond the baccalaureate level. The JMU student body is composed of around 58 percent women and 42 percent men. JMU has 91 major campus buildings on 472 acres, including a 31-acre, off-campus farm. Nearly $143 million worth of new facilities and improvements have been added since 1975. JMU offers students a full program of extracurricular and social programs, as well as a diversified program of intercollegiate and intramural athletics.

Location
JMU is located in Harrisonburg, Va., a progressive city of 34,000. The area is flanked by the Blue Ridge Mountains on the east and the Allegheny Mountains on the west. The JMU campus is located just off Interstate 81 and is a two-hour drive from Washington, D.C. and Richmond, Va. and one hour from Charlottesville, Va. The College of Graduate and Professional Programs is located in the Grace Street House on West Grace Street.

History
In its 95-year history, JMU has grown from a state normal and industrial school for women to today’s coeducational comprehensive university. In 1914, the name of the university was changed to the State Normal School for Women at Harrisonburg. The university became the State Teachers College at Harrisonburg in 1924 and continued under that name until 1938, when it was named Madison College in honor of the fourth president of the United States. In 1977, the name was changed to James Madison University.

The College of Graduate and Professional Programs
The JMU Graduate School was established in 1954, when the State Board of Education authorized the university to offer programs leading to the Master of Science in Education degree. In October 2001, the Graduate School and the Continuing Education Office joined to form the College of Graduate and Professional Programs. JMU graduate programs have continued to grow steadily.

The College of Graduate and Professional Programs is authorized to offer graduate programs leading to master’s degrees, Educational Specialist degrees, Doctor of Philosophy degrees and Doctor of Psychology degrees.

Mission
The mission of the College of Graduate and Professional Programs is to:
- Facilitate the development, growth and maintenance of graduate programs of distinction.
- Facilitate the development, growth and maintenance of high quality continuing
professional development programs for non-degree seeking students.

- Establish, implement and maintain a high standard of excellence in graduate and professional programs at JMU.
- Serve the needs of the Commonwealth of Virginia, and those of national and regional graduate and non-degree seeking students.
- Support the continuation and development of diverse, innovative graduate and professional programs by building on existing graduate and undergraduate strengths.
- Encourage and facilitate students in their development of strengths in critical and creative thinking, communication, and applied skills.

The mission of the College of Graduate and Professional Programs is in concert with the overall mission of the university, which states,

We are committed to preparing students to be educated and enlightened citizens who will lead productive and meaningful lives.

**Timeline of the James Madison University College of Graduate and Professional Programs**

- 1954    The State Board of Education authorized the university to offer programs leading to the Master of Science in Education.
- 1960    The Virginia Board of Education authorized the university to offer programs leading to the Master of Science degree with a major in biology.
- 1973    Master of Arts in Teaching and the Master of Education degrees were authorized.
- 1977    Master of Science in Health Sciences was authorized.
- 1979    Master of Fine Arts degree was authorized.
- 1980    Master of Music degrees, Master of Public Administration degrees and Educational Specialist degrees in school psychology were authorized.
- 1984    Master of Science in Computer Science was authorized.
- 1996    Doctor of Psychology degree was authorized.
- 2002    State Council Of Higher Education of Virginia authorized the first Doctor of Philosophy degree.

**Administration of the College of Graduate and Professional Programs**

The office of the dean of the College of Graduate and Professional Programs has academic responsibility for all issues of graduate education at JMU. In addition, the college oversees all continuing professional development programming.

Significant in the organization and administration of the College of Graduate and Professional Programs are the university’s Graduate Council, the graduate faculty as a body, the Graduate Student Organization and the dean of the college.

**The Graduate Council**

To accomplish the goals and objectives of the college, the Graduate Council, under the leadership of the dean of the College of Graduate and Professional Programs, develops broad policies and procedures. Included in the policies and procedures needing Graduate Council approval are:

- Graduate admission policies and procedures.
- General academic standards of graduate study.
- Research standards for graduate students and graduate faculty members.
- General procedures for the evaluation of graduate students.
- Addition of new graduate programs.
- Deletion of existing graduate programs.
- Addition or deletion of graduate courses.
- Establishment of appointment standards for graduate faculty.
- Appointment of graduate faculty.
Graduate Council Membership

- Dean of the College of Graduate and Professional Programs, chair
- Coordinator of each graduate program (or representative)
- Two graduate student representatives, at least one of whom will represent the Graduate Student Organization
- Representative from the JMU library system
- Representative from the division of Academic Affairs

Graduate Faculty Appointments

The graduate faculty hold a position of honor at JMU. Graduate faculty membership is reviewed every six years. The minimum criteria for achieving or maintaining graduate faculty status is:

- Possession of appropriate terminal degree in his/her field.
- Evidence of current scholarly productivity (within the last six years) as appropriate for his/her field.
- Evidence of successful teaching at the graduate level within the last six years. If this is the only criterion missing, the individual may be approved as graduate instructor and be recognized as graduate faculty with a memo from the department after the teaching semester criterion is met.

The minimum criteria for approval as graduate instructor status is:

- Possession of appropriate master’s degree in his or her field, preferably working toward appropriate terminal degree. If this is the only criterion missing, the individual may be approved as graduate instructor and be recognized as graduate faculty with a memo from the department when the criterion is met.
- Evidence of current scholarly productivity (within the last six years) as appropriate for his or her field.
- Evidence of successful teaching at the undergraduate level within the last six years.

The above minimum criteria for graduate instructor must be met for any faculty member who is to teach graduate courses at the 500-level or above. Through the Graduate Council, these faculty members assist the dean in developing general policies and administrative procedures for graduate programs. The Office of the dean of the College of Graduate and Professional Programs, assisted by the Graduate Council and the graduate faculty, have responsibility for final approval of graduate degrees to be awarded.

JMU Libraries

Carrier Library
Carrier Library Circulation
Phone: (540) 568-6150
Web site: [http://www.lib.jmu.edu](http://www.lib.jmu.edu)
Carrier Library Reference Desk Phone: (540) 568-6267

Music Library
Web site: [http://www.lib.jmu.edu/music](http://www.lib.jmu.edu/music)
Phone: (540) 568-6041

CISAT Library Services
Phone: (540) 568-2731

JMU Libraries, consisting of Carrier Library, the Music Library and CISAT Library Services, support research, study and instruction in the use of information resources at JMU. The Libraries house more than 700,000 titles, including books, government documents, periodicals and audiovisual materials, and nearly a million microform pieces. As an authorized U.S. Government Document Depository, Carrier Library receives thousands of selected documents on a regular basis throughout the year.
Along with subscriptions to more than 5,400 periodicals, full text articles from thousands of periodicals are provided online through networked computers as a result of membership in VIVA, the Virtual Library of Virginia.

In addition, the Libraries provide delivery of additional journal titles through a document delivery service. Items not available within the Libraries or through online resources can be retrieved through borrowing arrangements with virtually any academic library in the country.

The library Web site, [http://www.lib.jmu.edu](http://www.lib.jmu.edu), serves as a gateway to the services and collections of the JMU Libraries, as well as local and worldwide information resources. The Web site provides access to the online catalog (LEO), more than 200 electronic databases, and subject guides which list and describe the most important print and electronic sources in each field of study. Services such as electronic reference and Interlibrary Loan are also made available via the library Web site. More than 100 personal computers are provided in the public areas of the Libraries. Most of the resources made available on the library Web site are accessible from any computer on campus, and many are accessible from remote locations.

One of the Libraries' principal goals is to educate users, especially students, by providing them with lifelong learning skills that will enable them to find, use and evaluate information in all formats. Self-instruction modules, entitled “Go for the Gold,” are available online and supplemental instruction sessions are offered in library classrooms. Reference librarians are available, on a walkup basis or by appointment, to answer questions and assist students with research.

The liaison program links a librarian to each academic unit. Liaison librarians provide a wide variety of services, including library instruction for course-related activities, collection development and consultation with individual faculty members and students. The Music Library serves the students and faculty members of the School of Music, as well as offering its specialized resources to the greater university community. CISAT Library Services serves the needs of students and faculty on the east campus primarily through electronic resources, reference service and document delivery.

### Media Resources

**Phone:** (540) 568-6610  
**Web site:** [http://www.lib.jmu.edu/media/](http://www.lib.jmu.edu/media/)

Media Resources provides teaching and learning support to faculty, staff and students through hardware and software available to users of classrooms and other learning facilities. Technical services staff coordinate the development and perform the installation and maintenance of technology systems in general classrooms and many special facilities. They also consult on instructional technology projects and purchases undertaken by other units. Portable equipment is provided for loan and use in locations without technology. The staff offer training support for users of all installed and portable equipment, as well as repair services for non-computer media technology owned by the campus.

The Media Center in Carrier Library acquires and houses commercial educational media in video, audio and computer software formats for instruction and study by faculty, staff and students. Faculty and staff can also use the center's media rental service for items not in its collections, and its reference service to locate these software resources. The center also facilitates the scheduling and taping of satellite programming, and distributes selected campus-wide software such as Microsoft Office, SPSS and other applications in coordination with IT Computing Support.

### Center for Instructional Technology

**Phone:** (540) 568-7061  
**Web site:** [http://cit.jmu.edu/cit/](http://cit.jmu.edu/cit/)

The Center for Instructional Technology (CIT) is a central resource for the development and exploration of instructional technologies. CIT staff and student associates are
available to serve faculty and staff on a walk-in basis or by scheduling an appointment for focused assistance. CIT staff work with faculty on instructional planning, design of instructional materials, production of instructional materials and coordination of resources for project implementation. In the walk-in production facility, faculty, staff and students can check out digital cameras, master a CD-ROM, scan flat art and 35mm slides, and create color prints, transparencies, digital graphics, publications, classroom presentations and Web pages. In addition, a technology teaching station is available to practice professional and classroom presentations.

The center is also available for JMU students. Students assisting faculty members with the development of materials may use the center during open hours after the requesting faculty member has signed an authorization form. Students working on class projects may use the center during evening hours.

The center offers a variety of faculty development opportunities including hands-on workshops, in-depth technology concentrations, informal discussions and scheduled project support sessions. The center’s instructional technology grants program, mGrants, encourages faculty to develop and implement creative methods of instruction. These grants provide faculty with consulting services, support services and funding to design and develop course materials, experiment with new teaching models and promote active learning.

The center provides a multi-platform environment of PC and Macintosh workstations. Color and laser printers are available. The center also houses a CD-ROM library of rights-cleared digital photographic images, black and white clip art and color images of places, people and JMU events. Sound and digital video clips are also available.

**Distributed and Distance Learning Services**

Phone: (540) 568-7061  
Web site: [http://ddls.jmu.edu](http://ddls.jmu.edu)

Distributed and Distance Learning Services (DDLS) is a support facility for online learning activities at JMU. This support unit works with faculty and other stakeholders in the provision of distributed and distance learning courses, academic programs offerings and online certification opportunities. DDLS supports faculty members with a variety of services, including training, online resources and consulting. DDLS collaborates with other university divisions to provide a one-stop gateway to services for the university’s distance learning students. DDLS hosts the university’s online learning site, JMUOnline.

**Computing Support**

Web site: [http://www.jmu.edu/computing/support/](http://www.jmu.edu/computing/support/)

The university offers many computing services for students, faculty and staff. In addition to several computing systems for administrative purposes, the university also operates two central computing systems for general use: a VMS system and an HP/Unix system. These systems have access to electronic mail, bulletin boards, the Internet and the campus-wide information system. They also serve personal Web pages.

A dozen computing labs with a total of more than 300 Windows and Macintosh computers are scattered throughout campus. They have a variety of word processing, spreadsheet, graphics, database and statistical software. All lab computers are connected to the campus network and have access to central computing systems, the Campus Wide Information System and the Internet.

JMU’s Campus Wide Information System integrates a collection of online information relevant to JMU and its community. Academic, administrative, event and directory information is found in the CWIS.

**Campus Network**

The university’s campus network connects most buildings on campus for high-speed data communications. About 25 file servers and lab computers for faculty and staff members provide extended disk space, shared software and data files, and shared hardware, such as printers. Any computer connected to the campus network is also connected to the Internet.

**The HelpDesk**

Phone: (540) 568-3555  

The HelpDesk is a troubleshooting hotline and information desk. HelpDesk consultants respond to questions and problems from the JMU community on a wide range of computing topics. The HelpDesk is located in Frye Hall. It can be reached by phone at (540) 568–3555, by e-mail at help_desk@jmu.edu and through the Campus Wide Information System home page. Many guides and handouts are available online and some are also available in print from the HelpDesk.
Graduate Calendar

For detailed dates and times regarding payment and adjustment of tuition and fees, registration for courses and making course adjustments, see the Registration and Student Record Services Handbook or http://ecampus.jmu.edu.

Fall Semester

August 25, Monday
First day of classes.

September 12, Friday
Last day to withdraw from the university with cancellation of tuition charges and refund.

September 30, Tuesday
Last day to submit an application for a Graduate Degree form to the College of Graduate and Professional Programs if graduation requirements are to be met in December 2003.

October 10, Friday
First block courses end.

October 11, Saturday
Homecoming.

October 13, Monday
Second block courses begin.

October 17, Friday
First semester holiday. Classes do not meet.

October 31- November 2, Friday-Sunday
Parent’s Weekend.

November 3, Monday
Registration begins for 2004 spring semester.

November 14, Friday
Comprehensive examination deadline.

November 26, Wednesday
Thanksgiving vacation begins.

December 1, Monday
Classes resume.
Incomplete work (“I”) due to instructor for course work taken the previous term.

December 2, Tuesday
Thesis/Dissertation/Practicum due to the College of Graduate and Professional Programs.

December 5, Friday
Last day of classes.
Deadline for comprehensive examination written results to be submitted to the College of Graduate and Professional Programs.
Incomplete work (“I”) changes due to the Office of the Registrar.
December 8-12, Monday-Friday
Final examinations.

December 12, Friday
Deadline for completion of course work for December graduates.
Graduation. Commencement exercises 3 p.m., Convocation Center.

Spring Semester

January 12, Monday
Classes meet as scheduled.

January 19, Monday
Martin Luther King Jr. Day.
Classes do not meet.

January 30, Friday
Last day to withdraw from the university with cancellation of tuition charges and refund.

February 17, Tuesday
Last day to submit Application for a Graduate Degree form if graduation requirements are to be met in May, or if requirements are to be met by the end of 2004 summer session to participate in May graduation.
Student Assessment/Faculty Assistance (no classes 8 a.m.-4 p.m.).
Evening classes (those beginning 4 p.m. or later) meet as scheduled.

March 2, Tuesday
Third block courses end.

March 8-12, Monday-Friday
Spring Break.
Classes do not meet.

March 15, Monday
Classes resume.
Fourth block courses begin.

March 17, Wednesday
James Madison Day.

March 22, Monday
Registration for 2004 summer session begins.

April 6, Tuesday
Registration begins for 2004 fall semester.

April 9, Friday
Deadline for completion of comprehensive examinations.

April 16, Friday
Incomplete work (“I”) due to instructor for course work taken the previous semester.

April 21, Wednesday
Thesis/Dissertation/Practicum due to the College of Graduate and Professional Programs.

April 30, Friday
Last day of classes.
Deadline for comprehensive examination written results to be submitted to the College of Graduate and Professional Programs.
Incomplete work (“I”) changes due to the Office of the Registrar.

May 3-7, Monday-Friday
Final examinations.

**May 7, Friday**
Deadline for completion of course work for May graduates.

**May 8, Saturday**
Graduation.
Commencement exercises.

**Graduate 2004 Summer Session**

**Twelve-Week Term**

**May 17, Monday**
Registration and fee payment. Classes meet as scheduled.

**May 31, Monday**
Holiday. Classes do not meet.

**July 5, Monday**
Holiday. Classes do not meet.

**August 6, Friday**
Final examinations for twelve-week term.
Deadline for completion of course work for August graduates.
Incomplete work ("I") changes due to the Office of the Registrar.

**Eight-Week Term**

**June 14, Monday**
Registration and fee payment. Classes meet as scheduled.

**July 5, Monday**
Holiday. Classes do not meet.

**August 6, Friday**
Final examinations for eight-week term.
Deadline for completion of course work for July graduates.
Incomplete work ("I") changes due to the Office of the Registrar.

**First Six-Week Term**

**May 17, Monday**
Registration and fee payment. Classes meet as scheduled.

**May 31, Monday**
Holiday. Classes do not meet.

**June 25, Friday**
Final examinations for six-week term.
Incomplete work ("I") change due to the Office of the Registrar.

**Second Six-Week Term**

**June 28, Monday**
Registration and fee payment. Classes meet as scheduled.

**July 5, Monday**
Holiday. Classes do not meet.

**August 6, Friday**
Final examinations for six-week term.
Incomplete work ("I") change due to the Office of the Registrar.

**Tentative 2004 Fall and 2005 Spring Semesters**
August 23, Monday
Classes meet as scheduled.

October 15, Friday
Fall Break

December 10, Friday
Fall semester ends.

January 10, Monday
Spring semester begins.

March 7-11, Monday-Friday
Spring Break

May 6, Friday
Spring semester ends.

Important Dates for All Summer Sessions 2004

June 10, Thursday
Last day to submit an application for a Graduate Degree form to the College of Graduate and Professional Programs if graduation requirements are to be met in August 2004.

July 1, Thursday
Comprehensive examination deadline.

July 23, Friday
Thesis/Dissertation/Practicum due to the College of Graduate and Professional Programs.

August 6, Friday
Deadline for completion of all course work for August graduates.
Incomplete work ("I") changes due to the Office of the Registrar.
Admission to College of Graduate and Professional Programs

Dr. N. William Walker, Dean

Telephone: (540) 568-6131
Fax: (540) 568-7860
Web site: http://www.jmu.edu/cgapp

Admission Requirements

All applicants to individual graduate programs at JMU must first satisfy the general application requirements of the College of Graduate and Professional Programs. These are:

- Graduation from a regionally accredited college or university.
- Satisfactory grade point average.
- Satisfactory test scores from an appropriate, national standardized test, such as the Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT) or Miller Analogy Test (MAT). Consult the academic programs for specific entry test requirements.
- Official transcripts from all colleges or universities attended.

Once these requirements are met, each student’s application materials are then sent to the individual graduate program. An application is not considered complete until all required credentials and supporting documents have been received by the College of Graduate and Professional Programs. Applications that are not completed within 150 days of initial receipt will not be processed.

Additional application materials may be required by individual graduate programs. In accordance with the Southern Association of Colleges and Schools guidelines, graduate programs must establish both qualitative and quantitative requirements that result in the admission of students whose educational preparation indicates the potential for a high level of performance. Admission procedures include the requirement that an applicant submit, as part of the formal application process, evaluations by professionals in the field as to the readiness of an applicant for graduate work, and, if appropriate, credential evaluations. Standardized test admission criteria for each graduate program are established by the faculty responsible for instruction in that program. Contact the program directly or see the Web site for specific requirements.

General Application Procedures

There are two methods for applying to graduate study at James Madison University:

- Apply online through the College of Graduate and Professional Programs Web site at http://www.jmu.edu/cgapp
- Download the application form from the College of Graduate and Professional Programs Web site at http://www.jmu.edu/cgapp or pick up an application at the office and submit the application by mail.

Application may be made to only one graduate program at a time. JMU does not allow students to apply for more than one graduate program per application form.

Information regarding financial aid may be accessed online at http://www.jmu.edu/finaid. Class schedules are only available online at http://www.jmu.edu/registrar.

The current graduate catalog may be purchased from the JMU Bookstore in Warren Hall, or accessed through the College of Graduate and Professional Programs Web site.
Submitting Applications Online

Online applications are available through the College of Graduate and Professional Programs Web site at http://www.jmu.edu/cgapp. The following information must be submitted online:

- Official graduate application form
- $55 nonrefundable fee 1

1 Graduate applications will not be processed without application fees. Application fees cannot be waived. Payment must be made online: The JMU College of Graduate and Professional Programs will not accept paper checks with applications submitted online.

The following information should be mailed to the College of Graduate and Professional Programs:

- Official transcripts sent directly from all previously attended institutions.
- The official standardized tests scores (GRE, GMAT, etc.), sent directly from testing center.

Transcripts and test scores should be mailed to:

College of Graduate and Professional Programs, MSC 6702
James Madison University
Harrisonburg, VA 22807

All program-specific requirements should be mailed in a separate envelope directly to the graduate program to which application is being made. The envelope containing these additional materials should be clearly marked “Graduate Application Materials.” Many graduate programs have specific deadlines for application review: Consult the specific program area to see if additional deadlines apply.

Submitting Applications through the Mail

To expedite processing of mail-in applications, the following materials should be submitted (preferably in one large envelope) from the applicant directly to the College of Graduate and Professional Programs:

- Official graduate application form
- $55 nonrefundable fee 1
- Official transcripts sent directly from all previously attended institutions 2

1 Graduate applications will not be processed without application fees. Application fees cannot be waived. 2 Official transcripts may be submitted separately from the application and fee; however, to ensure faster processing, all required materials should be submitted in one envelope.

The official standardized tests scores (GRE, GMAT, etc.) must be sent directly from the testing center.

Applications should be mailed to:

College of Graduate and Professional Programs, MSC 6702
James Madison University
Harrisonburg, VA 22807

All program-specific requirements should be mailed in a separate envelope directly to the graduate program to which application is being made. The envelope containing these additional materials should be clearly marked “Graduate Application Materials.” Many graduate programs have specific deadlines for application review: Consult the specific program area to see if additional deadlines apply.

Application Deadlines

The College of Graduate and Professional Programs has a rolling admission policy. However, to guarantee applications are reviewed in time to meet anticipated dates of registration, students are encouraged to submit the completed applications by the following dates:

- Summer session – April 1
- Spring semester – November 1
- Fall semester – July 1
International Student Applications

JMU encourages applications for graduate study from qualified international students. In order for the university to qualify with the U.S. government as an educational institution for international students, certain criteria must be met.

All initial inquiries for international admissions must be conducted through the College of Graduate and Professional Programs. Correspondence with particular departments or program coordinators is strongly discouraged.

In addition to the general application requirements of the College of Graduate and Professional Programs, all international students applying for admission to a graduate program must:

- Have the necessary ability and educational background to benefit from experiences in this institution.
- Demonstrate proficiency in English sufficient to carry a full program of graduate study through submission of a satisfactory score on the Test of English as a Foreign Language (TOEFL). Examples of acceptable scores include 570 paper-based and 230 computer-based. For more information, visit http://www.toefl.org
- Have all funds necessary for expenses during the entire period of the student’s stay without resorting to employment while in the United States. A form for this purpose is accessible at: http://www.jmu.edu/cgapp/forms/FinancialDecl.pdf
- Although the university has no financial assistance reserved exclusively for international students, after being enrolled for at least one full semester they are permitted to compete for financial aid along with other graduate students.
- Have official transcripts sent directly to the College of Graduate and Professional Programs from the institution granting the baccalaureate degree. An external evaluation of the academic record must be submitted to ensure that it is comparable to a U.S. baccalaureate degree. External evaluators are listed online at: http://www.jmu.edu/cgapp/prospective/international.shtml.
- Allow 12 months between application for admission and the semester the applicant is requesting to enroll at the university if the applicant is residing outside the United States.
- Submit an application and $55 nonrefundable application fee (in U.S. dollars) six months in advance of the intended term of entry if transferring from another college or university in the United States or after completing a baccalaureate degree in a U.S. institution. If in the United States attending or having completed a degree from a U.S. college or university, an International Student Adviser Form must be completed by that institution and submitted with the application. Request the form from Dr. Elizabeth T. Puckett at the address listed in this catalog.
- Enter the United States on a valid student or other visa.

For general information regarding international student applications, contact:

Dr. Elizabeth T. Puckett, Director
International Graduate Admissions, College of Graduate and Professional Programs, MSC 6702
James Madison University
Harrisonburg, VA 22807
(540) 568-7065
puckettet@jmu.edu

Requests for information concerning federal regulations, visa and health should be directed to:

Director, Office of International Student and Faculty Programs, MSC 1503
James Madison University
Harrisonburg, VA 22807
http://www.jmu.edu/international/intlstudents/

Reserve Graduate Credit
During their senior year at James Madison University, undergraduate students who have been admitted into a JMU graduate program may take up to nine hours of graduate course work for reserve graduate credit. Graduate credit earned prior to completion of an undergraduate degree is held in reserve to be applied later toward the graduate degree. It is important to note that these graduate credits cannot be used as part of the student’s undergraduate degree.

Written permission to seek reserve graduate credit must be obtained from the dean of the College of Graduate and Professional Programs prior to enrollment in the graduate courses. Forms are available in the College of Graduate and Professional Programs office or online at [http://www.jmu.edu/cgapp](http://www.jmu.edu/cgapp). It is the student’s responsibility to obtain all required signatures. Students enrolled in five-year programs must abide by the policies governing reserve graduate credit.

Approval for reserve graduate credit does not imply that credit earned will be accepted at another graduate school.

**Offer of Admission to the College of Graduate and Professional Programs**

The dean of the College of Graduate and Professional Programs will send official written offers of admission to applicants who have been accepted. This letter specifies the effective date of admission (which normally coincides with the semester requested on the application), the classification of admission being offered (conditional or unconditional) and the name of the faculty adviser assigned to the applicant. The offer for admission is good only for the semester for which the student is applying.

The applicant must send a written acceptance or rejection of the admission offer to the College of Graduate and Professional Programs as soon as a decision on acceptance is made, but no later than the deadline specified by the graduate program. Refer to individual graduate programs for deadline dates. This allows the specific program to invite other candidates. A student who enrolls at another institution is considered to have rejected the university’s offer of admission. An applicant who has received an offer of admission, but who has not responded by the deadline, must submit a new application and fee to be reconsidered for admission at a later date.

**Admissions Classifications**

Applicants may be admitted to the College of Graduate and Professional Programs under three classifications: unconditional, conditional or provisional admission.

**Unconditional Admission**

Unconditional admission is admission to a graduate program without reservation and indicates that applicants have met all the entry criteria of the College of Graduate and Professional Programs and the specific graduate programs.

**Conditional Admission**

Conditional admission is admission to a graduate program with reservations as indicated in the letter of acceptance. This indicates that applicants have met all the entry criteria of the College of Graduate and Professional Programs, but the graduate program has identified specific conditions that must be met before the applicants attain unconditional admission status. After the conditions have been addressed, students may make a written request to their adviser, who decides if the conditions have been met. The adviser then contacts the dean of the College of Graduate and Professional Programs indicating the change of status.

As the provisions of conditional acceptance are usually determined at the programmatic level, they can only be removed or modified at the same level. While students are encouraged to attain unconditional acceptance as soon as possible, some programmatic conditions often cannot be completed until just before graduation, e.g., teacher licensure and competency in a foreign language or languages. Master’s and Educational Specialist students have a maximum of six years and doctoral students have a maximum of eight years to complete their programs. All students unconditional status
must be attained prior to program completion.

**Provisional Admission**

Students who have not fully met the requirements of the program or department to which admission is sought may be granted admission under a provisional status as prospective candidates for a degree. Such students must have as their initial objective the removal of provisional conditions to achieve advancement to unconditional status.

Provisional admission is a probationary status; the requirements for advancement to unconditional status are specified in each student's provisional admission letter. To change from provisional to regular status, students must submit a written request to their major adviser. The adviser will forward the request to the dean of the College of Graduate and Professional Programs.

Approval for graduate credit earned while enrolled in a provisional status will be determined by the dean of the College of Graduate and Professional Programs upon recommendation of the appropriate department head or school director. No more than nine hours of graduate credit taken in this status may be applied to the degree program upon the recommendation of the department head or school director and approval of the dean of the College of Graduate and Professional Programs. Regulations concerning unsatisfactory progress apply to this classification. (See Unsatisfactory Progress)

**Change of Degree or Program**

Admission to the College of Graduate and Professional Programs in one program does not entitle a student to transfer to another academic unit.

Any students wishing to change a degree or major must submit new applications, fees and any updated standardized test scores to the College of Graduate and Professional Programs.

**Continuous Enrollment**

All graduate students enrolled in graduate degree programs must register each regular semester for a minimum of one graduate credit hour from enrollment to graduation. This includes the time period during which post-course work requirements are being fulfilled, such as thesis or dissertation, internship or practica, and comprehensive examination. This policy excludes summer sessions.

A graduate student who takes an unauthorized break in registration by failing to maintain continuous enrollment will relinquish his or her graduate standing in the university. Students who wish to be reinstated will be required to file an Application for Graduate Admission, pay the admission fee, and register for one graduate credit for each term of unauthorized break in registration.

Due to the unique nature of their program, specific graduate programs may be exempt from the continuous enrollment policy. Consult the individual graduate program coordinator for information.

Students wishing to be excused from the requirements of this policy because of extreme extenuating circumstances, such as medical leave, must solicit exemption from the Dean of the College of Graduate and Professional Programs through the Leave of Absence: Continuous Enrollment option. Contact the College of Graduate and Professional Programs for further information.

For more information, refer to the Continuous Enrollment policy in the College of Graduate and Professional Programs Policy Manual.

If students do not have a one-credit course option in their program, they may enroll for GRAD 597, Continuance, during the regular registration period. No grade or credit hours will be assigned for this course.

**GRAD 597. Continuance.** 1-3 credits.

To remain in good standing in their program, all graduate students must maintain continuous enrollment each semester in their program from entry until graduation. This course allows those students who are not intending to register for any other courses during the current semester to continue in their program in good
Reappplication

Students who are accepted but who cannot enroll at the time of the offer and wish to reapply at a later date must complete a new application form and pay all fees as stated in the application process.

Time Limitations

Master’s and Educational Specialist Students

Master’s and educational specialist students must complete all degree requirements within six years. Academic work, including transfer credits taken before enrollment in the graduate program, completed more than six years before the date at which the master’s or educational specialist degree is awarded may not be used to satisfy the degree requirements. Students may, however, submit a written petition through their adviser, graduate program coordinator, and department head or school director to the dean of the College of Graduate and Professional Programs to receive extensions of time in the event of extenuating circumstances. Such requests must be received at least one month prior to the end of the student’s original six-year time limit.

A student whose status is deactivated, but later is reactivated through reapplication to the College of Graduate and Professional Programs, may not count the six-year time limit as beginning on the date of reactivation.

Doctoral Students

Doctoral students must complete all degree requirements within eight years. Academic work, including transfer credits taken before enrollment in the graduate program, completed more than eight years before the date at which the doctoral degree is awarded may not be used to satisfy the degree requirements. Students may, however, submit a written petition through their adviser, graduate program coordinator, and department head or school director to the dean of the College of Graduate and Professional Programs to receive extensions of time in the event of extenuating circumstances. Such requests must be received at least one month prior to the end of the student’s original eight-year time limit.

A student whose status is deactivated, but later is reactivated through reapplication to the College of Graduate and Professional Programs, may not count the eight-year time limit as beginning on the date of reactivation.

Professional Programs

(Formerly Continuing Education)

The Professional Programs segment of the College of Graduate and Professional Programs administers credit courses, certificate programs and noncredit continuing education programs.

Credit courses are offered off campus when there is demand and sufficient enrollment to support the courses. Off-campus credit courses feature the same academic rigor as courses available on campus. Special customized training is provided when requested by community or institutional groups.

Professional Programs offers only those credit courses and programs existing in the university. Non-credit programs follow national guidelines for recording Continuing Education Units. The university provides resources and services in support of outreach and service programs and such programs are evaluated in the same manner as on-campus courses. Academic credit is not awarded for work taken on a non-credit basis.

Special Student Enrollment

The College of Graduate and Professional Programs administers special student enrollment at JMU. Special students are non-degree seeking students who enroll in JMU courses. Special students must re-enroll each semester at JMU and may take up to 11 credit hours per semester. Special students who have not completed a baccalaureate degree may not earn more than 18 credit hours as a non-degree student.
Post-baccalaureate or Post-master’s Students

Graduates of accredited institutions who wish to take courses but do not wish to pursue advanced degrees may enroll as special students. These non-degree-seeking, post-baccalaureate or post-master’s students may register for classes but are not admitted to a graduate program.

Post-baccalaureate or post-master’s students may enroll in undergraduate and 500-level courses. They may also register, with prior written approval from the instructor, for 600 or 700 graduate-level courses.

Students who are enrolled as special students should understand that completion of graduate credit courses as a special student does not imply preferential consideration when applying to a specific graduate program at James Madison University.

If, at a later date, the special student is accepted into a graduate program at JMU, a maximum of one third of the credit hours required in that program that were completed at the post-baccalaureate or post-master’s level, may be transferred into a degree program upon the recommendation of the program coordinator, department head or school director, and approval of the dean of the College of Graduate and Professional Programs. All such transfer courses must have been completed with a grade of B or better during the six years immediately prior to the conferring of the master’s or Educational Specialist degree or during the eight years immediately prior to the conferring of the doctoral degree.

Graduates of an accredited institution who wish to enroll in 600-level graduate courses offered by the College of Business must be admitted as degree-seeking graduate students.

Transient and Term Special Students

A graduate student holding a baccalaureate degree from an accredited institution and presently working toward a graduate degree at an accredited institution other than JMU is known as a transient special student. An undergraduate student from an accredited institution and presently working toward an undergraduate degree at an accredited institution other than JMU is known as a term special student.

In addition to the enrollment form for special students, transient special students and term special students must submit documentation of good standing at their home college or university and must specify that the courses undertaken at JMU are to be transferred to the home institution. These requirements must be completed prior to registration each semester. For further information, contact:

   College of Graduate and Professional Programs, MSC 6702
   James Madison University
   Harrisonburg, VA 22807
   (540) 568-6131

Admission of Veterans

The College of Graduate and Professional Programs encourages veterans to apply for admission as full- or part-time students. For information, contact:

   Veterans Coordinator
   Office of the Registrar, MSC 3528
   James Madison University
   Harrisonburg, VA 22807
   (540) 568-6569

Foreign Language

Passing a third year foreign language course, a reading knowledge of a foreign language or successful completion of a foreign language exam is required in those academic units which so specify. Consult the degree requirements of the academic program for individual requirements.
General Regulations

Upon enrollment, graduate students accept responsibility to remain current on policies and regulations set forth by their programs of study and the College of Graduate and Professional Programs. Current regulations and policies are updated annually and published in the Graduate Catalog. Further explanations and clarification are readily available from the College of Graduate and Professional Programs Web site at http://www.jmu.edu/cgop/.

Advanced Graduate Degree Programs

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Advanced Graduate Degree Programs

The Master of Fine Arts, Educational Specialist, Doctor of Philosophy and Doctor of Psychology degrees are advanced graduate programs.

For more detailed information regarding deadlines and procedures, refer to the “Art and Art History” section of the Graduate Catalog for the Master of Fine Arts degree, the “Communication Sciences and Disorders” section for the Doctor of Philosophy and the “Psychology” section for the Educational Specialist and the Doctor of Psychology degrees. Additional information about these programs can be obtained from their individual Web sites.

Advising

Faculty Advisers

All students admitted into to the College of Graduate and Professional Programs are assigned faculty advisers. Graduate program coordinators/directors or designated members of the graduate faculty serve as faculty advisers.

After admission, students must meet with their advisers to select initial course work and plan their programs of study. Students should consult with their faculty adviser(s) to plan programs of study prior to initial registration. Advisers are also available to oversee subsequent changes in the student’s program of study and to conduct the final examination and other phases of the specific requirements for the graduate degree.
Changes to Policies and Programs of the College of Graduate and Professional Programs

The graduate degree requirements found in this catalog set the minimum standards acceptable by the JMU College of Graduate and Professional Programs. The university endeavors to provide note of any change, through the advising process, or through other means of communications; however, it is the responsibility of each individual student to become and remain aware of all applicable requirements and provisions that may apply to the student.

It is the prerogative of each academic unit to make changes in programs at any time prior to graduation. It is common practice, however, for students to complete the program requirements as described in the catalog for the year in which they entered their program. Students should inquire as to the specific policy of their graduate program.

Exceptions to Regulations

Exceptions to any of the published rules and regulations cited within the Graduate Catalog may be requested by petition to the dean of the College of Graduate and Professional Programs. Such petitions must be initiated by the graduate student with the written approval of the student’s adviser or graduate coordinator and must mention the regulation and justify completely the exception being requested.

Comprehensive Examinations

A formal assessment of mastery, a comprehensive written and/or oral exam, designed to appraise the student’s competence is required of each JMU student in order to complete his or her program of graduate study. The format and timing of this assessment is at the discretion of the graduate program, provided it fairly and adequately documents the knowledge and skills the student has acquired. The content of the comprehensive exam should accurately reflect the content of the student’s academic program. The exam should require the integration and synthesis of what has been learned by the student. The student must demonstrate a breadth of knowledge in the discipline and depth in specific content areas to be determined by the graduate program faculty.

The deadline for completing the comprehensive examination is indicated in the university calendar at the front of this catalog. Unless there are documented extenuating circumstances, only students whose admission classification is unconditional are eligible to participate in this formal evaluation.

A comprehensive examination involving a major/minor program cannot be taken until at least six credit hours in the minor program have been completed; approximately a third of the comprehensive examination will be devoted to the minor field. Students will be notified, in writing, of success or failure of the comprehensive examination by their major program or departmental adviser.

Comprehensive Committees

Each graduate program must have a comprehensive examination committee for the program and/or for the individual student. Individual student comprehensive committees are selected by the student in consultation with the graduate program coordinator and/or program adviser. Each comprehensive exam committee must consist of at least three JMU graduate faculty members with the background and interest necessary to evaluate the mastery of the student. At least two members must be from the student’s graduate program.

Non-graduate faculty members of the comprehensive exam committee, which may include persons external to the university, must be approved by the dean of the College of Graduate and Professional Programs. Such members shall make up no more than one-third of the total committee membership. Graduate instructors may also be appointed to committees with the approval of the dean of the College of Graduate and Professional Programs, but only when their expertise clearly qualifies them; however,
their appointment must be in addition to the required number of graduate faculty members.

Graduate students may not serve on the comprehensive examination committees. Only a graduate faculty member from the student’s graduate program may chair a comprehensive committee.

**Comprehensive Examination Failure**

In the event the comprehensive examination is failed, a student may request a re-examination. The re-examination must occur within six months of the date of failure. Unless there are extenuating circumstances, which must be raised or supported by the graduate program faculty, only one re-examination will be allowed. Cases involving extenuating circumstances must be presented to the dean of the relevant college in writing for approval. If the student fails the second administration of the comprehensive examination, his or her graduate program will be terminated.

**Comprehensive Continuance**

Students completing all degree requirements except the comprehensive examination are required to register for comprehensive continuance each semester, until they have passed the comprehensive examination. Comprehensive continuance carries no credit hour production and does not count toward graduate program requirements.

**Course Completion Deadlines**

All course work must be completed by the final date of the student’s final semester. Students failing to meet the deadline will have their names removed from the current graduation list and their degrees dated the following semester. Consult the calendar online at [http://www.jmu.edu/registrar](http://www.jmu.edu/registrar) or in this catalog for exact dates.

**Course Credits**

**Academic Loads**

<table>
<thead>
<tr>
<th>Status</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>9 or more</td>
</tr>
<tr>
<td>Three-quarter time</td>
<td>6</td>
</tr>
<tr>
<td>Half time</td>
<td>5</td>
</tr>
<tr>
<td>Less than half time</td>
<td>4 or less</td>
</tr>
</tbody>
</table>

The classification of students, i.e. full time, etc. accepted into graduate programs is often considered in determining payment deferment on undergraduate student loans, eligibility for insurance benefits, etc.

The following academic load guidelines apply to all categories of graduate student assistants below the doctoral level, i.e. graduate, research, teaching and service assistants, and athletic assistants. Guidelines for doctoral assistantships vary and are available from the offering program.

- All categories of graduate student assistants must carry nine graduate credit hours each semester in order to receive their stipend and tuition support.
- All categories of graduate student assistants must pay for any additional credit hours above the nine paid for by their assistantships.
- No graduate student assistant may take less than the nine required credit hours without prior written approval from the dean of the College of Graduate and Professional Programs. The Underload Request Form can be obtained from the College of Graduate and Professional Programs Web site at [http://www.jmu.edu/cgop/forms/OverloadUnderload.pdf](http://www.jmu.edu/cgop/forms/OverloadUnderload.pdf) or from the office. This underload of classes is permitted only once during a student’s graduate career and can be for no less than 6 credit hours.

- Graduate assistantship tuition funds do not cover any undergraduate course work. For their courses to be covered by their assistantship, all graduate research, service
and teaching assistants must register each semester during the regular registration period(s) and prior to the tuition refund date as outlined in the *Registration and Student Record Services Handbook* and online at [http://www.jmu.edu/registrar](http://www.jmu.edu/registrar). Students who register for any additional courses after this time period will be held personally responsible for additional tuition and fees. Students who drop courses after the tuition refund date will be personally responsible for fees and will receive a grade of "W" for the course. Exceptions may be made only for documented extenuating circumstances and will be handled on a case-by-case basis by the dean of the College of Graduate and Professional Programs. Students must contact the Associate Director of University College Centers for Student Organization Services, Taylor Hall, Room 205A if all courses are dropped to withdraw from the university.

**Receiving Credit**

To receive credit for courses, it is the responsibility of each student to ensure that courses selected are acceptable to the program being pursued.

**Transfer Credit**

Students who wish to receive graduate credit for courses taken prior to entering the JMU graduate program must submit requests to their adviser during the first semester of enrollment. The Transfer of Credit form is available online at [http://www.jmu.edu/cgop/forms/ApprovalOfTransferCredit.pdf](http://www.jmu.edu/cgop/forms/ApprovalOfTransferCredit.pdf) or from the College of Graduate and Professional Programs office. A grade of “B” or better must be earned in courses requested for transfer credit. Courses taken for pass/fail or satisfactory/unsatisfactory grades will not be accepted for transfer graduate credit. An official transcript showing the credits approved for transfer must be forwarded to the College of Graduate and Professional Programs.

Under no circumstances will more than one-third of the total graduate credits required for completion of a program be considered for inclusion in the student’s program of study. This includes any hours taken at JMU prior to acceptance. In the case of variable credit programs, the one-third maximum transfer hours allowed will be calculated based on the minimum number of hours required for the degree. Students may not transfer in more than 9 credit hours from institutions other than JMU. Transfer credit applications must be approved by the major adviser, minor adviser (if applicable), major department head or school director, and the dean of the College of Graduate and Professional Programs. Exceptions to the policy may be considered on a case-by-case basis.

In all cases, courses considered for transfer of credit must be applicable toward a comparable degree at JMU. Courses that are not intended by the institution offering them to be part of a degree program, such as extension and in-service courses, are not acceptable for transfer to JMU. It is the student’s responsibility to furnish evidence that any course presented for transfer of credit is applicable to a comparable degree at the accredited institution where the course was taken. If this information is not on the official transcript, it must be obtained in writing from the appropriate dean of the institution where the course work was earned.

Credits earned to complete a previous graduate degree may not be applied to a second graduate program at JMU at the same degree level. However, previously earned graduate credit earned as a part of a master’s degree program from an accredited institution may be counted toward the degree requirements of a higher level degree, such as the Master of Fine Arts, Educational Specialist and doctoral degrees. Academic work, including transfer credit, taken more than six years before the master’s degree award date or eight years before the doctoral degree award date may not be used to satisfy the degree requirements. No transfer credit will be approved while a student is in provisional status.

Students must familiarize themselves with their specific program requirements as discussed in the academic sections of this catalog. Respective programs will have detailed information relative to the acceptance of credit hours toward their degrees.

**Course Levels**
Course Numbering System
Courses numbered 500 through 900 are graduate courses and may be applied to a
graduate program. Post-baccalaureate/post-master’s students may register for 600- or
700-level courses with prior written approval from the instructor.
Some programs use dual-numbered courses that allow both graduate and
undergraduate students. Such courses may offer content concurrently on the 300, 400,
500 and 600 levels. In such instances, higher quality and/or additional work must be
required of the students registered at the 500 or 600 level in these courses. The
additional demands required of graduate students in these dual-numbered courses
must be evident in the course syllabus and catalog description.

Course Level Requirements
All credits contained in the student’s program leading to an advanced degree at JMU
must be in courses designated for graduate students. At least half of the courses must
be numbered 600 or above. Where the program has a minor, at least six of these 600-
level credits must be in the minor. Students should refer to their academic program for
specific requirements. Only six hours of 501 workshop courses may be applied to a
degree program.

Dissertation and Thesis Research
A dissertation is required of all candidates for the Doctor of Psychology and Doctor of
Philosophy degrees.
A thesis is required in several master’s and Ed.S. programs. In other master’s degree
programs, a research project and the writing of a thesis is an option which may be
elected by the student in consultation with his or her advisor. Graduate students are
required to register for the minimum hours of thesis or dissertation credit required in
their major fields. Students must register for thesis or dissertation credit hours during
those semesters in which they are engaged in the research or in the writing of the
thesis or dissertation.

Thesis and Dissertation Requirements
The general requirements for the preparation of a thesis or dissertation pertain
primarily to formatting considerations. The purpose of these stipulations is to provide a
degree of uniformity and to assure that each thesis or dissertation is in a form suitable
for binding, is fully legible and can be preserved for a reasonable period of time.
For those students who submit a thesis or dissertation in partial fulfillment of the
requirement for a graduate degree at JMU, the following steps should be considered.
B Students should identify a graduate faculty member from their program to act as
the chair of their dissertation or thesis committee.
B With the guidance of the committee chairperson, students should choose the
remaining committee members.
B With the guidance of the students’ dissertation or thesis committee chair and/or
committee, the students will choose a subject area and prepare a thesis or
dissertation proposal.
B Initial approval of thesis or dissertation proposals should be obtained from the
thesis or dissertation committees as early as possible in the research program. This
will be evidenced by written approvals on the students’ program of study by the
thesis or dissertation chairs and the department head/school directors. It is the
responsibility of the students’ thesis or dissertation committee to judge the
acceptability of the thesis or dissertation from all standpoints, including neatness,
mechanical considerations, and technical and professional competency. Committee
members attest to acceptability from all standpoints when they sign the approval
page. Students are urged to consult with the College of Graduate and Professional
Programs or the appropriate university librarian prior to the final reproduction.
B Guidelines for the technical preparation of a thesis or dissertation are outlined
in the JMU College of Graduate and Professional Programs Thesis and Dissertation
Requirements.
Manual, which is available online from http://www.jmu.edu/cgop/current/thesismanual.shtml. This online manual sets forth minimal university guidelines including instructions for Microsoft Word which can be used in the preparation of the thesis or dissertation. More specific style considerations should be obtained from style manuals standard in the student’s discipline. When a preference for specific style guides is not set by the department, school or discipline, students should consult a standard thesis or dissertation manual. Whichever manual students select should be followed consistently except where instructions conflict with those in the online JMU College of Graduate and Professional Programs Thesis and Dissertation Manual. Students are responsible for following these guidelines.

Titles of dissertations will be printed in the graduation program if the information is received by the appropriate deadline. In addition, two copies of each student’s thesis or dissertation will be cataloged in Carrier Library.

**Thesis and Dissertation Committees**

Students pursuing degrees requiring completion of a thesis or dissertation must have a thesis or dissertation committee to oversee progress toward the degree. Committees are selected by graduate students in consultation with the graduate program coordinator/director. Each committee must consist of at least three approved members of the JMU graduate faculty with the background and interest necessary to counsel, direct and evaluate the proposed research and progress toward completion of the program of study. At least two members must be from the student’s graduate program.

Non-graduate faculty members of dissertation or thesis committee, which may include persons external to the university, must be approved by the dean of the College of Graduate and Professional Programs. Such members shall make up no more than one-third of the total committee membership. Graduate instructors may also be appointed to committees with the approval of the dean of the College of Graduate and Professional Programs, but only when their expertise clearly qualifies them; however, their appointment must be in addition to the required number of graduate faculty members. Only a graduate faculty member may chair a thesis or dissertation committee. It is preferable that a member of the students’ graduate program chair the dissertation or thesis committee.

**Thesis or Dissertation Continuance**

Graduate students are required to register for the minimum hours of thesis or dissertation credit required by their graduate program. Students must register for thesis or dissertation in the appropriate increments of credit hours during those semesters in which they are engaged in the research or in the writing of the thesis or dissertation. As part of the JMU continuous enrollment policy, students failing to complete a thesis or dissertation after registering for the maximum credit hours are required to register for thesis or dissertation continuance during each regular semester until completion.

**Thesis and Dissertation Grading**

No grades will be given for a thesis or dissertation until the thesis or dissertation has been completed and approved by the thesis/dissertation committee. The thesis or dissertation grade will then be recorded as either satisfactory or unsatisfactory. For the purpose of registration and payment of fees, each thesis or dissertation research will be assigned equivalent credit hours.

**Research Project in School Psychology**

A written research project is required of all candidates for the Educational Specialist degree with a major in school psychology and community counseling. Students enrolled in the Educational Specialist school psychology or community counseling programs are required to register for PSYC 700 or PSYC 800, Educational Specialist Research Project. For specific credit hour requirements, refer to the individual program. Registration will
be in three credit-hour increments at any time prior to the completion of PSYC 790, Internship. Students not completing research projects by the time the internship is completed are required to register for project continuation credit (two credit hours) each semester, including summer, until graduation. Continuance credits do not count toward graduate program requirements.

In addition to these requirements, students enrolled in the Educational Specialist school psychology program must adhere to the steps listed in the “Thesis and Dissertation Requirements” section of this catalog.

**Thesis, Dissertation, Research Project, Directed Research or Comprehensive Examination Continuance**

Students completing registration for the maximum hours of thesis, dissertation, research project or directed research are required to register for thesis continuance, dissertation continuance, research project continuance or directed research continuance each semester until they have received their degree.

Students completing all degree requirements except the comprehensive examination are required to register for comprehensive continuance each semester until they have passed the comprehensive examination.

Continuance credits carry no credit hour production and do not count toward graduate program requirements.

**Doctoral Candidacy Request**

Doctoral students are admitted into candidacy for their graduate degree once they have completed all required course work and passed their comprehensive examination. Once students have reached this point, they must complete the Request for Doctoral Candidacy form available online at [http://www.jmu.edu/cgop/forms/App.For%20Grad%20Degree%202003.pdf](http://www.jmu.edu/cgop/forms/App.For%20Grad%20Degree%202003.pdf). This form can also be obtained from the College of Graduate and Professional Programs office. The Request for Doctoral Candidacy form must be signed by the student, his or her adviser or graduate program coordinator, and the dean of the College of Graduate and Professional Programs. Students are then permitted to advance to completion of their dissertation and graduation.

**Note:** Students who wish to become candidates for doctoral degrees may do so only after completing all the conditions, such as provisional admission, of the original admission into the individual’s degree program.

**Employment**

The College of Graduate and Professional Programs recognizes that many graduate students depend upon part-time or full-time employment to meet expenses. Though there is no limit to the maximum number of credit hours employed students may take, students and advisers should realize that a course schedule should take into consideration the demands of employment.

**Dual Employment**

Graduate students receiving stipends from Virginia state funds are occasionally permitted to accept JMU employment in addition to the assistantship. Permission for dual employment must come from the Dean of the College of Graduate and Professional Programs, who makes his approval decision in response to a request by the student’s graduate coordinator or adviser, not from the student. The student and the coordinator or adviser should carefully consider the overall effect of additional employment on the student’s academic performance. The coordinator or adviser endorsing the additional employment, must submit a written request for approval to the CGOP Dean.

**Equal Employment Opportunity**

James Madison University does not discriminate on the basis of race, color, national origin, religion, gender, age, veteran status, political affiliation or disability (in compliance with the Americans with Disabilities Act) with respect to employment or
admissions, or in connection with its programs or activities.
Inquiries or requests for reasonable accommodation may be directed to the activity
coordinator, the appropriate university office, or the Office of Affirmative Action, MSC
7802, JMU, Harrisonburg, VA 22807, phone (540) 568-6991 or (540) 568-6991 TDD,
or 540-568-7992 FAX. More information is available through the Office of Affirmative

General Appeal Process
Evaluation of a graduate student’s progress is primarily dependent on the judgments of
appropriate faculty members of the student’s graduate program. The university,
through the College of Graduate and Professional Programs, can define minimal
entrance standards and can prescribe general rules governing eligibility for
continuation. However, the crucial agency in graduate student evaluation is the
graduate program in which the students’ work is focused. Principal evaluators must be
faculty members of the student’s graduate program.
It is assumed that most disputes over evidence of unsatisfactory progress will be
informally discussed and reconciled at the program or department/school level. Most
discussions of this type will commonly occur among the student, major professor and
other faculty members in the graduate program.

Grade Appeal Procedures
Evaluation of student work and assignment of grades on the basis of academic criteria
are the responsibilities and prerogative of the faculty. The university and its faculty
members also recognize that grading can be a subjective process and students may
feel their grade has been inappropriately assigned. If such disagreements occur,
students have a right to be fairly heard. Two types of appeal procedures are related to
grading.

Grade Change Appeal Procedure
The only basis for a grade change appeal is an error in grade assignment or calculation.
If a student believes that a grade was assigned in error because of a mistake in
calculation or an error in recording, to resolve the discrepancy, the student should
consult the professor(s) involved before the Friday of the second full week of classes in
the regular semester following the semester of the contested grade. Requests for
review of spring semester or summer session grades must be initiated no later than the
Monday of the third full week of classes in the subsequent fall semester. If the
professor agrees that a change should be made, the professor should submit a Grade
Change form and forward it to the department head/school director or graduate
coordinator for signature. A copy will be forwarded to the dean of the College of
Graduate and Professional Programs.

Grade Review Appeal Procedure
If a student disputes a grade for any other reason than error in grade assignment or
calculation, the student can initiate a formal grade review appeal. To activate the grade
review appeal process, the student must follow these steps.
1. The student submits a Grade Review Form to the appropriate professor by
Monday of the third full week of classes in the regular semester that follows the
semester for which the contested grade was given. The student must attach a
written explanation of reasons for the appeal, including any documentation relating
to the disputed grade. Requests for review of spring semester or summer session
grades must be initiated no later than the Monday of the third full week of classes in
the subsequent fall semester.
2. The student meets with the course instructor by Friday of the third full week of
classes to attempt to resolve the concern.
   a. If the student and the course instructor reach an agreement that the grade
should be changed, the course instructor changes the grade by submitting a
Grade Change form to the appropriate department head/school director or
graduate coordinator for that individual’s signature. A copy of this signed Grade Change form will be forwarded to the dean of the College of Graduate and Professional Programs. For graduate students whose grade of “C,” “U” or “F” is to be changed, notice of the grade change must be sent to the College of Graduate and Professional Programs before that change occurs.

β If no resolution is reached, the instructor signs the Grade Review form and records a written response on the reverse side of the form. The instructor returns the original copy of this form to the student, retains a copy of the form for his or her personal records and forwards a copy to the relevant department head/school director or graduate coordinator by Friday of the fourth full week of classes.

3. The student must contact the relevant department head/school director or graduate coordinator by the Friday of the fifth full week of classes in order to request review of statement and response.

4. The department head/school director or graduate coordinator meets with the student and confers with the relevant course instructor.

β The department head/school director or graduate coordinator signs the Grade Review form and records a written response on the reverse side of the form by Friday of the seventh full week of classes. The student receives the original copy of this form. The relevant course instructor receives a copy of the form and the sender retains a copy of the form.

β If all involved parties agree that the grade should be changed, the course instructor submits a Grade Change form to the department head/school director or graduate coordinator and the appropriate individual signs the form. A copy of the form will be forwarded to the dean of the College of Graduate and Professional Programs. Notice of the grade change must also be sent to the College of Graduate and Professional Programs before the grade change occurs for graduate students who have a grade of “C,” “U” or “F” changed to some other grade.

After the review process outlined above has been completed, a student can also request that the form, documentation and responses be reviewed by the dean of the college in which the course was taught. The college dean’s responsibility is only to ascertain whether all parties have had an opportunity to present all relevant facts and have received a fair and impartial hearing at each level. To enter this phase of the process, a student must follow this procedure.

1. The student contacts the dean by Friday of the eighth full week of classes and requests that the dean review the overall process.

2. The dean of the relevant college reviews the process to be sure the student and the faculty member have had a fair hearing.

β If the relevant college dean believes that due process was not followed during the review process, he or she consults with the relevant professor and department head, school director or graduate coordinator to resolve the dispute.

3. The dean sends a written response to all involved parties by Friday of the 10th full week of classes. This written response is appended to the Grade Review form. The dean returns the original copy to the student, retains a copy and sends a copy to the relevant department head/school director or graduate coordinator and the relevant instructor.

β If it is agreed that the student’s grade should be changed, the relevant course instructor submits a Grade Change form to the department head/school director or graduate coordinator. The recipient then signs the form and forwards a copy to the dean. Notice of the grade change must also be sent to the College of Graduate and Professional Programs before the grade change occurs for graduate students who have a grade of “C,” “U” or “F” changed to some other grade.

There is no further review beyond the dean of the relevant college. The entire process will not extend past the end of the semester following the contested grade with the exception of grades given for summer session courses.

**Reinstatement Policy**

Graduate students dismissed for academic reasons are never automatically reinstated.
Students are suspended until reinstated by a decision of the dean of the College of Graduate and Professional Programs. Reinstatement will only be made on the recommendation of the departmental or school graduate appeals committee and the department head/school director. Suspension appeals will be heard promptly. Students may not enroll in any graduate-level courses while on academic suspension.

### Grading System

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Description</th>
<th>Numerical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>Very Good</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>Poor</td>
<td>2.7</td>
</tr>
<tr>
<td>C</td>
<td>Poor</td>
<td>2.0</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td></td>
</tr>
<tr>
<td>S/U</td>
<td>Satisfactory/Unsatisfactory</td>
<td>[Thesis/dissertation and selected other courses. See course descriptions.]</td>
</tr>
<tr>
<td>NP</td>
<td>Not Processed</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td></td>
</tr>
</tbody>
</table>

A grade point average is calculated by dividing the accumulated number of grade points earned by the accumulated number of credit hours attempted. All graduate credits attempted and all graduate grades earned, whether passing or failing, will be used to calculate a student’s grade point average.

The student’s grade point average appears on his or her transcript.

Students must take all courses on a letter grade (“A-F”) or satisfactory/unsatisfactory (S/U) basis, based on how the particular course was approved. Students do not have flexibility in choosing a grading option.

A grade of “NP” (not processed) will be given to students registered for dissertation or thesis work until their dissertation or thesis is complete. At that time, the grade will be changed to “S” or “U” for the required six hours of credit.

A grade of “NC” (no credit) will be given to students registering for comprehensive, dissertation or thesis continuance.

In order to graduate, students must satisfy grade requirements specified by their individual academic program.

### Auditing Graduate Courses

Graduate students may register for graduate courses using the “audit” option for elective courses only. These courses will not count as part of the student’s program of study. Students must initially register for the course using the “audit” option. Under no circumstances may a course credit option be changed from “audit” to “credit” or “credit” to “audit.” Students are required to pay for courses taken as “audit” credit. Audit courses cannot be paid for using any university sources of funding, e.g. assistantship funding.

### Incomplete Grades

The grade of “I” is used to indicate incomplete work in a given course and is awarded only when:

- the student presents a compelling personal reason (e.g., illness).
- the course has been designated by the department or school as normally requiring a grade of incomplete.
Courses in which a student received a grade of “I” must be completed by the end of the next regular semester, or the grade is reported permanently as an “F.” Students should consult departmental or school guidelines regarding such courses. It is the responsibility of the student to ensure grade changes are reported to the Office of the Registrar by the deadline. See the university calendar at the front of this catalog for the date by which grade changes must be submitted.

All course work must be completed by the final date of the student’s final semester. Students failing to meet the deadline will not graduate and will have their degrees dated the following semester. Consult the university calendar in the Registration and Student Record Services Handbook, online at http://www.jmu.edu/registrar or in the front of this catalog for dates.

**Unsatisfactory Progress**

If, at any time, a graduate student fails to make satisfactory progress toward the degree, the student may be denied permission to continue in the program. Such a decision may be reached by the student’s major adviser, department head or school director, or graduate program coordinator and will be referred to the dean of the College of Graduate and Professional Programs for final action.

A student will be dismissed from the degree program or provisional status will be revoked if the student receives an “F” or “U” in any graduate course or a total of three “C” grades in his or her graduate program. Unless there are extraordinary circumstances, a student dismissed from the degree program may not enroll in any graduate-level courses for a period of one year. Students who want to return to the university must re-apply and be re-accepted in the usual manner.

A graduate student will receive a notice of academic warning upon receiving a grade of “C” in any two graduate courses or if the student’s grade point average falls below 3.0. This academic warning will be noted on the student’s transcript. All credits attempted and all grades earned, whether passing or failing, will be used to calculate a student’s grade point average.

In some cases, graduate students may take undergraduate courses as part of their program of graduate study. The GPA includes undergraduate courses taken during graduate study. However, if an undergraduate course places a student’s GPA below 3.0, it will not place the student on probationary status or prevent the student from graduating.

**Graduation**

The office of the dean of the College of Graduate and Professional Programs, assisted by the Graduate Council and the graduate faculty, have responsibility for final approval of graduate degrees to be awarded.

**Application for a Graduate Degree**

In order to graduate, students must complete the Application for Graduate Degree form available online at http://www.jmu.edu/cgop/forms/App_For%20Grad%20Degree%202003.pdf or from the College of Graduate and Professional Programs. Students are responsible for notifying both their major academic unit and the College of Graduate and Professional Programs when they plan to graduate. Students are also responsible for consulting their advisers or the College of Graduate and Professional Programs office regarding deadlines for graduation.

The Application for Graduate Degree form must be approved by major and minor (if applicable) adviser(s) and the major department head/school director or graduate program coordinator.

Note: Students must complete all the conditions of the original admission in their degree program, e.g. conditional admission, before they can be permitted to graduate. Only six credit hours of 501 workshop courses approved for inclusion in a graduate program may be applied toward a degree. If students plan to use transfer credits to fulfill degree requirements, these credits, along with official transcripts showing the
credits and the transfer of credit form, must appear on the Application for a Graduate Degree form and be forwarded to the College of Graduate and Professional Programs.

**Graduate Degree Completion Requirements**

The College of Graduate and Professional Programs mandates the following general degree completion requirements in order for students to receive their graduate degrees. Each graduate student must:

- Complete a written graduate plan of study, approved by the student’s adviser, which must be reviewed by the College of Graduate and Professional Programs and approved by the dean. Note: At least one-half of the courses in the student’s required plan of study must be at the 600 course level or above.
- Be continuously enrolled to the graduate program from admission to graduation (unless specifically exempt).
- Have satisfied any conditions of his or her admission, such as provisional or conditional admission.
- Complete the graduate program with an overall GPA of 3.0 or higher.
- Be registered during the semester in which he or she plans to graduate.
- Complete all requirements of the graduate program and College of Graduate and Professional Programs within six calendar years (Masters and education specialist degrees) or eight years (doctoral degrees).
- Successfully achieve doctoral candidacy (doctoral students only).
- Successfully complete a comprehensive examination or equivalent as determined by the individual graduate program. Note: The graduate program must notify the College of Graduate and Professional Programs that the student has successfully completed the comprehensive examination.
- Submit a thesis, dissertation or research project, if required by the academic program, to the College of Graduate and Professional Programs that meets the format requirements set forth in the *College of Graduate and Professional Programs Thesis/Dissertation Manual*.
- Complete the minimum period of residency established by his or her program. Note: While the traditional period of required residency is optimal, the technological revolution that facilitates distance learning of all varieties may not allow for the traditional approach to residency. Accordingly, all students are strongly encouraged to take advantage of all available avenues of learning, including accessing the JMU faculty, staff and other students, as well as our library, laboratories and other facilities that nurture the academic experience.

In addition to meeting the general completion requirements set forth by the College of Graduate and Professional Programs, each student must meet the graduation requirements of the individual graduate program.

**Graduation Semester Registration Requirements**

All graduate students are required to be registered during the semester they receive their degree. If students are not registered in regular course work, they must register for either comprehensive, thesis or dissertation continuance, or directed research, whichever is appropriate.

**Attendance at Commencement**

Students are expected to attend graduation exercises. A student unable to be present for the graduation exercises must notify the Office of the Registrar at least 10 working days before commencement.

**Honor System**

The academic program at JMU operates under an Honor System that dates back to 1909. Students adopted the Honor System in order to uphold individual and community integrity. Each student is expected to observe complete honesty in all academic matters and to report instances where another student has violated the Honor System. A student Honor Council administers the Honor System, and every student who matriculates at the university, whether graduate or undergraduate, becomes a member
of the Honor System. The university expects the cooperation of faculty members and administrators in upholding this Honor System. The Student Handbook provides full information on the Honor System, and the Honor Council office provides students with assistance in understanding Honor System policy.

The Honor Council encourages all members of the JMU community to familiarize themselves with the Honor Code and Honor System procedures. The Honor Council office is located at Wilson 113. The Honor Council maintains a Web site at http://www.jmu.edu/honor/.

Off-Campus Courses
Off-campus courses are occasionally offered to part-time students enrolled in a graduate program but who are not in residence on the JMU campus. Credit for such courses may be allowed toward the graduate degree provided the course is taught by a member of the graduate faculty of the institution, and the course has the prior approval of the student’s adviser and the dean of the College of Graduate and Professional Programs. Only six hours of 501 workshop courses may be applied to a degree program.

Permission to Take a Course at Another University After Enrollment
With prior approval from their adviser, department head or school director, graduate coordinator, and the dean of the College of Graduate and Professional Programs, students enrolled in a graduate program may take graduate courses at another accredited institution. Forms are available at the College of Graduate and Professional Programs office or online at http://www.jmu.edu/cgop/forms/ApprovalOfTransferCredit.pdf for use in obtaining prior approval of transfer credit hours.

It is the students’ responsibility to request transfer credit for such courses upon completion and to have official transcripts submitted to the College of Graduate and Professional Programs office. Ordinarily, permission is not given to take a course elsewhere for transfer credit during the semester in which the degree is to be awarded.

Students who take their last courses to fulfill their programs of study at institutions other than JMU may not graduate during that semester unless the official transcript for the requested transfer course(s) is received in the College of Graduate and Professional Programs office prior to the last day of the semester graduation is requested. Otherwise, they must wait until the following semester to graduate.

Correspondence Study
No credit toward the graduate degree will be allowed for courses taken by correspondence study.

Office of the Registrar
The Office of the Registrar is responsible for the following activities.

- Add and drop registration procedures
- Athletic certification
- Class schedule preparation
- Commencement activities
- Diploma issuance
- Enrollment verifications
- Student records
- Transfer credit evaluation
- Transcript issuance

The Office of the Registrar Registration Services is located in Warren Hall, Room 302. For information regarding veterans’ affairs and graduation, students should contact Student Record Services on the third floor of Warren Hall or call the Office of the Registrar at (540) 568-6281.

Research Project Requirements
Refer to “Dissertation and Thesis Research.”

**Teaching Licenses**

Some candidates in programs leading to the Master of Arts in Teaching or Master of Science in Education degree and in certain programs leading to the Master of Education degree do not hold the Collegiate Professional License. These candidates must meet requirements for admission and retention in the JMU Teacher Education Program and should contact the Education Support Center, Maury Hall, Room 110, or their education adviser immediately upon acceptance into their program of study. The requirements for licensure must be met before the degree is conferred. This requirement may be waived by the dean of the College of Graduate and Professional Programs in exceptional cases, upon the petition of the graduate program coordinator. As a general rule, however, students with a minor in higher education are not required to hold the Collegiate Professional License. Refer to the Education section for additional information.

**Thesis Requirements**

Refer to “Dissertation and Thesis Research.”

**University Residency Requirements**

Graduate students must register a local address with the College of Graduate and Professional Programs office prior to initial registration for classes. All changes in local address must be registered with the Office of the Registrar. This can be done through e-campus, online at [http://www.jmu.edu/registrar](http://www.jmu.edu/registrar).

All graduate students must complete the minimum period of residency established by their program. While the traditional period of required residency is optimal, the technological revolution that facilitates distance learning of all varieties may not allow for the traditional approach to residency. Accordingly, all students are strongly encouraged to take advantage of all available avenues of learning, including accessing the JMU faculty, staff and other students, as well as our library, laboratories and other facilities that nurture the academic experience.

**Withdrawal**

**Withdrawal from Courses**

A student may drop a course without special permission through the time period designated as the “add/drop period.” A student may withdraw from a course without special permission through the time period designated as the “course adjustment period.” Refer to e-campus at [http://ecampus.jmu.edu/](http://ecampus.jmu.edu/) for exact dates.

Students will not be permitted to withdraw from a course after the course withdrawal deadline. Students are responsible for knowing their registered course schedules and for making any desired course adjustments by the published withdrawal deadlines. After the course withdrawal deadline, a grade other than a “W” must be issued for the course in question.

**Withdrawal from College of Graduate and Professional Programs**

Graduate students wishing to withdraw from their graduate program and the College of Graduate and Professional Programs must do so by completing a Withdrawal Request form. Graduate students withdraw from the College of Graduate and Professional Programs when they terminate enrollment before completing a regular semester or summer session for which they have registered. A student may withdraw from all courses during the course adjustment period without special permission, by completing a withdrawal request form available from the Associate Director of University College Centers for Student Organization Services, Taylor Hall, Room 205A The Associate Director of University College Centers for Student Organization Services will review request, determine withdrawal approval, set the official withdrawal date and notify other university officials of the action.
A student who voluntarily withdraws from his or her graduate program without receiving official approval will receive a grade of “F” for all courses in which he or she is enrolled. A student voluntarily withdrawing with official approval will receive a grade of “W” in all courses.

It may also be necessary for a graduate student to withdraw due to extenuating circumstances. Withdrawal for extenuating circumstances must be approved by the student’s graduate coordinator and the dean of the College of Graduate and Professional Programs. A student who withdraws because of extenuating circumstances will also receive a “W” in all courses.

Students who withdraw from their graduate program will be responsible for tuition as determined by the Office of the Registrar and may be subject to a change in their financial aid status.

Confidentiality of Education Records

The Family Educational Rights and Privacy Act of 1974

James Madison University adheres to and annually informs students of the Family Educational Rights and Privacy Act of 1974, as amended. This act, with which the institution intends to fully comply, was designated to protect the privacy of educational records. Under the Family Educational Rights and Privacy Act (FERPA) students have certain rights with respect to their education records.

These rights include:

The right to inspect and review the student’s education records within 45 days of the day the University receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

The right to request the amendment of the student’s education records that the student believes are inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the University may disclose education records without consent to officials of another school in which a student seeks or intends to enroll. The following is considered “Directory Information” at James Madison University and may be made available to the general public unless the student notifies the Office of the Registrar in person or in
writing within five days after the first day of class registration:
Student’s name, telephone numbers, addresses, date and place of birth, major and
minor fields of study (if applicable), college of major and year (freshman, sophomore,
etc.), dates of attendance, degree sought and time, degrees conferred, awards and
honors conferred, participation in officially recognized activities and sports, weight and
height of members of athletic teams, the most recent previous educational agency or
institution attended by the student, fraternity and/or sorority and educational societies.
Beginning in the fall semester of 2001, full-time/part-time status is directory
information.

The right to file a complaint with the U.S. Department of Education concerning
alleged failures by James Madison University to comply with the requirements
of FERPA. The name and address of the office that administers FERPA is: Family Policy
Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW,
Washington, DC 20202-4605.

For more detailed information concerning JMU’s records policy see James Madison
University, Policies and Procedures, Policy 3102, The Family Educational Rights and
Privacy Act.
Available Programs and Degrees

Doctor of Philosophy (Ph. D.)
Communication Science & Disorders
   ☐ Clinical Doctorate Track in Audiology
   ☐ Clinical Scientist (Research) Track in Audiology
   ☐ Clinical Scientist (Research) Track in Speech Language Pathology
Psychology
   ☐ Assessment and Measurement¹

Doctor of Psychology (Psy.D.)
Psychology
   ☐ Assessment and Measurement
   ☐ Combined Clinical, School and Counseling Psychology

Master of Fine Arts (M.F.A.)
Studio Art
   ☐ Ceramics
   ☐ Metal & Jewelry
   ☐ Painting & Drawing
   ☐ Print Making
   ☐ Photography
   ☐ Sculpture & Papermaking

Educational Specialist (Ed.S.)
Community Counseling
School Counseling
School Psychology

Master of Arts (M.A.)
Art & Art History
   ☐ Art Education
   ☐ Art History
   ☐ Studio
   ☐ No concentration desired
English
   ☐ Creative Writing/Thesis
   ☐ No concentration desired
History
   ☐ European History
   ☐ United States History
   ☐ Local/Regional/Public History
Psychology
   ☐ Psychological Sciences
   ☐ Psychological Sciences - Fifth year format
   ☐ School Psychology

Technical and Scientific Communication
Master of Arts in Teaching (M.A.T.)
Education
- Early Childhood Education
Education - Fifth year format
- Elementary Education
- Middle School Education
- Secondary Education

Kinesiology and Recreation Studies
- Physical and Health Education

Master of Business Administration (M.B.A.)
Business Administration
- Health Services Administration
- Web-based Business
- No concentration desired

Master of Education (M.Ed.)
Psychology
- College Student Personnel Administration
Education - students may elect to concentrate in more than one of the following areas of education:
- Middle Education
- Early Childhood Education
- Educational Technology
- Reading Education
- School Administration
- Secondary Education

Special Education
- Emotional Disturbance
- Early Childhood Special Education
- Learning Disabilities
- Mental Retardation
- Non-Teaching Program

Special Education - Fifth year format

Master of Music (M.M.)
Music
- Conducting
- Performance
- Music Education
- Music Theory/Composition
- No concentration desired

Master of Public Administration (M.P.A.)
Public Administration
- Health Administration
- Public Sector Communication
- Criminal Justice
- Individualized Concentration
- No concentration desired

Public Administration - Fifth year format

Master of Physician Assistant Studies (M.P.A.S.)
Physician Assistant Studies
Master of Science (M.S.)

Accounting
- On-campus program
- Off-campus program

Biology
- Thesis/Research Track
- Non-Thesis/Teaching Track

Computer Science
- Web-based Information Security
- Secure Software Engineering

Health Education
- Directed Research Option
- Thesis Option

Health Sciences
- Administration of Health Promotion/Wellness
- Nutrition & Physical Activity
- Dietetics
- No concentration desired

Integrated Science and Technology
Kinesiology and Recreational Studies
- Exercise Physiology
- Fitness Specialist
- Nutritional/Physical Activity
- Sports Studies: Athletic Administration/Coaching
- Sports Studies: Sport & Recreation Management
- Kinesiology & Recreational Studies

Speech Pathology

Technical and Scientific Communication

Master of Science in Education (M.S.Ed.)

Adult Education/Human Resource Development
- Leadership & Facilitation
- Human Resource Management
- Higher Education
- Individualized Concentration
- Technology
- Research

Health Education
- Non-Thesis Option
Fees and Expenses

Student Financial Services

302 Warren Hall
Phone: (540) 568-6505
Web site: http://www.jmu.edu/stufin

Tuition and fee charges for the 2003-2004 session are available on the Student Financial Services Web site. The tuition and fees listed contribute to general maintenance and operation costs, instruction costs and other university service costs including recreational and health-service facility costs. The fees also support student activities such as the Student Government Association, University Program Board and student publications.

For a full description of the tuition and fee rates, refer to the Registration and Student Record Services Handbook or the Student Financial Services Web site.

Billing and Registration

Registration for the fall semester is conducted in April for returning students and in November for the spring semester. Students who register during the aforementioned times will be notified of the amounts due through the mail in early August for the fall semester and early December for the spring semester. Thereafter, monthly statements will be mailed for any new charges or unpaid account balances.

Students are encouraged to review their financial account for amounts due after any registration or course adjustment activity. Students may access their financial account by using the student information e-campus link on the Registrar’s Web site at http://www.jmu.edu/registrar.

Students are responsible for payment of their bills by the first week of classes to avoid a late fee and/or hold.

Continuous Enrollment

All graduate students enrolled in graduate degree programs must register each regular semester for a minimum of one graduate credit hour from enrollment to graduation. This policy excludes summer sessions. Students wishing to be excused from the requirements of this policy because of extreme extenuating circumstances must solicit exemption from the dean of the College of Graduate and Professional Programs through the Leave of Absence: Continuous Enrollment option.

A graduate student who takes an unauthorized break in registration by failing to maintain continuous enrollment will relinquish his or her graduate standing in the university. Students who wish to be reinstated will be required to file an Application for Graduate Admission, pay the admission fee and register for one graduate credit for each term of unauthorized break in registration.

Tuition and Fees

Payment

Payment may be made by the following means.

- Remitting cash or check payment to Student Financial Services, Warren Hall, Room 302.
- Remitting check payment along with the billing statement to the university’s bank lock box.
- Remitting credit card payment online through the Student Financial Services Web site at www.jmu.edu/stufin or e-campus. The service is provided by an outside vendor.
Students may pay by a combination of personal check, money order, cashiers check and credit cards. Payments drawn on foreign banks must be converted to U.S. dollars prior to transmittal to the university. The student’s account number (social security or campus ID number) should be included on all payments to ensure its application to the proper account.

Debts owed to the university are governed by the following policies.

- No credit for university work may be given to any student for a diploma, teacher’s license or transfer purposes until all debts to the university, other than student loans, have been settled.
- Unless accounts are paid in full, students will be ineligible for readmission or registration for a future semester.
- Upon recommendation of the director of student financial services and with the approval of the assistant vice president for finance, students in debt to the university may be suspended from their classes or may be withdrawn.

**Audit Fees**
A student registering to audit a course will pay the same tuition and fees as one who registers for credit.

**Specialized Class Fees**
Certain courses which use off-campus facilities (e.g., bowling, skiing) have additional charges which will be determined at the time the course is offered.

**Examination for Credit Fee**
Arrangements for attempting credit by departmental examination may be made by paying a nonrefundable $25 fee to Student Financial Services and presenting the receipt to the Office of the Registrar.

**Returned Check Fee**
A $20 per check fee is assessed for checks returned unpaid to the university. Check cashing privileges may be withdrawn from repeat offenders. The university will hold the student’s records, future registration, transcripts, teaching license and diploma until the check is redeemed.

If the student does not redeem the check, the university may invalidate the student’s registration, cancel the student’s class schedule and participation in university activities, or withdraw the student from the university.

**Convenience Fee**
Electronic Student Account payments made through e-campus will be assessed a convenience fee. The convenience fee is based on the total charges paid. The calculated amount is displayed separately and assessed at the time payment is made.

**Eligibility for In-state Tuition**
Eligibility for in-state tuition charges is based on the provisions of Section 23-7.4 of the Code of Virginia in effect on the first day of classes for each term. A link to the Code of Virginia guidelines can be found on the Student Financial Services Web site. This statute limits in-state tuition to those with Virginia domiciliary status. Domicile is defined as the “present, fixed home to which you return following temporary absences and at which you intend to stay indefinitely.” If there is any question of the right to classification as a domicile of Virginia, it is the student’s obligation, prior to the first day of classes for the semester, to raise the question with Student Financial Services.

To qualify for in-state tuition, a graduate student shall establish by clear and convincing evidence that for a period of at least one year immediately prior to the date of the alleged entitlement, he or she was domiciled in Virginia and had abandoned any previous domicile, if such existed.

Domiciliary status shall not ordinarily be conferred by the performance of acts which are auxiliary to fulfilling educational objectives or are required or routinely performed by temporary residents of the commonwealth. Mere physical presence or residence primarily for educational purposes shall not confer domiciliary status. A matriculating student who has entered an institution and is classified as an out-of-state student shall be required to rebut
by clear and convincing evidence the presumption that he or she is in the commonwealth for the purpose of attending school and not as a bona fide domiciliary.

Initial determinations of eligibility are made by the Office of Graduate and Professional Programs (graduate students and continuing education and special students). Decisions on re-entry students are also made by these respective offices. To establish eligibility, an applicant must complete the uniform domiciliary status questions included in the applications for admission to the university or on the special student enrollment form. For information on special provisions of Section 23-7.4 covering military families and persons living out-of-state but employed full-time in Virginia, contact the Office of Graduate and Professional Programs.

Once a student receives an initial determination of eligibility, he or she may appeal for a review of the application by contacting the head of the office that made the determination (director of the Admissions Office or dean of the Office of Graduate and Professional Programs). Appeal for a final administrative review of the decision to deny in-state tuition may be made to the university’s Residency Appeals Committee chaired by the associate vice president for institutional effectiveness. If there is any question of the right to classification as a domicile of Virginia, it is the student’s obligation, prior to or at the time of registration, to raise the question with the administrative officials of James Madison University. Any party aggrieved by a final administrative decision shall have the right to petition within 30 days for a review by the Circuit Court of Rockingham County.

Returning students may apply for reclassification from out-of-state to in-state status through Student Financial Services. Denial of a request for such reclassification may be appealed within 30 days to the assistant vice president for finance with a final appeal within 30 days to the Residency Appeals Committee. Petition for review of this final appeal must be made within 30 days to the Circuit Court of Rockingham County.

A change to in-state status may be made for a semester only when the completed application for reclassification form is received in Student Financial Services prior to the first day of classes for that semester. Students are responsible for paying out-of-state tuition rates until in-state status has been approved.

**Refunds**

Any overpayment of a student account can be either refunded or posted to a future semester as a payment. All overpayments are refunded to the student except for parent PLUS loans, which are refunded to the parent. Direct Deposit to the student’s or parent’s bank account is strongly encouraged. Direct deposit forms can be acquired at the Student Financial Services office at Warren Hall, Room 302, through the Student Financial Services Web site at [www.jmu.edu/stufin](http://www.jmu.edu/stufin), or the Office of Financial Aid Web site at [www.jmu.edu/finaid](http://www.jmu.edu/finaid). If no direct deposit form is on record, then a check will be processed within 10 banking days and mailed to the student’s/parent’s home address of record.

Students who officially withdraw from the university by September 12 for fall semester and January 30 for spring semester will be refunded all tuition and fees except the tuition and room deposit. Withdrawing after the end of this period will not reduce tuition charges. Room and board fees will be prorated from the dining hall opening date. After September 12 and January 30 refunds will be for only a pro rata share of the board fee.

Students who withdraw from the university due to illness certified by a physician or for unavoidable emergency or extenuating circumstances approved by the Associate Director of University College Centers for Student Organization Services will be refunded a pro rata share of all fees. Refunds for withdrawal from the university are calculated from the date on which withdrawal is officially approved by the Associate Director of University College Centers for Student Organization Services.
Financial Assistance

For information regarding Assistantships, contact
College of Graduate and Professional Programs
17 West Grace Street, MSC 6702
Phone: (540) 568-7065
Web site: http://www.jmu.edu/cgop/assistantships.shtml

For other information, contact Scholarships, Grants and Loans
Warren Hall, MSC 3519
Phone: (540) 568-7820
Web site: http://www.jmu.edu/finaid/

Assistantships
Each year, James Madison University makes available approximately 2.25 million dollars for graduate study tuition assistance and stipends through the graduate assistantship program. Although limited in number, assistantships are available in academic and non-academic areas. All categories, described in the “Classification of Assistantships” section, are referred to as graduate assistantships unless otherwise indicated. Assistantships are managed by the College of Graduate and Professional Programs and are distributed among academic departments, administrative offices, athletics and student services areas.

Students will be awarded assistantships for a maximum of four academic semesters (exclusive of summer session) in most masters’ and educational specialist degree programs and a maximum of three years in the Master of Fine Arts and doctoral programs. Assistantships are limited to nine paid graduate hours of tuition each fall and spring semester, although contracts are usually written for an academic year. Students must pay for any additional hours each semester at the tuition rate based on residency status. Under no circumstances will payment from assistantship funds be used for audited course work or undergraduate hours. Assistantships do not cover students’ room and board expenses. No tuition or stipend is paid through the assistantship program for summer sessions.

Deadlines
Some departments, schools or programs may require specific deadlines for assistantship applications. Consult the appropriate department or school for their application deadline.

Criteria
To be eligible for assistantship consideration, students must:

- Be conditionally or unconditionally accepted into a specific graduate program.
- Have official transcripts on file indicating completion of the baccalaureate degree from a regionally accredited institution.
- Carry a full time (nine credit hour) course load during the period of the assistantship.

Academic Load
The following academic load guidelines apply to all graduate assistants.

Graduate assistants must:

- Carry nine credit hours each semester.
- Receive prior approval from the graduate program coordinator when planning to register for more than nine credit hours
- Pay for any additional credit hours above the nine paid for by their assistantships.
Not take less than nine credit hours without prior written approval from the dean of the College of Graduate and Professional Programs. This underload of classes to no less than six credit hours is allowed only once during a graduate career.

For tuition to be covered by the assistantship, all graduate assistants must register each semester for all courses during the regular registration period(s) and prior to the tuition refund date as outlined in the Registration and Student Record Services Handbook. Students who register for any additional courses after this time will be held personally responsible for additional tuition and fees. Students who drop courses after the tuition refund date will be held personally responsible for fees and will receive a grade of “W” for the course. Exceptions will be made only for documented extenuating circumstances and will be handled on a case-by-case basis.

**Classification of Assistantships**

**Graduate Assistants in Academic Areas**
A limited number of graduate assistantships are available in most academic units offering programs of graduate study. Graduate assistants are assigned to an academic unit to assist faculty members in preparing for instruction, grading papers, conducting research, preparing laboratories, performing departmental or school administrative tasks, etc. Application forms may be obtained from the College of Graduate and Professional Programs office. Graduate assistants undertake various academic unit assignments requiring approximately 20 hours a week, while at times it is necessary for GAs to perform administrative duties, there is a concerted effort to limit the assistantship duties to activities relevant to the students’ field of training.

**Graduate Assistants in Nonacademic Areas**
Graduate assistants are employed in a nonacademic departments or administrative offices and their duties vary according to the needs of their assigned area. Specific responsibilities will vary, but in general assistants will aid in the administrative duties of a supervisor approximately 20 hours per week.

**Graduate Assistants in Student Affairs**
The Division of Student Affairs offers appointments to the university staff for graduate students interested in working in a student personnel position. The employment site will depend on training, experience and interest.

**Teaching Assistants**
A limited number of teaching assistantships are available in academic units offering major programs of graduate study. Teaching assistants must:

- Have earned at least 18 graduate credit hours in the discipline in which they are teaching.
- Be under the direct supervision of an experienced faculty member.
- Receive training in teaching methods.

Teaching assistants are assigned to an academic unit and are expected to instruct three to six credit hours of course work or an equivalent of three to six credit hours of laboratory instruction. Application forms may be obtained from the College of Graduate and Professional Programs office.

**Doctoral Assistantships**
Some Doctoral Assistantships may cover more than nine hours per semester tuition. These assistantships may pay a higher stipend and may be in effect through the summer semesters. Doctoral students seeking assistantships should contact the individual program.

**Dual Employment**
Graduate students receiving stipends from Virginia state funds are occasionally permitted to accept JMU employment in addition to the assistantship. Permission for dual employment must come from the Dean of the College of Graduate and Professional Programs, who makes his approval decision in response to a request by the student’s graduate coordinator or adviser, not from the student. The student and the coordinator or adviser should carefully
consider the overall effect of additional employment on the student’s academic performance. The coordinator or adviser endorsing the additional employment, must submit a written request for approval to the dean of the College of Graduate and Professional Programs.

**Federal Financial Assistance Programs**

The Office of Financial Aid and Scholarships helps qualified students secure a financial aid package designed to meet their financial needs. The award package may consist of grants, scholarships loans and work-study.

Students interested in information on financial assistance programs should contact the Office of Financial Aid and Scholarships at the above address or send e-mail to fin_aid@jmu.edu.

**Application Procedures and Deadlines**

All financial aid applicants must undergo a standardized federal “needs analysis” by completing the *Free Application for Federal Student Aid* (FAFSA). Because of intense competition for scholarships and grants at JMU, it is essential that applicants ensure their FAFSA has reached the federal government by March 1 prior to the academic year for which you are seeking financial assistance to receive priority consideration for the coming school year. Failing to file by the priority filing date may cause delays in receiving aid and can result in lower aid packages.

A student must complete a FAFSA before financial aid eligibility can be determined for the following sources of aid:

- Federal Subsidized Stafford Loan
- Federal Unsubsidized Stafford Loan
- Federal Work-Study Program
- Need-based Foundation Scholarships

When a student files the FAFSA, the federal processor calculates their Expected Family Contribution (EFC). The EFC is an estimate of the family’s ability to contribute to the student’s overall educational expenses for one year. The student’s financial aid “need” is JMU’s computation of educational expenses minus the EFC. Due to limited funding, state and federal grants must be awarded to students who have the highest financial need, and in many cases who met the priority FAFSA filing date.

Financial aid recipients must complete the FAFSA each school year. Amounts and types of assistance may vary from year to year. If funds are available, the Office of Financial Aid and Scholarships continues to assist students who meet the following conditions:

- Complete the FAFSA, with priority given to those who apply by the priority filing date of March 1, prior to the academic year for which you are seeking financial assistance.
- Meet the general eligibility requirements for aid as defined by the FAFSA
- Maintain Satisfactory Academic Progress (described later)

Students who are offered financial assistance by JMU will receive a financial aid award notice indicating the source(s) and amount(s) of assistance. The aid notice has important information, so the recipient should read it very carefully before returning the appropriate copies to the Office of Financial Aid and Scholarships. If any of the information is not correct, the student should immediately notify the Office of Financial Aid and Scholarships.

Financial aid is awarded based on FAFSA information, as well as the student’s status at JMU (e.g. class status, enrollment level, and residency). Federal and state regulations also require the Office of Financial Aid and Scholarships to consider any outside sources of aid when awarding financial aid. These outside sources can be JMU scholarships, private scholarships, veteran’s benefits, tuition waivers, etc. It is possible for a student’s financial aid award to fluctuate throughout the year if any of the FAFSA information, JMU status, or outside aid status changes. Financial aid notices are usually sent to returning students during the spring. New students may receive aid notices in the spring prior to enrollment.

**Cost of Attendance**

An important part of determining a student’s eligibility for financial aid is determining a Cost
of Attendance. In accordance with federal regulations, JMU has developed a Cost of Attendance (i.e. budget) for anticipated expenses a student may incur during the current school year. These expenses include tuition, room, board, books and supplies, travel expenses, and personal expenses. Room and board can be residence hall or off-campus housing expenses depending a student’s response on the FAFSA. Expenses are also considered for students who live at home with parents or relatives, but it’s a lesser dollar amount than for those living elsewhere. Travel expenses include items such as gasoline, vehicle maintenance and insurance. Personal expenses include things such as laundry, entertainment and clothing. Many items in the Cost of Attendance are estimates, so it’s possible for a student to spend more or less than we anticipate during any given year.

Satisfactory Academic Progress

To be academically eligible to receive financial assistance, students must be making satisfactory progress toward graduation as defined by the College of Graduate and Professional Programs.

Student Loans

Federal Stafford Loan Program
Web site: http://www.jmu.edu/finaid

The Stafford Loan (subsidized and unsubsidized) is a long-term, low-interest loan, for which undergraduate, graduate and professional students may apply. The interest rate is variable, but is capped at 8.25 percent. For a subsidized loan, the government will pay the interest while the student is in school. For an unsubsidized loan, the student can either pay the interest in school or have it capitalized (i.e. added into the principle). Payments on the principle amount do not begin until the student graduates or drops below half-time status. Graduate students may borrow no more than $18,500 per year. Eligibility is determined by the Office of Financial Aid and Scholarships.

Alternative Loans
Many banks are now offering credit-based alternative loans to students and parents who either don’t qualify for the Stafford loan or who cannot receive enough money through these loan programs to cover their educational expenses. Terms of these private loans vary, but interest rates are normally higher than the Stafford loan. The financial aid office strongly encourages students to exhaust other sources of aid before pursuing an alternative loan; however, brochures and applications are available in our office for those needing more information on these types of loans.

Donald E. Gardner Memorial Loan Fund
The Donald E. Gardner Memorial Loan Fund is a short-term loan program named in memory of Donald E. Gardner, who served as university comptroller for nine years. The program provides students with a resource to meet short-term financial needs. These short-term loans, which range from $200 to $600, are available to undergraduate and graduate students who meet the following criteria:

- Are currently enrolled
- Are degree-seeking
- Are full- or part-time (taking at least six hours of course work)
- Are making satisfactory academic progress
- Can repay the loan within 90 days

Tuition must be paid in full prior to applying for the Donald E. Gardner loan. Loan applications and other eligibility information may be obtained in the Office of Financial Aid and Scholarships.

JMU Scholarships
Web site: www.jmu.edu/finaid

Many scholarships for students are established through the JMU Foundation and other
individual departments. All scholarships are awarded through the Office of Financial Aid and Scholarships or by the appropriate college or division according to criteria set by the scholarship donor. Scholarships are awarded based upon either merit and/or need. To be considered for need-based scholarships, students must complete the FAFSA.

A listing of scholarships is available through the Office of Financial Aid and Scholarships. For information on specific scholarships, we encourage you to visit the Financial Aid and Scholarships Office or check the Web site.

**Private Off-Campus Scholarships**

Private off-campus scholarships include those scholarships awarded to specific students by outside (non-JMU) organizations. These scholarships are credited to the student's account upon receipt of the funds. If this type of scholarship is to be used to pay tuition and fees, the funds must be received prior to the semester due date for payment of fees. Please mail all off-campus scholarships to:

Office of Student Financial Services, MSC 3516
James Madison University
Harrisonburg, VA 22807

The student is responsible for compliance with the provisions of the scholarship (i.e., grade reporting, notification of attendance, etc.).

**Student Employment**

JMU employs both graduate and undergraduate students in academic, administrative or service oriented areas. Students must be degree seeking and currently enrolled to be employed in these positions. They receive payment for their services via direct deposit twice a month. There are two work programs at JMU.

**Federal Work-Study Program**

Federal Work-Study jobs can be part of the financial aid package for students who demonstrate high financial need as determined by their FAFSA. This is an opportunity for students to have a meaningful work experience; however, employment is not guaranteed. The student will still need to interview with the appropriate employers to secure a position. These jobs provide a student with the opportunity to earn a paycheck throughout the year, and the money earned through this program is not counted as income when the student applies for financial aid next year.

**Institutional Employment**

Institutional Employment is also available to students at JMU. These jobs are very similar to the FWS jobs with two main exceptions. A student does not have to establish financial need to apply for an institutional job. Secondly, these jobs are not awarded to students. Students must apply for an institutional job through the Office of Financial Aid and Scholarships.

**University Withdrawal**

If you withdraw from the university, Student Financial Services may adjust your charges based upon your withdrawal date and the JMU Refund Policy. For the university refund policy, please refer to the Student Financial Services Web site at [http://www.jmu.edu/stufin](http://www.jmu.edu/stufin).

Regardless of any adjustment to your charges, if you withdraw from the university, your financial aid may be adjusted based on the percentage of the semester you completed before withdrawing. In some cases, Federal Return of Title IV Funds regulations may require that aid be returned to the federal government for students who completely withdraw from JMU before 60% of a term has been completed. Financial aid is awarded for the entire term, which is generally a 15 week period. If a student does not complete the entire 15 weeks, then the Return of Title IV Fund rules will determine how much financial aid has been earned. The student can keep that amount for the term, but the unearned part must be immediately returned to the federal government. In some situations, this will leave the student with a balance owed to the university. Funds are returned to the federal government in following order: Unsubsidized Stafford, Subsidized Stafford, PLUS, Perkins, Pell and SEOG. See the terms and conditions of Financial Aid at [www.jmu.edu/finaid](http://www.jmu.edu/finaid) for a sample.
calculation. Additionally, certain state grant programs cannot exceed tuition, or the cost of tuition and books. So, if a student’s tuition is reduced based on the JMU Refund Policy, it’s very possible that state grant funds will be reduced by the same amount. In most cases, this will not impact a student’s bill, as the reduction to state grants is generally equal to the remaining tuition balance.
University Services

Academic Affairs Mission Statement
Phone: (540) 568-6616
Web site: http://www.jmu.edu/acadaffairs/mission.htm

Our mission is to provide an exceptional educational experience, designed to meet the changing needs of our students in society and dedicated to achieving the highest level of excellence within our academic programs.

We strive to focus on the student both as an individual and as a member of the global community. Our faculty are dedicated mentors who are scholars, innovative teachers, and models of responsibility and accountability. Our staff are creative and talented colleagues who are committed to providing a supportive environment that facilitates learning and development.

Student Affairs Mission Statement
Phone: (540) 568-3685
http://www.jmu.edu/stuaffairs/

We are committed to preparing students to be educated and enlightened citizens who will lead productive and meaningful lives.

Campus Services

Academic Advising and Career Development
301 Wilson Hall, MSC 1016
Phone: (540) 568-6555
Web site: http://www.jmu.edu/career/

There are a variety of career development services on campus to assist students at various stages of the career exploration and job search process. These services are part of the Student Success Center in Wilson Hall. Professional career counselors are available to discuss vocational objectives and a career resource center augments students’ career decision-making and job search activities.

A continuous on-campus interviewing program by employers from public schools, businesses, industries and government agencies is arranged during each school year in Sonner Hall.

Workshops on job-hunting strategies, resume writing, completing applications and interviewing are offered on a regular basis. Job vacancies from a variety of organizations are available in the resource center in Wilson Hall.

Bookstore
211 Bluestone Drive, MSC 2902
Phone: (540) 568-6121
Web site: http://www.jmu.edu/bookstore

The JMU Bookstore stocks all textbooks used by the academic schools and departments, as well as a large selection of general and technical books. The store also sells school, office and computer supplies, software, clothing, gifts, magazines and greeting cards. For students’ convenience, the bookstore provides the following services
- Special orders for books
- Textbook buy back
Gift certificates
Film processing
Bus tickets
Computer services

Card Services
Warren Hall, Third Floor, MSC 3532
Phone: (540) 568-6446
Web site: [http://www.jmu.edu/cardctr/](http://www.jmu.edu/cardctr/)

Card Services issues the JMU access card, which is the official identification card for all members of the university community. The JAC allows access to various campus facilities and services. It is also used for meal plans, dining dollar declining balance accounts and FLEX declining balance accounts, all of which are administered by Card Services. FLEX declining balance accounts are honored for purchases or services in the following areas: bookstore, on-campus copy centers and copy machines, game room, library fines, Mister Chips convenience store, postal services, University Health Center, University Recreation Center, Printing Labs located across campus, Masterpiece Theatre, Parking Services, UPB movies, on-campus vending machines, Warren Hall Ticket Office and all dining services locations as well as many off-campus locations such as Changelos, Biltmore Grill, IHOP, Latalia, Blimpies, Chilis, China Express, Luigi’s, Movie Max, Pargos, RT’s Chicken, Spanky’s and Subway, The Look, Carribean Tan, Dominios Pizza and more to come.

Copy Center
Medical Arts Suite 31, MSC 5722
Phone: (540) 568-3263
ISAT/CS, Room 129, MSC 4311
Phone: (540) 568-8731
Web site: [http://www.jmu.edu/copycenter](http://www.jmu.edu/copycenter)

The university Copy Centers are owned and operated by the university as a service to the campus community. There are two locations conveniently operating extended hours and providing a full range of photocopying services. Academic coursepack service, copyright permission service, full color copying, digital copying and digital file storage, network printing, binding, laminating and express photocopying service is available. Hours of operation vary according to location. All centers are closed for university holidays.

Center for Multicultural/International Student Services
Warren Hall, Room 245, MSC 3504
Phone: (540) 568-6636
Web site: [http://www.jmu.edu/multicultural](http://www.jmu.edu/multicultural)

The Center for Multicultural/International Student Services strives to celebrate the diversity of our students by fostering student growth and development, heightening awareness, and educating our constituents regarding ethnic and cultural diversity.

Our purpose is:

- To assist the university in its goal of recruitment of multicultural and international students, faculty and staff
- To increase the retention of multicultural and international students through a host of program services designed to assist these students in achieving their academic and career aspirations
- To encourage the development of a climate in which accomplishments of multicultural and international students are appreciated
- To create an environment through which multicultural and international students can continue to be an active part of the mainstream of campus life
The office works diligently to provide the following services:

- Recruitment and Retention
  - Site visits and recruitment fairs
  - Transition Program
  - Academic Follow-up
  - Mentor Program
  - Educational Skills Development
  - High School Male Academy and Female Institute

- Cultural Programming and Awareness
  - Campus wide events featuring our multicultural education series, special programs and performances
  - Educational activities including diversity workshops
  - Social activities such as homecoming step show, dances and receptions
  - International Week celebration

- Student Support
  - Monthly newsletter
  - Semester cultural calendar
  - Resources & referrals to our library, scholarship and internship information
  - Student Organization advising
  - Assessment and evaluation

- International Student Development
  - Transition America: International Student Orientation
  - Cultural Exchange Program
  - Friendship Families: for community support and an introduction to U.S. family life
  - Madison International – Ashby Hall
  - Annual International Student Leadership Conference

- Leadership Development
  - Organizational Roundtable
  - Leadership Training Programs
  - Assistance or sponsorship for leadership conferences

**Convenience Store**

Phone: (540) 568-3922

JMU's on-campus convenience store, Mister Chips, is owned and operated by the university. It sells a wide variety of products including snacks and beverages, health and grooming aids, newspapers, greeting cards, novelties, flowers and balloons. Mister Chips also provides film processing.

**Counseling and Student Development Center**

Varner House, Room 101, MSC 0801
Phone: (540) 568-6552
Web site: [http://www.jmu.edu/counselingctr/](http://www.jmu.edu/counselingctr/)

The Counseling and Student Development Center provides mental health services, developmental skills assistance and human relations services to the student community. Through individual therapy, group counseling and psycho-educational programming, the center helps students to:

- Resolve personal conflicts
- Deal with emotional distress
- Develop more effective and satisfying lifestyles
- Overcome sexual abuse trauma
- Improve interpersonal relationships
- Recover from substance abuse
- Enhance educational development

In addition to counseling and therapy, the center provides consultative services and
psycho-educational programs to students, faculty members, administrators and parents. Consultative services provide individuals the opportunity to consult with a counselor and obtain assistance in assessing a problem, considering how to help someone who may be having personal or mental health difficulties and/or obtaining information about psychological and mental health services. Consultation can also assist with referrals to mental health providers in the Harrisonburg community. Psycho-educational services provide a variety of workshops and presentations (such as stress management, interpersonal communication, family dynamics and weight and eating concerns) to assist students with their academic success and personal well being.

Services are available to all full-time students; limited services are available to part-time students. The center is staffed by psychologists and counselors. All contacts with the center are treated on a confidential basis unless other arrangements are made. Appointments can be made by calling the center or stopping by the office. In case of a mental health emergency after regular office hours, call the campus police for assistance at (540) 568-6911.

Dining Services
Gibbons Hall, Entrance 7, MSC 0901
Phone: (540) 568-6751
Web site: http://www.jmu.edu/dining/

Nutrition is important throughout life, and the college years are no exception. JMU Dining Services is one of the largest departments at the university, supporting the academic life of the entire community seven days per week with convenient, tasty meals and refreshments. The department serves the entire campus in 14 different venues across campus, ranging from espresso bars to cheeseburgers.

To meet the varied needs of individual students, Dining Services provides different meal plans. All on-campus residents may choose from among three meal plans, which come with the "Student Housing and Food Contract." They are the 19-Meal Plan, the 14-Meal Plan and Any-11-Premier Meal Plan. All of these plans provide the student with more good food at less cost per meal than any other means available. Commuters, who do not automatically have meal plans, may purchase any of the on-campus plans and have the additional options of a ten, five and three meal plan.

The department also offers declining balance accounts that operate similar to a debit card. Students using this plan, called Dining Dollars, get a 5-percent discount and pay no sales tax on anything they buy. Cash sales are also welcome at all Dining Services locations.

Disability Services
Wilson Hall, Room 107, MSC 1009
Voice/TDD: (540) 568-6705
Web site: www.jmu.edu/disabilityser

The Office of Disability Services ensures that the university complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). Section 504 and the ADA guarantee the rights of all students with documented disabilities equal access to an education, which is limited only by personal ability and not by their disability.

Our mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at JMU. We cooperate through partnerships with students, faculty, and staff to provide reasonable accommodations, services and programs that enable equal access and encourage and assist students in the development of independence, responsibility and effective self-advocacy.

Individuals eligible for services include, but not limited to, those with
- Learning Disabilities
- Attention Deficit/Hyperactivity Disorder
- Mobility/Orthopedic impairments
Depending on a student's special needs, the following services may be available to JMU students with documented disabilities:

- Assessment of disability-related needs
- Specialized academic advising
- Consultation/liaison with faculty & other university departments
- Academic support services
- Learning strategies
- Alternative testing accommodations
- Special Housing Requests
- Books on Tape
- Paratransit - campus transportation services for mobility impairments

In order to provide effective and reasonable accommodations, students will be required to provide documentation of their disability. Documentation should indicate the student's current level of functioning. It should also state the diagnosis of a disability, indicate the substantial limitations resulting from the disability and provide a justification for reasonable accommodations. Guidelines for the documentation of a disability can be requested from Disability Services or found at the following Web site: www.jmu.edu/disabilityser/documentation.htm. This information will help Disability Services provide each student with appropriate, reasonable accommodations and support services.

For more information on how to secure accommodations for students with disabilities or for information about policies, procedures and resources regarding services for students with disabilities, contact this office.

**Facilities Management**

University Services Building, Room 207B, MSC 7001

Facilities Management is responsible for planning, acquiring, building, maintaining, managing and directing the capital assets of the university. Maintenance includes heating, cooling, integrated waste management, grounds cleaning and beautification. Routine maintenance and cleaning services for campus residential facilities are provided by Facilities Management through the Office of Residence Life. Facilities Management is also responsible for integrated pest management, utilities, The Edith J. Carrier Arboretum, transportation services for the university and the Locksmiths shop. Emergency services can be obtained by calling 568-6101 Monday-Friday, from 7:30 a.m. to 11:30 p.m. During nights, weekends, and holidays, please call Campus Police at 568-6911.

**Mail Services**

Warren Hall, MSC 0001
Phone: (540) 568-6257
Web site: www.jmu.edu/jmumailser

JMU Mail Services is a fully functional Post Office serving the entire JMU community. We offer a wide variety of mailing supplies. We also offer UPS shipping service, fax service, on demand delivery and much more. There is a USPS stamp vending machine outside our office in Warren Hall and one in the Festival Building. There are USPS drop boxes, as well as JMU Mail Services drop boxes, located throughout the university for your convenience.

Student mail is delivered between 10:00 a.m. and 4:00 p.m. with deliveries from UPS, DHL, FedEx, etc. throughout the day. Packages too large for mailboxes are received into our computer system. Notification slips are put into student mailboxes and e-mails are sent to the student. Any outgoing mail received after 4:00 p.m. will be postmarked.
the following business day. All outgoing UPS packages are picked up Monday through Friday at 3:00 p.m.

**Office of Affirmative Action**

Burrus Hall, Room 128, MSC 7802  
Voice/TDD: (540) 568-6991  
Fax: (540) 568-7992  
Web site: [http://www.jmu.edu/affirmact/](http://www.jmu.edu/affirmact/)

The Office of Affirmative Action promotes the practice of and adherence to the equal opportunity policies of James Madison University. Bringing diversity to JMU, the program assists in the identification and recruitment of qualified individuals who normally have been underrepresented in the university. It also sponsors workshops on various subjects such as sexual harassment, disabilities, affirmative action, etc. The Office of Affirmative Action also provides a place where individuals who feel that they have been subjected to harassment or discrimination due to race, color, national origin, religion, gender, age, veteran status, political affiliation or disability can file a complaint for an impartial resolution. Inquires may directed to the Office of Affirmative Action.

**Office of Judicial Affairs**

Fredrickson C101, MSC 2901  
Phone: (540) 568-6218  
Web site: [http://www.jmu.edu/judicial](http://www.jmu.edu/judicial)

The Office of Judicial Affairs is committed to promoting student learning, civic responsibility and, in partnership with others, developing the environment necessary for the university to best achieve its educational mission.

**Ombudsperson**

Taylor Hall, Room 499, MSC 3509  
Voice: (540) 568-3550

The president of the university has empowered a member of the student affairs staff to serve as ombudsperson. The Ombuds officer or “ombudsperson” is committed to providing students with impartial, independent and confidential support regarding university policy, procedure and regulations. Through collaboration with the student, the officer

- Facilitates the resolution of issues for concerned or dissatisfied students  
- Provides direction to students on procedure and regulations  
- Provides confidential, impartial facilitation of communication  
- Aids in the fair resolution of grievances

The current Ombudsperson is Rick Larson, who can be reached at larsonrd@jmu.edu.

**Parking Services**

Parking Deck, 381 Bluestone Drive, MSC 1301  
Phone: (540) 568-3300  
Web site: [www.jmu.edu/parking/](http://www.jmu.edu/parking/)

All vehicles parked on property owned, operated or leased by James Madison University are required to display a valid JMU parking permit. For information regarding the university’s parking regulations refer to the *Parking and Traffic Regulations Handbook*. A copy of the handbook may be obtained free of charge upon request at the Parking Services office. Updated information can be obtained through our Web site. For additional questions and concerns contact Parking Services between 7:00 a.m. and 4:30 p.m. Monday through Friday.

**Public Safety**

Shenandoah Hall, MSC 6302  
Phone: (540) 568-6913
The Office of Public Safety consists of law enforcement and safety services. The office supports and advances the educational purposes of the university through the provision of a safe and secure environment for learning, working and personal development.

**Police**

The university police are commissioned officers with comprehensive law enforcement powers. University police continually patrol JMU’s campus and facilities, providing full-service protection to the JMU campus community.

The Campus Police Cadet Program carefully screens and trains students to aid the university police. Cadets are on duty from 7 p.m. until 2 a.m. each weeknight and until 3 a.m. on weekends. Cadets are responsible for patrolling the campus and securing academic and administrative buildings each evening. In addition, they provide escort services to students walking across campus. When cadets are off duty, university police officers escort students as needed.

**Safety**

The university safety engineer is responsible for conducting safety surveys and inspections; investigating fires, hazardous material spills and other dangerous conditions and providing environmental and workplace safety and health awareness training.

**Residence Life**

Huffman Hall, MSC 2401
Phone: (540) 568-6275
Web site: [http://web.jmu.edu/reslife/](http://web.jmu.edu/reslife/)

The Office of Residence Life oversees multiple functions related to living and learning at James Madison University. Offices and programs within the department focus on student learning, student development, and successful transitions throughout the university experience. This department includes the First-Year Involvement Center (FYI), Residential Learning Programs, Housing Operations and Business Operations.

Residential Learning Programs oversees the selection, training and supervision of residence hall staff, develops policies and procedures for hall operations, and administers the delivery of programs and services designed to promote student success. Housing Operations manages all university-sponsored housing facilities, including the administration of contracts and room assignments. Business Operations coordinates all maintenance and housekeeping services and manages residence hall summer projects.

**Graduate Student Housing**

The university sponsors a limited number of efficiency apartments for upper-class and graduate students. Students interested in more information regarding Dentons and university housing may contact the Office of Residence Life.

**Student Government Association**

Taylor Hall, Room 234, JMU Box 3523
Phone: (540) 568-6376
Web site: [http://sga.jmu.edu/](http://sga.jmu.edu/)

Students, faculty and administration share the responsibility for governing JMU. They are represented on the University Council, on its commissions and on standing and special committees reporting to these bodies.

The Student Government Association collectively represents the university student population. SGA promotes the welfare of students by providing the medium through which students can actively voice their concerns, and by serving as a liaison between the students, faculty and administration at JMU.

**Student Handbook**

Web site: [http://www.jmu.edu/judicial/handbook.html](http://www.jmu.edu/judicial/handbook.html)
The student handbook contains a wealth of information about university policies and regulations, university facilities and student organizations. For students’ convenience, the handbook is available online.

**Student Success**

MSC 1012  
Phone: (540) 568-3787  
Web site: [http://www.jmu.edu/stusuccess](http://www.jmu.edu/stusuccess)

Student Success is the name of JMU’s collaborative, campus-wide effort to coordinate programs and support services based on cohesive educational goals. Focusing on academic achievement, career development, planning, decision-making and leadership development. Student Success programs are designed to help students assume responsibility for learning so they can complete seamless transitions into, through and out of the university. The Student Success Learning Center (Wilson Hall) houses the Office of Student Success Programs, Academic Advising and Career Development, Educational Support Programs, Written and Oral Communication Support, Science and Mathematics Learning Center, an Assessment Lab, The James Madison Center, University Information @ Wilson, and Supplemental Instruction. The Student Success Service Center (Warren Hall) houses Card Services, Financial Aid and Scholarships, Registration Services, Student Financial Services, University Information @ Warren and Warren Box Office along with several student center resources: Center for Multicultural/International Student Services, Dining Services, Office of Sexual Assault Prevention and Women’s Resource Center, lounges and Post Office. The Student Success Welcome Center in Sonner Hall houses the Office of Admissions, On-Campus Recruiting, and University Information @ Sonner.

**University and College Centers**

Taylor Hall, Room 200, MSC 3501  
Phone: (540) 568-3341  
Web site: [http://www.jmu.edu/ucenter/](http://www.jmu.edu/ucenter/)

Through facilities, services, programs and resources, the James Madison University & College Centers department responds to the needs of the entire JMU community. The Centers provide experiential learning opportunities, which support the university’s mission of student learning and development.

The University & College Centers department reflects a broad range of programs and services, which represent all members of the university community. The facilities serve as a community center for the campus. Physically, the University & College Centers are the gathering places for the campus, with meeting rooms, assembly spaces, lounges and support services available. Philosophically, they are places where ideas come to life, learning is put into practice and the various constituencies of the campus find common ground.

The University & College Centers department is comprised of the following units.

**Events & Conferences**

Taylor Hall, Room 233, MSC 3501  
Phone: (540) 568-6330  
Web site: [www.jmu.edu/ucenter/events/](http://www.jmu.edu/ucenter/events/)

Events & Conferences provides a comprehensive approach to the coordination of services necessary for campus events as well as coordination of scheduled meetings and conferences throughout the year.

**Facilities Services**

Taylor Hall, MSC 3501

Five buildings house the programs and services which the University & College Centers provide for the JMU community. They are Grafton-Stovall Theatre, Warren, Taylor, and...
Phillips Halls, and College Center on the East Campus. In addition, the University Information central facility is located in Sonner Hall. The Facilities Services area addresses physical concerns in these spaces.

**Student Organization Services**
Taylor Hall, Room 211, MSC 3501  
Phone: (540) 568-6613  
Web site: [http://www.jmu.edu/ucenter/sos/](http://www.jmu.edu/ucenter/sos/)

Student Organization Services houses Clubs & Organizations, Fraternity/Sorority Life, and the University Program Board and is located in Taylor Hall. SOS provides a wide range of educational, social and cultural events, as well as support services for all JMU student clubs and organizations. Student Organization Night at the beginning of each semester offers an opportunity for all students to meet members of clubs, learn about organizations and discover how to become involved with them.

**Clubs and Organizations**
Taylor Hall, Room 205A, MSC 3501  
Phone: (540) 568-6613  
Web site: [http://www.jmu.edu/ucenter/sos/](http://www.jmu.edu/ucenter/sos/)

Clubs and Organizations provides services to the more than 260 recognized student organizations at JMU and provides information about recognized student organizations to the JMU community. Programs such as C.E.O.Workshop Series, fund raising workshops, Officer Transition Workshops and Brown Bag Lunches provide members, officers and advisers of student organizations with opportunities to educate themselves and improve their organizations. Students are invited to stop by and learn more about involvement opportunities at JMU. Student organizations offer students a leadership laboratory in which to apply their knowledge and skills.

**Fraternity/Sorority Life (Greek Life)**
Taylor Hall, Room 205A, MSC 3501  
Phone: (540) 568-8157  
Web site: [http://www.jmu.edu/ucenter/sos/](http://www.jmu.edu/ucenter/sos/)

The University and College Centers work with the fraternities and sororities to foster cooperation and communication among the chapters, the university and the community. The staff advises the Inter-Fraternity and Panhellenic Councils and also works with the individual chapters in promoting leadership, involvement and service. The University and College Centers are committed to the development and growth of the fraternity and sorority community by implementing programs and workshops to facilitate the many aspects of Fraternity/Sorority Life.

**University Program Board**
Taylor Hall, Room 203, MSC 3501  
Phone: (540) 568-6217  
Web site: [http://upb.jmu.edu](http://upb.jmu.edu)

Campus entertainment is scheduled through the University Program Board, a student organization advised through the University and College Centers. Concerts, films, speakers, trips and numerous other activities designed to complement the educational mission of JMU are arranged by the UPB. The board also solicits collaborative programs with other student organizations, university departments and schools. Committees for which students may volunteer include film, club, musical events, global awareness and contemporary issues, tickets, technical services, publicity, public relations, financial management, internal student development and communications.

**Taylor Down Under**
Taylor Hall, Room 102, MSC 3511  
Phone: (540) 568-7853
Taylor Down Under, located on the ground floor of Taylor Hall, includes the office of Off-Campus Life and TDU Services, the Corner Pocket Game Room and TDU Coffee Bar and Bakery. The TDU lounge area was developed with the commuter student in mind but has become a popular hang out for all students. This area offers computers for student use, daily newspapers, television, evening entertainment on the TDU Stage, comfortable futons and tables and a University Information site. University Information at Taylor, operated by student employees and managed by TDU Services, is one of four sites across campus for front line information about JMU and the Harrisonburg community. Off Campus Life is concerned with the needs and education of our commuter students who are preparing to live off campus. OCL offers regular office hours, a Web site, updated housing listings, educational programs and conflict resolution along with locker rentals and lunch refrigeration. Our awardwinning UDAP program (Utility Deposit Assistance Program) is coordinated through TDU.

**University Information**

University Information is a network of information sites located on campus to provide assistance with academics, on and off campus events, directions, area tourist sites and travel information, as well as general questions about daily life at JMU; such as who-to-go-to-for-what and what kiosks are available to check e-mail, surf the Web, and register for classes.

- Welcome Center: Lobby of Sonner Hall – xUIINFO; jmu-info@jmu.edu
- UI at Taylor: Taylor Hall, 1st floor – x87853
- UI at College Center: College Center, 2nd floor – x82592
- UI at UREC: Lobby of University Recreation – x88700

**University Health Center**

The University Health Center partners with students to encourage personal responsibility for their well being by providing quality primary care and education in a confidential, professional, and collaborative manner. The UHC is staffed by physicians, nurse practitioners, registered nurses, and health education and support staff trained in young adult health care needs. The General Medicine area provides ambulatory, acute care service. Appointments can be scheduled by calling (540) 568-6178. Critical or emergency situations will be referred to Rockingham Memorial Hospital, located adjacent to the UHC.

The services of the UHC are available to JMU graduate students enrolled in six or more credit hours. All students must have a completed health record on file with evidence of required immunizations. Services include allergy clinics, immunization clinic, lab services, contraception services including counseling and education, and health education services and programs. Services do not include the cost of prescriptions, lab work, x-rays, hospital care or the services of specialists not on the UHC staff. It is strongly recommended that students carry health and accident insurance. This coverage may be through a family policy or the group policy available to JMU students at an additional cost.

The UHC Office of Health Promotion takes an active role in promoting wellness and the benefits of a healthy lifestyle for students, faculty and staff. Health educations and the REACH peers offer a variety of services related to college health issues including university-wide programs and speakers, presentations to classes, and consultations for class research and personal health concerns. Additional information is available from the UHC Web site or by calling (540) 568-6178.

The UHC Office of Sexual Assault Prevention and Women’s Resource Center, located in
Warren 404, provide services, resources, programs and information on issues associated with sexual assault, gender and relationships, self-esteem, communication skills, prevention and risk reduction, as well as providing services through the One in Four Male Education Program and C.A.R.E. (Campus Assault ResponS E Helpline). For more information, visit the Web site at http://www.jmu.edu/assaultprev or http://www.jmu.edu/womensresource.

University Recreation
University Recreation Center, MSC 3901
Phone: (540) 568-8732
Web site: http://www.jmu.edu/recreation/

University Recreation promotes and advances healthy lifestyles through participation opportunities, educational experiences and supportive services. Our qualified staff is committed to excellence and attentive to the developmental needs of our participants. In 1996, James Madison University opened its doors to a 140,700 square foot Recreation Center (UREC). All recreational programs are centralized in this multi-level complex (located near the JMU Convocation Center) to offer the JMU community a comprehensive menu of recreational and educational opportunities.

All six of our programming areas - Adventure, Aquatics and Safety, Fitness and Nutrition, Group Fitness and Wellness, Intramurals, and Sport Clubs offer activity and program sign-ups at the Program Registration desk, located by the Welcome Center. Our Equipment Center specializes in all adventure and recreation equipment check-out, as well as locker and towel service. Our facility occupies three levels of recreation space. Incorporated into our six programming areas, we are also offer both massage and yoga and are currently working on a low ropes course as part of our new TEAM Challenge program. UREC is also home to thirty one different sport clubs, as well as the Sport Club Executive Council. We also host a variety of special events throughout the academic year, such as our annual Homecoming 5K, Reach Out Climb event, and Biathlon event.

“Your Right To Know”
Your personal safety and the security of the campus community are of vital concern to James Madison University. A copy of the university’s annual Harrisonburg campus and London Semester security reports is available upon request. This report includes statistics for the most recent three-year period concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by James Madison University, and on public property within, or immediately adjacent to and accessible from the campus. The report also includes information regarding the law enforcement authority of the university police; policies concerning campus security, such as crime prevention, alcohol and drug use, sexual assault, state sex offender registry, missing person investigation procedures and reporting of any crimes that may occur on the campus. You can obtain a copy of this report by contacting the Office of Public Safety, Crime Prevention Unit, MSC 6302, James Madison University, Harrisonburg, VA 22807 or you can request that a copy be mailed to you by calling (540)568-6766 / 6769. This information is also available by clicking on the “Your Right to Know” links for the main and London campuses at www.jmu.edu/pubsafety/index.shtml.

Withdrawal from the University
Taylor Hall, Room 213, MSC 3509
Phone: (540) 568-6099

The Associate Director of University College Centers for Student Organization Services assists students who are considering withdrawing from the university. The student and staff member discuss personal, financial and academic implications of withdrawal. The staff member can provide the student with the proper withdrawal request forms and assist in their completion. For additional information, call Kristin R. Muncy.
Dr. Bradley Roof, Director, School of Accounting
Dr. Nancy Nichols, Graduate Coordinator

For information, call (540) 568-3081
http://cob.jmu.edu/accounting/

Professors
C. Baril, A. Gabbin, D. Riordan, M. Riordan, B. Roof

Associate Professor
D. Fordham

Assistant Professors
N. Nichols, R. Richardson

Mission
The mission of the School of Accounting at James Madison University is to cultivate an environment of educational excellence. We do so by providing a learning environment in which students are encouraged to develop both technical and interpersonal skills necessary for successful professional accounting careers; encouraging and supporting meaningful intellectual contributions by our faculty; and participating actively in the academic and professional communities.

The Graduate Accounting program leads to the Master of Science in Accounting (M.S.) degree. The primary goal of the M.S. program is to prepare business and nonbusiness majors for entry into the public accounting profession, or to serve as the "fifth" year in preparing students for the 150 hours of postsecondary education required for AICPA membership and required (or scheduled to be required) to become a certified public accountant in most jurisdictions.

M.S. in Accounting Program
James Madison University offers two alternatives to receiving the M.S. degree in Accounting, an on-campus program and a program in Northern Virginia. Our on-campus program is tailored for individuals who prefer a traditional full-time program of study. Our Northern Virginia program is designed to meet the needs of professional accountants in the Washington DC/Baltimore metro area who are working towards career advancement or who desire to meet the 150-hour requirement for AICPA membership or CPA certification.

The Northern Virginia program consists of ten classes, taught over two years. The classes are scheduled from May to December of each year to avoid conflict with the accountant’s traditional “busy season.” Classes meet every other Saturday in a professional environment in Northern Virginia, with online class meetings (distance learning) taking place every week. Each course runs for six weeks.

Admission Criteria and Degree Requirements
Admission is open to individuals with a baccalaureate degree in accounting, business or any nonbusiness discipline. Admission criteria and degree requirements for both programs are the same for all students.

Either the Graduate Management Admissions Test or successful completion of all four parts of the CPA exam is required for admission to the M.S. program. Prerequisites are based on the background and previous training of the student.
More information on general admission requirements is available from the College of Graduate and Professional Programs Web site at http://www.jmu.edu/gradprograms/.

**Prerequisites**
All students must be proficient with a spreadsheet program and have the following courses (or their equivalent) prior to starting M.S. course work.

**Accounting Courses**
- Accounting Information Systems
- Intermediate Accounting I
- Intermediate Accounting II
- Federal Income Tax Accounting
- Auditing
- Cost Accounting

**Business Courses**
- Principles of Management
- Organizational Behavior
- Statistics
- Managerial Finance
- Micro Economics
- Macro Economics
- Business Law

The completion of five courses offered by JMU over the Internet will fulfill the Business Course prerequisite. Each course is the equivalent of three credit hours.

MBA 501. Management and Organization Behavior
MBA 502. Statistics and Management Science
MBA 504. Managerial Finance
MBA 505. Foundations of Economics
MBA 506. Legal Environment of Business

Each course is offered three times a year and is 100% self-paced.

**Master of Science in Accounting Degree**
The course work for the M.S. program consists of a common core and electives with a thesis option. Thirty credit hours must be taken at the 600 level.

<table>
<thead>
<tr>
<th>Minimum Core Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 675. Accounting Theory</td>
<td>3</td>
</tr>
<tr>
<td>Any 600-level Economics course (approved by Director)</td>
<td>3</td>
</tr>
<tr>
<td>Any 600-level Finance course (approved by Director)</td>
<td>3</td>
</tr>
<tr>
<td>Accounting electives (600 level)</td>
<td>15</td>
</tr>
<tr>
<td>Electives (600 level)</td>
<td>6</td>
</tr>
</tbody>
</table>

30

1 Electives are chosen with the approval of the program director. Prerequisites must be met before taking 600-level courses. 2 This course is considered the capstone in the program. 3 One elective must be outside of Accounting.

**Course Offerings**

**Accounting**

**ACTG 627. Federal Taxation and Business Decisions.** 3 credits.
Considers federal tax consequences across business entities, including sole proprietorships, partnerships, corporations electing "S" status and corporations. *Prerequisite: Master of Science student or permission of instructor.*
ACTG 640. Accounting Information Technology. 3 credits.
In-depth coverage of modern technology used in the accumulation, reporting and analysis of accounting data. This course covers modern computing hardware, telecommunications, networking and intermediate systems design concepts. Also provides an introduction to information security. Prerequisite: Master of Science student or permission of instructor.

ACTG 671/MBA 653. Business Law. 3 credits.
A study of the principles of the law of contracts, agency, sales, commercial paper and business organizations. This course emphasizes the effect of such laws on business operations.

ACTG 675. Accounting Theory. 3 credits.
Study of selected areas in accounting theory, practice, and methodology, requiring integration and synthesis of student's accounting knowledge. Because this is the capstone course, a grade of "B" or better is required for this course for successful completion of the MSA program. Prerequisite: Master of Science student or permission of instructor.

ACTG 676. Seminar in Cost Accounting. 3 credits.
This course teaches students to apply analytic reasoning and formal models to selected cost problems. Prerequisite: Master of Science student or permission of instructor.

ACTG 677. Advanced Assurance Theory and Practice. 3 credits.
Study of auditing and assurance topics from both a professional and research perspective. Students will have opportunities to develop various ideas and skills necessary to become leaders in the auditing and assurance services arena. Contemporary professional standards will be reviewed as well as the theories behind these standards. Prerequisite: Master of Science student or permission of instructor.

ACTG 678. Fund Accounting. 3 credits.
Study of the current theory and practice of budgeting, accounting, reporting and auditing of governmental and not-for-profit organizations. Prerequisite: Master of Science student or permission of instructor.

ACTG 680. Directed Readings. 3 credits.
Opportunity for directed readings in areas of special interest. Prerequisites: Permission of instructor and Master of Science program director.

ACTG 681. Directed Research. 3 credits.
Opportunity for directed research in areas of special interest. Prerequisites: Permission of instructor and Master of Science program director.

ACTG 691. Advanced Accounting Systems. 3 credits.
An applications-oriented course covering the analysis of integrated accounting information systems with special emphasis on identifying and evaluating system features and characteristics appropriate for various business settings. The course culminates in a special project requiring application of systems knowledge to solve a complex accounting case problem. Prerequisite: Master of Science student or permission of instructor.

ACTG 693. Applied Theory and Corporate Reporting. 3 credits.
Study and evaluation of selected areas of financial accounting theory and practice. This course emphasizes financial reporting and disclosure. Prerequisite: Master of Science student or permission of instructor.

ACTG 694. Business Practicum for Accountants. 3 credits.
Through the Graduate Accounting Internship Program, students engage in a supervised work experience in public accounting, industry, not-for-profit organizations or government. During this time students gain insight into the real world of business
through their work in a variety of accounting functional areas prior to graduation. 
*Prerequisite: Permission of internship director.*

**ACTG 695. Seminar in Accounting.** 3 credits. 
Study of selected areas in accounting theory, practice and methodology. *Prerequisite: Master of Science student or permission of instructor.*

**ACTG 698. Comprehensive Continuance.** 1 credit. 
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**ACTG 699. Thesis Continuance.** 2 credits. 
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

**ACTG 700. Thesis.** 6 credits. 
This course is graded on a satisfactory/unsatisfactory (S/U) basis. *Prerequisite: Permission of Master of Science program director.*
Art and Art History Graduate Programs

Dr. Cole H. Welter, Director
Dr. Kenneth Szmagaj, Graduate Coordinator

For information, call (540) 568-6216
Web site: http://www.jmu.edu/art

Professors
K. Arthur, C. Diop, B. Lewis, K. Szmagaj, C. Welter, S. Zapton

Associate Professors
L. Halpern, K. Schwartz, W. Wightman

Assistant Professors
D. Ehrenpreis, M. Rooker, G. Stewart, S. Zurbrigg

Application and Portfolio Deadlines
Fall Semester and Summer Session: February 15
Spring Semester: October 15

Portfolios for summer session and fall semester will be returned after April 15. Portfolios for spring semester will be returned after December 15.

Applications received after these dates, or applications which are incomplete as of these dates, may not receive full consideration.

Degrees and Concentrations
The School of Art and Art History offers the Master of Fine Arts degree in studio art and the Master of Arts in art history, art education or studio art. Students pursuing the Master of Education degree may minor in art.

Master of Fine Arts
Mission
The mission for the Master of Fine Arts Program is to challenge and support independently motivated artists in their intellectual, philosophical and artistic development. The graduate program encourages life long learning, career success and community involvement.

Goals and Objectives
- To provide an environment allowing for further development of the candidate’s creative endeavor.
- To help the candidate to develop artistic skills to a level which will lead to successful performance in the world beyond the university.
- To promote the candidate’s ability to develop philosophical, aesthetic and conceptual modes of individual inquiry.
- To develop a candidate’s ability to develop philosophical, aesthetic and conceptual
modes of individual inquiry.

- To develop candidates who demonstrate a professional studio competence as exemplified by the production of a significant body of work and supported by a written monograph.

**Program Requirements**

The Master of Fine Arts degree is considered the professional and terminal degree in studio art. The degree requires a minimum of 60 credit hours. In addition to the general admission requirements, the prospective graduate student in the Master of Fine Arts program must have an undergraduate degree with a minimum of 33 credit hours in studio art and nine credit hours in art history. The art history hours must include six hours surveying the history of Western art and three hours in upper-level art history.

Three letters of recommendation and a portfolio of the applicant’s artwork must be submitted as an indication of preparation for graduate study. The portfolio may include actual examples, photographs or 35mm slides of the applicant’s work. A selection of not less than 15 nor more than 20 examples should be presented. The applicant for the Master of Fine Arts program must have at least half of the artwork in the portfolio in the intended area of emphasis. This portfolio must be submitted to the School of Art and Art History for examination before action on an application for graduate admission takes place.

The Master of Fine Arts degree in studio art is awarded for a high level of professional competence. The student will select an emphasis in a studio area. Those now available are ceramics, metal and jewelry, painting and drawing, printmaking, photography and sculpture.

The minimum requirement for the Master of Fine Arts degree in studio art is 60 hours of graduate credit including 39 credit hours of studio art, 21 of which must be in the area of emphasis; 12 credit hours in art history, with a minimum of three in pre-20th century; and three credit hours in art criticism. Six credit hours of electives may be taken in or out of the field of art. A Master of Fine Arts candidacy review will be held after 18 credit hours have been completed to determine whether the student’s growth and potential merit continuation in the Master of Fine Arts program. Each semester, graduate faculty will conduct group critiques of the students’ work.

Near the end of the program of study, the Master of Fine Arts candidate must produce an exhibition of his/her personal graduate artwork, a slide portfolio of the exhibition (to be retained by the university) and a written statement clarifying the student’s work, its development, and its cultural and historical references. An oral comprehensive examination, generally in conjunction with the exhibition and closely related to the written statement, will also be held.

Up to 30 hours of graduate credit from other accredited institutions may be accepted toward the *Master of Fine Arts* degree if a) the credits were earned within the last six years, b) the student received a grade of “B” or better, c) the transfer credit is from an institution offering a comparable degree and d) the student submits this request with the application to the College of Graduate and Professional Programs and the application is supported by slides, transcripts and artwork from the courses taken at other institutions. No more than nine hours of transfer credit will be accepted in the student’s area of concentration.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>Studio (21-credit-hour minimum within a concentration)</td>
<td>39</td>
</tr>
<tr>
<td>Art history</td>
<td>12</td>
</tr>
<tr>
<td>Criticism</td>
<td>3</td>
</tr>
</tbody>
</table>
**Master of Arts Degrees**

The Master of Arts in art history, art education or studio art requires a minimum of 30 credit hours. In addition to the general admission requirements, each area of study has further requirements.

**Master of Arts in Art History**

**Mission**
The M.A. in art history is designed for those who wish to prepare for a doctoral program of study, or seek entry level positions in museums, galleries, arts organizations, art-related government agencies and businesses. It also provides advanced art historical study for Virginia teachers, or those who are intending to teach in public schools or other educational institutions.

**Goals**
- To provide training in critical thinking and methodologies
- To encourage in-depth study of a particular cultural/historical area
- To provide students with research and writing skills for advanced graduate study
- To promote general scholarly inquiry in art history and an appreciation of the interaction of culture and art

**Program Requirements**
The candidate must have an undergraduate degree with a minimum of 12 hours of art history, including the six hours of the survey of Western art. Three letters of recommendation and a research paper of the student’s choice must be submitted with the graduate application. The program includes 18 hours of art history, six hours of electives and six hours of internships or directed study. At least half of these credits must be in courses designated exclusively for graduate students. Students must also successfully complete a language exam demonstrating reading proficiency in either German or French. Students may petition to be examined in another language if it is directly relevant to their course of study.

Check with the department office for the availability of this program.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art history</td>
<td>18</td>
</tr>
<tr>
<td>Internship or directed study</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>30</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Master of Arts in Art Education**

**Mission**
The Master of Arts in Art Education at JMU is a graduate program for certified art educators dedicated to excellence in teaching and directing comprehensive art education programs in schools, museums, art organizations, or in the private sector. The program includes in-depth analysis of the methods and techniques for teaching studio art, art history, art criticism, and aesthetics. The program promotes graduates who are: 1) dedicated art education professionals; 2) articulate art education advocates; and 3) charismatic leaders who demonstrate art education as a vital component of general education.
**Goals**

- To provide students with the structure, skills, core concepts and methods of inquiry for teaching and directing comprehensive art education programs, including: aesthetics, art criticism, art history and studio production.
- To provide students with opportunities to create and evaluate art instructional opportunities that is adapted to diverse learners.
- To provide opportunities for students to demonstrate an extensive range of strategies for teaching and evaluating art instruction, including the use of technology.
- To foster active inquiry, collaboration, and supportive interaction among students for developing thesis papers and projects.
- To deepen a student’s knowledge in a specific area of art education scholarly interest.
- To provide students with opportunities to apply research to art lessons that support intellectual, social, and personal development.
- To provide learning environments that promote life-long learners, articulate art education advocates, and charismatic instructional leaders who foster relationships with school colleges and the community to support student learning in art.
- To maintain a selective screening and admissions process necessary to the advancement of a rigorous program of study and future reputation and success of the graduates.

**Program Requirements**

The candidate must have an undergraduate degree with a minimum of 33 credit hours in studio art and nine credit hours in art history. The art history hours must include six hours surveying the history of Western art and three hours in upper-level art history. The candidate must have an art-teaching license and submit three letters of recommendation and a personal statement as an indication of preparation for graduate study.

The program of study includes nine hours in art education, six hours in art history, three hours in criticism, six hours in education and/or art education electives (Directed Study), and six hours of thesis.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education</td>
<td>9</td>
</tr>
<tr>
<td>Art history</td>
<td>6</td>
</tr>
<tr>
<td>Criticism</td>
<td>3</td>
</tr>
<tr>
<td>Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Education/Art Education Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Master of Arts in Studio Art**

**Mission**

The mission for the Master of Arts Program in Studio Art is to support artistic growth beyond the level of the baccalaureate. Although the goals for the M.A. reflect those of the M.F.A., the M.A. degree is viewed as an option for studio study, which doesn’t result in a terminal degree in the visual arts.
Goals

- To develop and improve artistic skills in two and three-dimensional art.
- To promote the candidate’s ability to develop ways of individual inquiry.

Program Requirements

Candidates must meet the same admission requirements as candidates for the Master of Fine Arts degree.

The program of study includes 15 hours of studio in the applicant’s area of interest, six hours of art history, three hours of criticism and six hours of elective credit. Near the end of the program of study, the candidate must produce an exhibition of his/her graduate artwork, a slide portfolio of the exhibition (to be retained by the university) and a written statement clarifying the student’s work, its development and its cultural and historical references. An oral comprehensive examination, generally in conjunction with the exhibition and closely related to the written statement, will also be held.

A program of study for the Master of Arts degree must be approved by the student’s adviser and art school director before final acceptance. Up to nine hours of graduate transfer credit may be accepted toward the Master of Arts degree, and must meet the same criteria as those accepted for the Master of Fine Arts degree. No more than six hours of transfer credit will be accepted in the candidate’s area of interest.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>15</td>
</tr>
<tr>
<td>Art history</td>
<td>6</td>
</tr>
<tr>
<td>Criticism</td>
<td>3</td>
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<tr>
<td>Electives</td>
<td>6</td>
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<td><strong>Total</strong></td>
<td><strong>30</strong></td>
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Minor in Art

Students planning a program leading to the Master of Education degree may minor in art with 12 credit hours of graduate credit in art, including ART 683, Criticism of Art. Applicants for a graduate minor in art must submit a portfolio of their work to the graduate faculty of the art school, meeting standards of quality appropriate to graduate study in art. Applicants should contact the appropriate area in the College of Education.

Art Education Courses

ART 518. Contemporary Issues in Art Education
ART 610. Studio Experiences in the Schools
ART 682. Curriculum and Research

Art History and Criticism Courses

ARTH 510. African Art: The Sahara and Northern Sahel
ARTH 512. African Art: Sub-Saharan
ARTH 516. Arts of Oceania
ARTH 519. Topics in African Art
ARTH 520. Ancient Art
ARTH 524. Arts of Ancient Egypt
ARTH 530. Far Eastern Art
ARTH 540. Early Medieval Art
ARTH 542. Art of Later Middle Ages
ARTH 544. Gothic and Gothic Revival Architecture
ARTH 546. Italian Renaissance Art
ARTH 548. Studies in Leonardo and Michelangelo
ARTH 549. Topics in Renaissance Art
ARTh 550. Baroque Art
ARTh 552. Eighteenth Century Art
ARTh 560. Nineteenth Century Art
ARTh 569. Topics in Nineteenth Century Art
ARTh 570. Modern Art from 1900-1945
ARTh 572. Modern Art Since 1945
ARTh 574. New Media and Contemporary Art
ARTh 576. Modern Architecture
ARTh 579. Topics in Modern Art
ARTh 580. American Art to 1870
ARTh 582. American Art from 1870
ARTh 584. Art of the Americas
ARTh 586. Monticello
ARTh 589. Topics in American Art
ART/ARTH 590. Topics in Art and Art History
ART/ARTH 594. Introduction to Museum Work
ARTh 620. Seminar in Non-Western Art
ARTh 640. Seminar in Italian Renaissance Art
ARTh 660. Seminar in Nineteenth Century Art
ARTh 670. Modern and Contemporary Critical Theory
ARTh 678. Seminar in American Art
ART/ARTH 683. Criticism of Art

**Studio Art Courses**
ART 501. Workshops in Art
ART 621. Weaving and Other Fiber Arts
ART 622. Jewelry and Metalwork
ART 625. Ceramics
ART 635. Sculpture
ART 653. Printmaking
ART 655. Photography
ART 660. Painting and Drawing

**Directed Study Courses**
ART/ARTH 595. Internship in Art or Art History
ART/ARTH 680. Reading and Research
ART/ARTH 698. Comprehensive Continuance
ART/ARTH 700. Thesis

**Course Offerings**

**Art and Art History**

**ART 501. Workshop in Art.** 1-3 credits. (May be repeated to 6 credits.)
Workshops, accompanied by lecture and discussion periods, selected from such areas as painting, sculpture, printmaking, ceramics, art education, photography and crafts. In studio workshops, 30 contact hours will be required for each credit hour.

**ARTH 510. African Art: The Sahara and Northern Sahel.** 3 credits.
An introduction to the arts and cultures of northern and northwestern Africa. The diverse, rich heritage of Africa’s arts will be explored through the major style areas of Saharan and northern sub-Saharan Africa including prehistoric rock arts, Egypt, northern Africa, Christian northeastern Africa, and Islamic North Africa.

**ARTH 512. African Art: Sub-Saharan.** 3 credits.
A survey of the arts and cultures of sub-Saharan Africa, focusing on the major style areas of the continent. Coverage will include: the historic sites of Nigeria, the Guinea Coast, and central, eastern, and southern Africa.
ARTH 516. Arts of Oceania. 3 credits.
An introduction to the visual arts and cultures of Oceania (the South Pacific). The major style areas of Polynesia, Melanesia, and Micronesia will be explored.

ARTH 518. Contemporary Issues in Art Education. 3 credits.
An investigation of contemporary issues and trends in education and art education and their impact on our schools, including state mandates, arts education associations on the state and national level, funding agencies and technology.

ARTH 519. Topics in African Art. 3 credits.
Topics in African Art will deal with current thematic or methodological issues such as contemporary African arts and artists, arts of the African diaspora, a particular media (such as architecture or the textile arts), portraiture and identity, the royal arts of Africa, African film and performance, or gender in the arts of Africa.

ARTH 520. Ancient Art. 3 credits.
A study of major works selected from the Egyptian, Mesopotamian, Greek, Etruscan and Roman cultures. Considers themes such as the development of sacred places, royal art and architecture and artistic conventions in early civilizations.

ARTH 524. Arts of Ancient Egypt. 3 credits.
A study of the arts of Ancient Egypt (c. 3000 B.C. to c. 300 B.C.). This course will focus on the art and architecture of the Old and New Kingdoms and also examine the enduring fascination with this unique artistic heritage from the excavations of Napoleon to the present.

ARTH 530. Far Eastern Art. 3 credits.
A survey of East Asian art from prehistoric times to 19th-century colonialism. Emphasis is placed on the areas of major production: India, China, Japan, with less attention to such centers as Cambodia Siam and Korea.

ARTH 540. Early Medieval Art. 3 credits.

ARTH 542. Art of Later Middle Ages. 3 credits.
A study of Western European arts and architecture in the later Middle Ages with concentration on Romanesque and Gothic styles (1000-1400). Examines church construction and allied arts around the millennium and the development of Gothic architecture, sculpture and painting in France, Italy and England.

ARTH 544. Gothic and Gothic Revival Architecture. 3 credits.

ARTH 546. Italian Renaissance Art. 3 credits.
A survey of the development of Italian Renaissance art and architecture 1300-1550. Focuses on themes such as the revival of classical art, the influence of humanism and Neo-Platonism, the invention of perspective and the formation of the Early and High Renaissance styles.

ARTH 548. Studies in Leonardo and Michelangelo. 3 credits.
Seminar which examines the artworks of Leonardo da Vinci and Michelangelo Buonarroti. Discusses issues such as the artist’s creative process, the development of the artist’s style, the patron’s role in the artwork, and inter-relationships between the artist’s visual and literary works.
ARTh 549. Topics in Renaissance Art. 3 credits.
Topics in Renaissance art may include studies of major Italian or Northern Renaissance artists, the development of linear perspective, the Renaissance tomb chapel or art and politics of the Protestant Reformation.

ARTh 550. Baroque Art. 3 credits.
A survey of European art and architecture of the 17th century. This course will focus on Baroque art and its cultural context in Italy, France, Britain and Holland.

ARTh 552. Eighteenth Century Art. 3 credits.
A survey of the major European artistic movements of the 18th century. This course will focus on the development of Rococo and Neoclassical styles in architecture, sculpture and painting.

ARTh 559. Topics in Seventeenth and Eighteenth Century Art. 3 credits.
Topics in Seventeenth and Eighteenth Century Art may include studies of particular artists such as Rembrandt, Caravaggio, or Watteau, studies of particular styles such as the Rococo, or thematic studies such as the history of garden design or the development of art theory.

ARTh 560. Nineteenth Century Art. 3 credits.
A study of European art (1750-1900) concentrating on Neoclassicism, Romanticism, Realism, Impressionism and Symbolism. Major topics include nationalism, historicism and the advent of new modes of representation.

ARTh 569. Topics in Nineteenth Century Art. 3 credits.
Topics in Nineteenth Century Art may include studies of major artists, such as Caspar David Friedrich or Edouard Manet, specific artists groups like the Pre-Raphaelite brotherhood, or thematic issues such as the relationship between art and nationalism.

ARTh 570. Modern Art from 1900-1945. 3 credits.
Principal trends in European and American art-painting, sculpture, photography, film, architecture- during the first decades of the century. Central themes include art and nationalism, modernity and industry/technology, impact of popular culture, and art theory and criticism.

ARTh 572. Modern Art Since 1945. 3 credits.
A study of the many developments and trends in American and European art since 1945. This course will focus on such movements as abstract expressionism, pop, conceptual art, installation art, video, film and computer art with an understanding of the theoretical basis of those movements and the development of the art market during this period.

ARTh 574. New Media and Contemporary Art. 3 credits.
Advanced seminar that addresses impact of cultural politics and technology on how we make, evaluate and “speak” about art. Focus on variety of media including video, multimedia installations, conceptual art, computer generated imagery, virtual “reality,” contemporary film, and digital photography.

ARTh 576. Modern Architecture. 3 credits.
Survey of architecture from 1851 to the present day. Thematic investigations will include regional, philosophical and technical developments in architectural space. Architects may include Labrouste, Berlage, Wagner and Richardson, through Wright, Mies, Le Corbusier, to the avant-garde Murcutt, Siza, Nouvel and Mockbee.

ARTh 579. Topics in Modern Art. 3 credits.
Topics in Twentieth Century Art may include studies of contemporary painters (i.e. Gerhard Richter), sculptors (i.e. Kiki Smith or Mona Hatoum), performance and video artist (i.e. Bill Viola), or thematic issues such as the relationships between art, technology, and gender/racial politics.
ARTh 580. American Art to 1870. 3 credits.
American painting, sculpture, architecture and decorative arts from the Colonial period through 1870. Topics will include Colonial portraiture, African American aesthetics, the definition of folk art, nationalism and landscape painting and the question of American exceptionalism. The course will also introduce students to problems of interpretation in current scholarship.

ARTh 582. American Art from 1870. 3 credits.
American painting, sculpture, architecture and decorative arts from 1870-1945. It will address such topics as the American Renaissance, the Harlem Renaissance, Chicago School architecture, masculinity in Western American art, notions of decay in turn-of-the-century art and American modernism. It will also introduce methodological debates in current scholarship. Prerequisite: ARTH 206.

ARTh 584. Art of the Americas. 3 credits.
Art of indigenous peoples in the Americas (Meso, Central, South and/or North America) before European contact. This course will examine domestic and state architecture, painting, textiles, ceramics, metalwork, and earthworks within the context of geographic, state, religious, and social issues. Other topics include museum display, repatriation and western taxonomies.

ARTh 586. Monticello. 3 credits.
Seminar on the architecture and material culture of Thomas Jefferson’s Monticello. The course will examine the design and construction of the house, its decorative arts, mechanical devices, landscape and garden design, Mulberry Row, the Monticello joinery, and the Indian Hall. Fieldtrips to Monticello are required. Prerequisite: permission of the instructor.

ARTh 589. Topics in American Art History. 3 credits.
Topics in American art may include studies of major artists such as Thomas Cole, George Catlin or Thomas Eakins, a specific group like the Hudson River School, or thematic issues such as art produced in a colonial context, sentimentalism in American genre painting or representations of the West in American art. Prerequisite: ARTH 206.

ART/ARTH 590. Topics in Art and Art History. 3 credits.
Study of selected topics in art and art history. May be repeated when course content changes. See e-campus for current topics.

ART/ARTH 594. Introduction to Museum Work. 3 credits. (Cross-listed as HIST 594.)
A study of the philosophy and practice of museum work, including exhibit design, conservation, registration, education and administration. A research project provides in-depth knowledge in one of the above areas. Subject is taught from the perspective of the museum professions and is applicable to diverse disciplines and types of collections.

ART/ARTH 595. Internship in Art or Art History. 1-8 credits.
Individual internship programs may be pursued in a variety of art-related areas which would parallel the education and career needs of each student. Each internship will be a full-time work/study program which will expose the student to the agency’s organization and operation. Prerequisite: ART 494 or 594 is a prerequisite for internships in museum and galleries.

ARTh 620. Seminar in Non-Western Art. 3 credits.
A seminar addressing the representation of ‘others’ in scholarship and museum exhibition strategies. Issues of identity, of the construction of knowledge, of audience participation, and differing ways of seeing and knowing will be explored.

ARTh 640. Seminar in Italian Renaissance Art. 3 credits.
This course will focus on various topics in Italian art from 1300-1550, including interdisciplinary themes such as art in the Age of Dante or in-depth contextual studies.
of Italian Renaissance sculpture or painting.

**ARTH 660. Seminar in Nineteenth Century Art.** 3 credits.  
This course will focus on various topics in Nineteenth century art from 1780-1900, including interdisciplinary themes such as Art in an age of Revolution, or in-depth contextual studies of specific movements such as Romanticism.

**ARTH 670. Contemporary Visual Culture and Critical Theory.** 3 credits.  
This course will focus on the variety of critical methodologies used to analyze contemporary visual culture. We will, for example, investigate deconstruction, feminist criticism, semiotics, Foucault’s structures of power, all within the context of contemporary European and American cultural politics.

**ARTH 678. Seminar in American Art.** 3 credits.  
An intensive reading colloquium focused on selected topics, interpretations, historiography, or methods in American art scholarship from the Colonial period to 1945. Issues and readings will change each semester that the course is offered.  
*Prerequisite: ARTH 206 and permission of instructor.*

**ART 610. Studio Experiences in the Schools.** 3 credits.  
A course designed for the art teacher to explore, investigate and produce artwork in media or approaches unfamiliar to the teacher. Emphasis will be placed on acquiring skills and knowledge with respect to materials and processes of specific media, as well as their direct application to students in a school setting.

**ART 621 A, B, C. Weaving and Other Fiber Arts.** 3 credits each. (May be repeated or taken concurrently.)  
Individual studio problems and research in fiber arts which may include tapestry, weaving, paper and surface design. Emphasis will be placed on creative development of techniques and individual expression.  
*Prerequisite: Nine hours undergraduate weaving or permission of instructor.*

**ART 622 A, B, C. Jewelry and Metalwork.** 3 credits each. (May be repeated or taken concurrently.)  
Studio work in metal with an emphasis on individual artistic development, craftsmanship and metalworking techniques.  
*Prerequisite: Nine hours undergraduate metal and jewelry or permission of instructor.*

**ART 625 A, B, C. Ceramics.** 3 credits each. (May be repeated or taken concurrently.)  
Studio projects in the techniques and processes of ceramic design, with emphasis on quality as evidenced by technical and formal consideration.  
*Prerequisite: Nine hours undergraduate ceramics or permission of instructor.*

**ART 635 A, B, C. Sculpture.** 3 credits each. (May be repeated or taken concurrently.)  
Advanced sculptural projects with choices from a wide range of materials and techniques including welding, casting, carving, construction and others. Emphasis is on process development and personal creative growth.  
*Prerequisite: Nine hours undergraduate sculpture or permission of instructor.*

**ART 653 A, B, C. Printmaking.** 3 credits each. (May be repeated or taken concurrently.)  
Independent research under faculty supervision which may include work in lithography, intaglio, screenprint, relief and related photographic processes. Emphasis will be placed on creative development and technical expertise.  
*Prerequisite: Nine hours undergraduate printmaking or permission of instructor.*

**ART 655 A, B, C. Photography.** 3 credits each. (May be repeated or taken concurrently.)  
Individual projects in the photographic arts. A series of progressive problems will be
selected by the student in consultation with the instructor. Prerequisite: Nine hours undergraduate photography or permission of instructor.

**ART 660 A, B, C. Painting and Drawing.** 3 credits each. (May be repeated or taken concurrently.)

Studio projects aimed toward the development of the individual’s expressive means. The student may choose from a wide variety of media. Prerequisite: Nine hours undergraduate drawing and painting or permission of instructor.

**ART/ARTH 680. Reading and Research.** 1-3 credits.

Directed reading and research in art areas of special concern to the student. Usually the topics will deal with art history, art theory or philosophical aesthetics. Prerequisites: Two graduate-level art history courses and the approval of the art history instructor who will direct the research, or permission of the director of the art school.

**ART 682. Curriculum and Research.** 3 credits.

A review of curriculum development and research in art education. The class will include assignments, readings and discussions of practical applications by art teachers. Curriculum models and sample research proposals will be developed by the students.

**ART/ARTH 683. Criticism of Art.** 3 credits.

An overview of major art theories, both as philosophy and style analysis, for the purpose of investigating the functions and practice of art criticism.

**ART/ARTH 698. Comprehensive Continuance.** 1 credit.

Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**ART/ARTH 699. Thesis Continuance.** 2 credits.

Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

**ART/ARTH 700. Thesis.** 6 credits.

This course is graded on a satisfactory/unsatisfactory (S/U) basis.
Program of Biology

Dr. Jonathan Monroe, Interim Department Head
Dr. Susan Halsell, Graduate Coordinator

For information, call (540) 568-6225
Web site: http://www.jmu.edu/biology/biogrd.html

Professors
R. Harris, I. Knight, M. Renfroe, D. Wubah, G. Wyngaard

Associate Professors
S. Babcock, C. Cleland, D. Cocking, J. Kastendiek, S. Keffer, J. Monroe, K. Murphy, C. Rose, K. Slekar

Assistant Professors

Mission
The Department of Biology Masters of Science Program is committed to providing a strong and unique training plan for advanced students of the discipline that will prepare them superbly for their future career goals. The program takes advantage of the current strengths of the department: basic scientific research and excellent biology pedagogy. Students will develop their intellectual potential by pursuing advanced course work in biology and pedagogy, by participating in mentored teaching experiences and preparing a teaching portfolio and/or by successfully completing a research thesis.

The Biology Program offers two tracks in the pursuit of a Masters of Science: a thesis based track based on research and a non-thesis track for students whose primary focus is teaching. Both tracks require a minimum of 30 hours of graduate credit in biology.

Thesis/Research Track
The thesis/research track is for students who wish to continue the study of biology as a scholarly pursuit and who later continue work toward the Ph.D. or work for industry or government. The primary objective of the thesis/research track is to enrich the student’s subject knowledge and give the student a rigorous experience in research and thesis-writing. Thesis track students can also acquire training and experience in teaching. Training in teaching is provided through courses, offered by the biology department, and the mentored teaching of biology laboratories. Thus, students in the thesis track not only gain research experience, they also can learn to be effective teachers and communicators.

Currently, the biology department has research strengths in the following areas.

- Cell Biology and Genetics
- Comparative and Functional Morphology
- Developmental Biology
- Ecology, Evolution, Behavior and Systematics
- Environmental Microbiology
- Neurobiology
- Plant Biology
More information regarding faculty research can be found at the following Web site: http://www.jmu.edu/biology/biofac.html.

### Thesis Track Requirements

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<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
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<tr>
<td>BIO 500. Effective Teaching I: Biology</td>
<td>2</td>
</tr>
<tr>
<td>BIO 700. Thesis</td>
<td>6</td>
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<tr>
<td>Electives</td>
<td>22</td>
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<td><strong>Total</strong></td>
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1. Students who wish to receive training and mentoring in teaching and who wish to teach biology laboratories in their second year are also required to take BIO 600, Effective Teaching II: Evaluating your Teaching (1 credit) and BIO 601, Mentored Teaching (1 credit).

2. Students must take a total of 15 hours credit hours of 600 and 700 level courses, including BIO 700.

### Non-Thesis/Teaching Track

The non-thesis/teaching track is for students who wish to teach, particularly in two year community colleges. The program has two foci: subject training and teacher training. Currently, subject training is concentrated in areas much in demand by community colleges, i.e., Anatomy & Physiology, Microbiology, and General Biology. Students are trained in teaching through courses, all taught within the biology department, and through mentored teaching of laboratories and lectures. In addition, each student will prepare a professional teaching portfolio.

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<th>Minimum Requirements</th>
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<tr>
<td>BIO 500. Effective Teaching 1: Biology</td>
<td>2</td>
</tr>
<tr>
<td>BIO 600. Effective Teaching II: Evaluating your Teaching</td>
<td>1</td>
</tr>
<tr>
<td>BIO 601. Mentored Teaching</td>
<td>1</td>
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<tr>
<td>BIO 701. Effective Teaching III: Teaching Portfolio</td>
<td>3</td>
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<tr>
<td>Electives</td>
<td>23</td>
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<tr>
<td><strong>Total</strong></td>
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1. Students must take a total of 15 hours credit hours of 600 and 700 level courses, including BIO 600, 601 and 701.

All students electing to major or minor in biology must have their individual program of study approved by the student’s Graduate Advisory Committee and the head of the department. Graduate students planning a program of study leading to the Master of Education degree, offered by the College of Education, may minor in biology with 12 hours of graduate credit in biology if they satisfy the minimum entrance requirements for the Master of Science degree program in biology.

Up to nine hours of graduate credit from accredited institutions may be accepted toward the Master of Science degree, subject to the general regulations and procedures of the College of Graduate and Professional Programs regarding transfer credit.

Prospective graduate students for the Master of Science degree should have completed an undergraduate major consisting of a minimum of 20 credit hours in biology, including courses covering the areas of general botany, general zoology, cell biology,
ecology and genetics. A student may be admitted with deficiencies in one or more of these areas but should be aware that the Graduate Advisory Committee may require the student to make up deficiencies with no credit toward the master's degree. The applicant should have completed a minimum of a year (two semesters) of general chemistry and one semester of organic chemistry. A course in general physics is strongly recommended, especially for those students interested in physiology. Certain areas of study may require additional background in biochemistry, statistics, calculus or computer programming. Students are required to submit with their application the Graduate Record Examination General Test and Biology Subject Test scores, three letters of recommendation from individuals who know the student’s scientific potential, and a statement of professional goals and interests.

Full-time biology graduate students are required to attend and participate in departmental seminars while in residence.

Students who want to be considered for a graduate assistantship must have completed the admission process and filed a separate assistantship application by February 15.

**Course Offerings**

**Biology**

For a student to enroll in any biology graduate course (except BIO 501), the department assumes the student meets minimal course requirements for entrance into the Master of Science degree program in biology. Permission of the instructor is required if this is not the case.

**BIO 500. Effective Teaching I: Biology.** 2 credits.

Students will explore student learning styles and effective teaching strategies in the biological sciences at postsecondary levels. Emphasis will be placed on how to prepare and teach laboratory and lecture courses, classroom observations, effective use of instructional technology, and effective exam preparation.

**BIO 501. Workshops in Biology.** 1-3 credits.

Concentrated study in particular areas of biology. No credit is allowed toward the Master of Science degree requirements and no more than one workshop may be applied toward a minor in biology.

**BIO 504. Evolution.** 3 credits.

Population change as brought about by mechanisms of organic evolution. Molecular biology is integrated with evolutionary biology and concepts of phylogenetic relationships resulting from the process of speciation are stressed. A seminar/research project is required. Credit may not be earned in both BIO 404 and BIO 504.

**BIO 513. Human Gross Anatomy with Clinical Applications (4, 8).** 6 credits.

An advanced study of human anatomy with cadaver dissection. Emphasis is given to a clinical perspective and the evolution and development of human structure within a comparative context. Prerequisite: A rigorous undergraduate course in anatomy. Credit may not be earned in both BIO 413 and BIO 513.

**BIO 526. Graduate Topics in Biology.** 3 - 4 credits.

Studies in special areas of biology. May be repeated with change in topic or change in subject matter within a topic.

**BIO 542. Immunology.** 3 credits.

A study of the fundamental concepts of immune responses, the properties of antigens and immunoglobins, immunological specificity, and the development and regulation of cellular and humoral immunity. Prerequisite: A course in microbiology or cell biology or the equivalent. Credit may not be earned in both BIO 442 and BIO 542.

**BIO 544. Virology.** 3 credits.

A lecture seminar course considering the fundamental principles of basic and medical virology and an analysis of the structure, chemistry and replication of representative
RNA and DNA animal viruses at the molecular level. Prerequisite: A course in microbiology or genetics or consent of the instructor. Credit may not be earned in both BIO 444 and BIO 544.

**BIO 550. Neurobiology (3, 3).** 4 credits.
Molecular, cellular and network mechanisms underlying behavior will be studied using problem-solving, discussion, lecture and reading of primary literature. Similarities and differences between nervous systems and computers will be explored. Laboratories will utilize contemporary electrophysiology and computer simulation to examine the neurobiology of simple animal model systems. Independent project required. Credit may not be earned in both BIO 450 and BIO 550.

**BIO 551. Ecosystem Dynamics.** 4 credits.
Structure and functional dynamics of ecosystems. Basic ecological units, which are comprised of communities interacting with their environment and are themselves components of landscape, are quantitatively examined. Prerequisite: General Ecology. Credit may not be earned in both BIO 451 and BIO 551.

**BIO 552. Population Biology (2, 4).** 4 credits.
Theoretical and applied aspects of distribution and abundance, population regulation, interactions between populations, and conservation will be studied in selected organisms, including humans. An independent research project will be required. Credit may not be earned in both BIO 452 and BIO 552.

**BIO 553. Microbial Ecology (2, 4).** 4 credits.
The ecology of microorganisms will be covered, emphasizing the study of microbial growth and activity in natural environments. An independent laboratory project is required. Prerequisites: Introductory ecology and microbiology courses. Credit may not be earned in both BIO 453 and BIO 553.

**BIO 554. Biometrics.** 3 credits.
The design of biological experiments and applications of statistical techniques in ecology, cell biology, physiology, behavior, systematics, genetics and evolution. A seminar/research project involving advanced applications is required. Prerequisite: MATH 220 or equivalent. Credit may not be earned in both BIO 454 and BIO 554.

**BIO 555. Plant Physiology (3, 3).** 4 credits.
The physiology of plant cells and organisms emphasizing biophysical and biochemical aspects of plant function including water relations, mineral nutrition, transport phenomena and metabolism. Prerequisites: General Botany and Organic Chemistry. Credit may not be earned in both BIO 455 and BIO 555.

**BIO 559. Aquatic Ecology (2,4).** 4 credits.
Functional relationships and productivity of freshwater communities are examined as they are affected by their physical, chemical and biotic environment. Organisms inhabiting lakes, ponds, rivers, streams and estuaries are studied at the population, community and ecosystem levels. Preparation of seminar topic papers required. Credit may not be earned in both BIO 459 and BIO 559.

**BIO 560. Plant Cell and Tissue Culture (2,4).** 4 credits.
Theory and practice of growing isolated plant cells, tissues and organs. Independent research project and class seminar expected. Prerequisites: General Botany and Chemistry. Credit may not be earned in both BIO 460 and BIO 560.

**BIO 565. Plant Somatic Cell Genetics.** 3 credits.
Examination of genetic changes at the cellular level and implications for plant trait modification. Literature review and class presentation expected. Prerequisites: Cell Biology and Genetics. Credit may not be earned in both BIO 465 and BIO 565.

**BIO 580. Advanced Molecular Biology (2, 4).** 4 credits.
Cellular constituents and cellular genetics are emphasized at the molecular level. An
exhaustive literature review and research proposal is required. Prerequisite or
corequisite: CHEM 342 or equivalent, or permission of instructor. Credit may not be
earned in both BIO 480 and BIO 580.

**BIO 582. Human Histology (3, 3).** 4 credits.
This course presents the microscopic structure of cells, tissues and organs to explain
normal physiological function and provides a basis for understanding disease
mechanisms and altered cellular states. A special research project is required. *Prerequisite: BIO 270 or BIO 290, or equivalent.*

**BIO 584. Comparative Endocrinology.** 3 credits.
This course will study the hormonal regulation of physiological activity in different
animals, from the cellular to the whole-organism level. Special emphasis will be paid to
recent advances in cellular and molecular endocrinology as well as human endocrine
disorders. A special research project is required. *Prerequisite: BIO 270 or BIO 370, or equivalent.*

**BIO 586. Systematics of Vascular Plants (2, 4).** 4 credits.
Study of systematic theory and an overview of the classification and evolution of higher
plants, with particular attention to flowering plant families. Techniques for plant
identification and collection and for construction of phylogenies will be taught in lab. An
independent project and presentation will be required. *Prerequisites: general botany and cell biology or equivalents.* Credit may not be earned in both BIO 486 and BIO 586.

**BIO 590. Biomechanics (3, 3).** 4 credits.
A study of the interactions of organisms with their physical environment. Concepts from
fluid and solid mechanics are applied to biological form and function. Independent
research is required. *Prerequisite: BIO 220 or permission of the instructor.* Credit may
not be earned in both BIO 490 and BIO 590.

**BIO 595. Topics in Integrative Biology.** 1-3 credits.
This course will examine the interrelationships of various biological topics with related
scientific and mathematical disciplines that are not offered by the biology department.
A seminar/research project involving advanced applications is required. Course may be
repeated as topics change. *Prerequisite: Permission of the instructor.*

**BIO 600. Effective Teaching II: Evaluating your Teaching.** 1 credit.
Students continue their exploration of effective teaching strategies in the biological
sciences as they enter into their first teaching assignment in the department. Students
will be assigned a teaching mentor and classroom meetings will emphasize mentor and
peer evaluations of the students’ teaching skills.

**BIO 601. Mentored Teaching.** 1 credit.
Students continue their exploration of effective teaching strategies in the biological
sciences as they enter into their first teaching assignment in the department. Students
will work under a faculty teaching mentor who will guide the students through their first
teaching experience in the Biology Department. Emphasis will be placed on mentor and
peer evaluations of the students’ teaching skills. *Corequisite: BIO 600.*

**BIO 603. Scientific Presentations.** 1 credit.
A forum for students to present their research and/or teaching materials to their peers
and receive constructive feedback on their progress. Presentations may take the form
of informal “chalk talks,” journal club presentations and/or formal presentations. This
course is graded on a satisfactory/unsatisfactory (S/U) basis. May be repeated for up to
2 credits.

**BIO 615. Managing Anatomy and Physiology Laboratories.** 2 credits.
This course will teach students how to manage an anatomy and physiology laboratory.
Course topics will include: lab safety, course budgets, the acquisition of supplies,
facility layout and design, cadaver maintenance, and the use and maintenance of
equipment and inventory control.
BIO 630. Advanced Graduate Topics in Biology. 3-4 credits.
Studies in advanced special areas of biology. May be repeated with change in topic or change in subject matter within a topic.

BIO 660. Graduate Seminar. 1-3 credits.
Seminar in special areas of biology. May be repeated up to a total of 12 hours with change of subject.

BIO 670. Developmental Anatomy of Seed Plants. 4 credits.
A study of the origin, growth, differentiation and maturation of cells, tissues and organs and their interrelationships. Emphasis is placed on economically important structures of crop, ornamental and forest plants.

BIO 697. Biological Research. 1-6 credits.
Laboratory and/or field research will be conducted under the direction of the Graduate Advisory Committee. The course will emphasize the development of research techniques and data collection. Can be repeated for credit. Hours do not apply toward 30 hours required for graduation.

BIO 698. Comprehensive Continuance. 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

BIO 699. Thesis Continuance. 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

BIO 700. Thesis. 6 credits.
Thesis research to be directed by the Graduate Advisory Committee. This course is graded on a satisfactory/unsatisfactory (S/U) basis. Prerequisites: Unconditional admission status in the graduate program and completion of an approved thesis research proposal.

BIO 701. Effective Teaching III: Teaching Portfolio. 3 credits.
Students will document their teaching background in preparation for the job application process.
Business Administration

Dr. Kenneth D. Bahn, Graduate Director and Coordinator

For information, call (540) 568-3253
Web site: http://www.jmu.edu/mba

Accounting Program
Professors
C. Baril, A. Gabbin, D. Riordan, M. Riordan, B. Roof

Associate Professor
D. Fordham

Assistant Professors
N. Nichols, R. Richardson

Economics Program
Professors
E. Ahmed, W. Fields, R. Horn, W. Wood

Associate Professors
J. Doyle, R. Jerome, D. Kreutzer, S. Milliman

Finance and Business Law Program
Professors

Computer Information Systems/Operations Management Program
Professors
B. Brookshire, K. Forcht, F. Teer

Associate Professors
M. Busing, I. Markham, S. Palocsay, S. Stevens, P. Wang

Assistant Professor
S. Kruck

Management Program
Professors
P. DuBose, D. Gallagher, C. Pringle

Associate Professor
M. White

Assistant Professors
P. Bierly, B. Clemens, S. de Janasz, P. Daly, A. Manikar, E. Stark

Marketing Program
Professors
K. Bahn, C. Bolfing, C.B. Claiborne, R. Reid, K. Williamson

Mission
The M.B.A. Program within the College of Business at James Madison University emphasizes excellence and continuous improvement in graduate learning by stressing
knowledge and technical, interpersonal and experiential skills in the development of managerial decision-making.

**M.B.A. Program Outcomes Based Learning Objectives**

When students complete the M.B.A. Program they should be able to:

- critically evaluate theoretical and applied research across a broad range of business disciplines.
- make ethical decisions fostering corporate citizenship.
- think critically and apply sound business concepts to decision-making.
- interpret statistical findings and choose the most appropriate quantitative methods for solving business problems.
- function effectively as a team member and as a team leader.
- make managerial decisions using the knowledge gained in advanced courses.
- derive best case solutions to business problems by integrating material across business and related disciplines.
- create, store, access, analyze and synthesize information from a technology-based perspective.
- analyze financial statements to identify the strengths and weaknesses of company’s operations and managerial and financial structure.

Faculty members from the College of Business support the Master of Business Administration program.

The accounting, CIS/OM, economics, finance and business law, international business, management, and marketing programs in the College of Business support the Master of Business Administration degree program. The College of Business also offers other graduate courses designed to supplement and broaden knowledge in business and economics for master’s degree candidates in other fields.

The Master of Business Administration program is offered in Harrisonburg on the JMU campus. In addition, the new Information Security concentration is offered predominantly online. Admissions criteria and degree requirements for this program are the same for full and part-time students. Full-time students may expect to complete a degree in 12 months. Part-time students can expect to finish in 24 to 48 months.

The GMAT is required of all applicants. This instrument measures aptitudes important to the study of business and must be taken prior to admission. Applicants are required to have at least two years of post-baccalaureate work experience prior to pursuing an M.B.A. degree.

Applicants must complete the essay form included with the application materials and must submit a resume supported by two letters of recommendation elaborating on their work experience.

**Master of Business Administration**

JMU’s Master of Business Administration program has been designed to provide students with the knowledge and skills necessary to succeed in today’s rapidly changing global business environment. The curriculum emphasizes teamwork, critical analysis, managerial decision-making and leadership skills.

The program is primarily intended for working professionals holding full-time positions in the Shenandoah Valley of Virginia. All classes are offered during the evenings in Harrisonburg. The Master of Business Administration program is fully accredited by the AACSB and received reaffirmation in the spring of 2002.

While applications are accepted all year, students may begin the program during the fall semester. To remain on schedule, it is recommended that students take four courses per calendar year. Classes meet one evening per week during fall and spring semesters and two evenings per week during each six-week summer session.
The university encourages applicants with degrees in all major fields of study from accredited institutions. No specific undergraduate courses are required; however, students with non business baccalaureates are required to complete the following 500 level foundation courses in the functional areas of business.

### Non-business Baccalaureate Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 501. Management &amp; Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MBA 502. Statistics &amp; Management Science</td>
<td>3</td>
</tr>
<tr>
<td>MBA 503. Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MBA 504. Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>MBA 505. Foundations of Economics</td>
<td>3</td>
</tr>
<tr>
<td>MBA 506. Legal Environment of Business</td>
<td>3</td>
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<td><strong>18</strong></td>
</tr>
</tbody>
</table>

Each of the six prerequisites is offered as a self-paced, seven-week, online course. Each course is offered three times per year. All prerequisite courses must be completed prior to beginning 600-level courses.

The core MBA program consists of 12 courses (36 credit hours) of advanced work at the graduate level. All candidates for the Master of Business Administration degree are required to take a common core of ten courses and two additional courses selected from electives in each of the functional areas.

For those admitted conditionally because of required prerequisites, the Master of Business Administration program has determined that the following time limit will apply for completing the required prerequisite courses: Three years from beginning the first course. The summer terms will be considered when determining this time limit. All 600 level course work must be completed within six years of beginning the first 600 level course. Returning students are strongly encouraged to register for courses for the next semester during the pre-registration period. Courses with low enrollments tend to be cancelled.

Students must notify the M.B.A. program office upon completion of each prerequisite course and have official transcripts submitted to the College of Graduate and Professional Programs office directly from the institution where the course was completed.

Students are encouraged to begin with four sequenced courses: MBA 600, Organizational Behavior; MBA 610, Quantitative Methods for Management; MBA 620, Accounting for Decision Making & Control; and MBA 630, Financial Management. After completion of these four courses, students can then move through other required courses and electives. As an alternative, MBA 640, Management Information Systems and MBA 641, Economics, can be taken during the first year.

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MBA 600. Organizational Behavior</td>
<td>3</td>
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<tr>
<td>MBA 610. Quantitative Methods for Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 620. Accounting for Decision Making &amp; Control</td>
<td>3</td>
</tr>
<tr>
<td>MBA 630. Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 640. Managerial Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MBA 641. The Microeconomics of Business Decision Making</td>
<td>3</td>
</tr>
</tbody>
</table>
Students with an undergraduate major in accounting or who have a CPA or CMA certification should take a graduate-level accounting elective instead of MBA 620, Accounting for Decision Making & Control. MBA 690, Strategic Management, is considered the capstone course in the M.B.A. program and replaces the comprehensive examination requirement. A grade of “B” or better must be attained to pass MBA 690. Because MBA 690 meets the formal assessment requirement for the College of Graduate and Professional Studies, it must be the last course taken.

**Information Security Concentration**

Fundamental business practices are changing rapidly because of new information technologies. The future of business depends upon the security and integrity of these technologies. The Master of Business Administration program offers a Master of Business Administration with a concentration in information security.

This program is designed to create a new decision-maker who understands the business implications of information security.

The information security concentration is offered in an online remote learning format. Each course is 8 weeks long. Each course meets once at the beginning for four hours and once at the end for four hours. Instruction for the eight weeks between face-to-face meetings is done on-line. Assignments, faculty interaction, group discussions and examinations are Web-delivered.

The Master of Business Administration with a concentration in information security courses and credit-hour requirements are listed here. Enrollment in 600-level courses offered by the College of Business is restricted to fully admitted graduate students. This program employs the cohort model.

### Information Security Concentration Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 600. Organizational Behavior</td>
<td>3</td>
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<tr>
<td>MBA 640. Management Information Systems</td>
<td>3</td>
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<tr>
<td>MBA 680. Introduction to Information Security</td>
<td>3</td>
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<tr>
<td>MBA 610. Quantitative Methods for Management</td>
<td>3</td>
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<tr>
<td>MBA 620. Accounting for Decision Making &amp; Control</td>
<td>3</td>
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<tr>
<td>MBA 630. Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 681. Managing System Networks</td>
<td>3</td>
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<tr>
<td>MBA 641. The Microeconomics of Business Decision-Making</td>
<td>3</td>
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<tr>
<td>MBA 642. Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 643. Advanced Topics and Cases in Financial Management</td>
<td>3</td>
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<tr>
<td>MBA 644. Foundations of Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 682. Information Security Ethics and Policy</td>
<td>3</td>
</tr>
<tr>
<td>MBA 690. Strategic Management</td>
<td>3</td>
</tr>
</tbody>
</table>
Health Services Administration Concentration

The Master of Business Administration program in conjunction with the Department of Health Sciences offers a Master of Business Administration with a concentration in health service. This program has evening classes to permit professionals currently working in the health field to further their education.

Applicants to this program should have experience in the health industry. An internship is required for those applicants who do not meet this experience requirement.

The Master of Business Administration with a concentration in health administration courses and credit-hour requirements are listed. Enrollment in 600-level courses offered by the College of Business is restricted to fully admitted graduate students.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 600. Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MBA 610. Quantitative Methods for Management</td>
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<td>MBA 620. Accounting for Decision Making &amp; Control</td>
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<tr>
<td>MBA 630. Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 640. Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>HTH 659. Health Care Environment</td>
<td>3</td>
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<tr>
<td>HTH 660. Health Economics</td>
<td>3</td>
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<tr>
<td>HTH 661. Financial Management of Health Services Organizations</td>
<td>3</td>
</tr>
<tr>
<td>HTH 669. Health Care Administration</td>
<td>3</td>
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<tr>
<td>MBA 642. Operations Management</td>
<td>3</td>
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<tr>
<td>MBA 644. Foundations of Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 690. Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>Elective (choose one of the following):</td>
<td>3</td>
</tr>
<tr>
<td>MBA 641. The Microeconomics of Business Decision-Making</td>
<td>3</td>
</tr>
<tr>
<td>MBA 643. Advanced Topics &amp; Cases in Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 650. Managing Human Resources</td>
<td>3</td>
</tr>
</tbody>
</table>

Course Offerings

Accounting

See the Accounting section (http://cob.jmu.edu/accounting/).

MBA 620. Accounting for Decision Making and Control. 3 credits.
Designed to present use of accounting in business decision making. Covers concepts and theories pertinent to the management function. Prerequisite: One year of introductory accounting. Not available for graduate credit for Master of Science program studies.

MBA 670. Directed Research. 1-3 credits.
Opportunity for directed research in areas of special interest. Prerequisites: Permission of instructor and Master of Business Administration program director.

Business Law
MBA 653. Business Law. 3 credits.
A study of the principles of the law of contracts, agency, sales, commercial paper and business organizations; emphasizes the effect of such laws on business operations.

MBA 676. Directed Research. 1-3 credits.
Opportunity for directed research in areas of special interest. Prerequisites: Permission of instructor and Master of Business Administration program director.

Economics

MBA 505. Foundations of Economics. 3 credits.
This course is designed to equip students with the fundamentals of economic analysis so they will be able to apply these principles to appropriate cases. The course is designed to develop a facility for using the tools of economics, including standard models of the micro and macro economies, and an appreciation for the conditions under which the various models can effectively be applied. The course also develops an appreciation for the limitations of the models and an understanding of the relationship among economics and other disciplines.

MBA 641. The Microeconomics of Business Decision-Making. 3 credits.
This course is designed to provide graduate business students with the basic analytical tools needed to understand the decisions made by profit-maximizing firms and the causal linkages between these decisions and market structures. The course uses case study approach to examine market demand, the costs and organization of production, and the structures of the markets in which firms operate.

MBA 660. International Finance. 3 credits.
Analysis of problems involving international business finance. Description of international payments system and financial institutions, and application of analytical techniques and procedures for financing investments and business activities abroad. Prerequisite: MBA 630.

MBA 662. Macro Economic Theory and Economic Policy. 3 credits.
A study of macroeconomic theory and policy as they relate to unemployment, inflation and the rate of economic growth.

MBA 673. Directed Research. 1-3 credits.
Opportunity for directed research in areas of special interest. Prerequisites: Permission of instructor and Master of Business Administration program director.

Finance

MBA 630. Financial Management. 3 credits.
An in-depth examination of financial topics vital to the financial manager including financial and cash flow analysis, pro forma statement analysis, working capital, capital budgeting, valuation of financial assets, cost of capital, and risk analysis. The course emphasizes quantitative problem solving with extensive use of actual case situations. MBA 620 should be taken either at the same time or prior to MBA 630.

MBA 643. Advanced Topics and Cases in Financial Management. 3 credits.
An in-depth examination of financial topics including financial and market efficiency, obtaining funds using debt or equity, leasing, capital structure, dividend policy, warrants, options and other derivative securities, international finance, hedging risks, mergers and acquisitions, financial distress and firm valuation. The course makes extensive use of actual case situations. Prerequisite: MBA 630.

MBA 654. Investment Analysis. 3 credits.
Investment theory, development and application of analytical tools in the appraisal and selection of investments.

MBA 660. International Finance. 3 credits.
Analysis of problems involving international business finance. Description of international payments system and financial institutions, and application of analytical techniques and procedures for financing investments and business activities abroad. **Prerequisite:** MBA 630.

**MBA 661. Financial Management of Real Estate Investments.** 3 credits. An in-depth examination of real estate investment and finance from an individual and institutional approach. Topics include: the investment calculus, risk analysis, cost of long- and short-term capital and construction, and development financing.

**MBA 671. Directed Research.** 1-3 credits. Opportunity for directed research in areas of special interest. **Prerequisites:** Permission of instructor and Master of Business Administration program director.

### International Business Program

**MBA 663. International Business Development.** 3 credits. An in-depth study of a special topic or theme in international business and/or a collection of currently breaking opportunities in the global business environment. **Prerequisite:** Permission of instructor.

### Computer Information Systems/Operations Management

**MBA 610. Quantitative Methods for Management.** 3 credits. This course develops topics in management science, and then applies these tools to analyze and solve problems arising in business situations. Topics include forecasting, simulation, queuing theory, linear programming, integer programming, sensitivity analysis, and decision analysis. **Prerequisites:** MBA 502 or the equivalent.

**MBA 640. Management Information Systems.** 3 credits. An overview of information systems theory and technology. Primary emphasis is on management's role in planning, designing, developing and using computer-based information systems in business organizations. Other topics include systems theory, computer technology, information systems for decision making and behavioral implications of management information systems.

**MBA 642. Operations Management.** 3 credits. An introduction to the managerial and technical elements of operations management in service and manufacturing organizations. Topics covered include system design, resource planning and management, and quality management.

**MBA 652. Technology Enhanced Decision Making.** 3 credits. This course provides an introduction to techniques for structuring and analyzing managerial decision problems involving major uncertainties. Topics include decision tree and influence diagrams, probability assessment, risk analysis, risk attitudes and sensitivity analysis. Group decision making and groupware technologies will also be discussed. Emphasis is placed on the use of computer software for decision analysis.

**MBA 658. Managing Innovation.** 3 credits. This course focuses on exploring the historical context of innovation, understanding the environment in which innovation thrives, identifying the issues which are central to establishing a climate in which innovation is rewarded, exploiting innovations in technologies and helping the firm gain a competitive advantage. **Prerequisite:** MBA 652.

**MBA 672. Directed Research.** 1-3 credits. Opportunity for directed research in areas of special interest. **Prerequisites:** Permission of instructor and Master of Business Administration program director.

### Management
MBA 600. Organizational Behavior. 3 credits.
Through the use of experimental exercises and case studies, the student will gain greater depth of knowledge in the study of organizational behavior, including leadership, management of conflict, change strategies, and group and individual behavior.

MBA 650. Managing Human Resources. 3 credits.

MBA 664. Negotiations and Conflict Management. 3 credits.
This course focuses on the identification and development of effective negotiation skills that can be utilized in business and interpersonal relationships. Applications of bargaining principles are also discussed in the context of the resolution of disputes between both organizations and individuals.

MBA 690. Strategic Management. 3 credits.
The required capstone course for all graduate business students. Emphasizes corporate governance and complex, top management level strategic thinking and decision making. Integrates all the functional areas of business while emphasizing the external environment and ethical context of management. Prerequisite: Must be the last course taken of the Master of Business Administration program.

MBA 674. Directed Research. 1-3 credits.
Opportunity for directed research in areas of special interest. Prerequisites: Permission of instructor and Master of Business Administration program director.

Marketing

MBA 644. Foundations of Marketing Management. 3 credits.
The course focuses on marketing planning, strategy and policy. In addition, application of analytical tools to contemporary marketing problems is a central focus.

The course provides MBA students with the tools to evaluate primary market research. Students will study the market research process including: defining the problem, conceptualization, research design, sources of data, questionnaire development, sampling, data collection methods, univariate and multivariate statistical analyses, and the development of a management oriented report. Students will apply the components of the market research process and conduct their own research project.

MBA 656. Relationship Marketing. 3 credits.
Course focuses on the fundamentals of targeting, modeling, and segmentation to build customer relationships. Students will learn theory and economics of database-driven direct marketing, sources of data and database software, and technology behind database marketing.

MBA 665. Internet Marketing. 3 credits.
Studies the culture and demographics of the Internet, online business strategies, and the hardware and software tools necessary for online marketing practice. Students learn to identify relevant target segments, develop product opportunities, pricing structures, and distribution channels over the Internet, and execute marketing strategy in computer mediated environments.

MBA 675. Directed Research. 1-3 credits.
Opportunity for directed research in areas of special interest. Prerequisites: Permission of instructor and Master of Business Administration program director.

Information Security Concentration
MBA 680. **Introduction to Information Security.** 3 credits.
Overview of Information Security exploring basic concepts and developing knowledge and skills of protecting valuable information assets and systems.

MBA 681. **Managing System Networks.** 3 credits.
Development of understanding and skills for managing effective security in enterprises that depend upon information infrastructures and engage in e-commerce.

MBA 682. **Information Security Ethics and Policy.** 3 credits.
Overview of business law concentrating on legal issues critical to enterprises operating information infrastructures and engaging in electronic commerce.

**Online 500-Level Prerequisites**

MBA 501. **Management and Organizational Behavior.** 3 credits.
This course is designed to meet the entry level MBA requirements in Organizational Behavior and in Management. Course content is drawn from both of these fields, including the structure of organizations, leadership, motivation, organization, culture, and work in groups.

MBA 502. **Statistics and Management Science** 3 credits.
This course provides MBA students with a foundation in the central ideas and tools of statistical and quantitative analysis. It is intended as a prerequisite for MBA 690 (currently IDS 695: Quantitative Methods for Management). Topics include measures of central tendency and dispersion, point and interval estimates, hypothesis testing, linear regression, mathematical modeling and basic probability. MBA 502 is offered as a self-paced, online course and is accessible via an Internet browser such as Internet Explorer. **Prerequisites:** Math 205 (Business Calculus) or the equivalent.

MBA 503. **Financial Accounting.** 3 credits.
The role of financial data in contemporary society; the problems of measuring and reporting income, assets, liabilities and equities; interpretation of financial statements.

MBA 504. **Managerial Finance.** 3 credits.
Study of theoretical concepts and analytical techniques to aid management decision-making. Topics include: financial statement analysis and forecasting, time value of money concepts, working capital management, and capital budgeting.

MBA 505. **Foundation of Economics.** 3 credits.
Economics 505 is designed to equip the student with the fundamentals of economic analysis, so that he or she will be able to apply these principles to appropriate cases. The course is designed to develop a facility of using the tools of economic analysis, including standard models of the micro and macro economies, and an appreciation for the conditions under which the various models can effectively be applied. The course also develops an appreciation for the limitations of the models, and an understanding of the relationship between economics and other disciplines.

MBA 506. **Legal Environment of Business.** 3 credits.
An introduction to the American legal system, the public law regulating business and the private law of business relationships. The law is examined as an evolving process in which current rules have developed and new rules with evolve in the ethical and moral context of American society.

**MBA Courses**

**Prerequisite Courses**

MBA 501. Management & Organizational Behavior
MBA 502. Statistics and Management Science
MBA 503. Financial Accounting
MBA 504. Managerial Finance
MBA 505. Foundation of Economics
MBA 506. Legal Environment of Business

**Required**
MBA 600. Organizational Behavior
MBA 610. Quantitative Methods For Management
MBA 620. Accounting For Decision Making & Control
MBA 630. Financial Management
MBA 640. Management Information Systems
MBA 641. The Microeconomics of Business Decision-Making
MBA 642. Operations Management
MBA 643. Advanced Topics & Cases in Financial Management
MBA 644. Foundations of Marketing Management
MBA 690. Strategic Management

**Electives**
MBA 650. Managing Human Resources
MBA 652. Technology-Enhanced Decision-Making
MBA 653. Business Law
MBA 654. Investment Analysis
MBA 655. Marketing Research For Decision Making
MBA 656. Relationship Marketing
MBA 658. Managing Technology Innovation
MBA 659. Financial Markets
MBA 660. International Finance
MBA 661. Financial Management of Real Estate Investments
MBA 662. Macro Economic Theory and Economic Policy
MBA 663. International Business Development
MBA 664. Negotiations and Conflict Management
MBA 665. Internet Marketing
MBA 670. Directed Research-Accounting
MBA 671. Directed Research-Finance
MBA 672. Directed Research-CIS/OM
MBA 673. Directed Research-Economics
MBA 674. Directed Research-Management
MBA 675. Directed Research-Marketing
MBA 676. Directed Research-Business Law
Communications Sciences and Disorders

Dr. Nicholas W. Bankson, Department Head
Dr. Charles Runyan, Graduate Coordinator

For information, call (540) 568-6440
Web site: http://www.csd.jmu.edu

Professors
N. Bankson, C. Runyan, R. Ruth, B. Ryals, B. Seal

Associate Professors

Adjunct Professors
J. Hollis, J. Rassi, D. Schwalbach

Adjunct Instructor
S. Ingram

The Department of Communication Sciences and Disorders offers graduate degrees in speech-language pathology and audiology. The department offers the degree of Doctor of Philosophy in either speech-language pathology or audiology, which prepares students for research and academic careers. In addition, the department offers a Doctor of Philosophy in clinical audiology and the Master of Science degree in speech-language pathology, both of which are designed to prepare students for clinical practice.

Mission
The Department of Communication Sciences and Disorders (CSD) is committed to providing comprehensive, state of the art undergraduate pre-professional coursework and observation, plus graduate level coursework and practicum experiences for those interested in entering professional practice in either speech-language pathology or audiology. The department is also committed to advancing the state of knowledge in both basic and applied aspects of communication sciences and disorders through faculty and student activities, and to providing service to professional and client communities at the local, state, national and international levels. The missions of the Graduate Degree programs in Speech-Language Pathology and Audiology are:

- To prepare individuals for clinical certification/licensure in either speech-language pathology or audiology; and
- To prepare individuals for teaching and research careers, as well as leadership positions in service delivery settings focused on speech-language pathology or audiology.

Admission Requirements
To be considered for unconditional (see “Admission to the College of Graduate and Professional Programs”) admission into any of the graduate programs, a prospective student must have a 3.25 grade point average in the undergraduate major, successfully completed the undergraduate prerequisite courses, completed the Graduate Record Examination and submitted letters of recommendation (three letters for the Ph.D.; two for the masters degree). Applicants for the Ph.D. program must also submit a letter of intent and schedule a personal interview. Applications may be submitted at any time. However, for full consideration, it is recommended that all
materials be received by February 1 for fall semester admission. After that time, applications will be reviewed in accordance with slots that may be available. Using the submitted material, the department admissions committee will rank eligible candidates for a limited number of admissions. Students who have not met the undergraduate prerequisite course work may apply to these graduate programs as a provisional student. Once the prerequisite course work has been completed at a satisfactory level, the student is shifted from provisional to either conditional or unconditional status.

The audiology and speech language pathology clinical training programs in the Department of Communication Sciences and Disorders are accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association.

**Speech-Language-Hearing Applied Laboratory**

The JMU Applied Laboratory, operated by the Department of Communication Sciences and Disorders, provides evaluation and clinical instruction services for individuals with speech, language and hearing problems. The priority for services offered through this clinical teaching laboratory is determined by the needs of practica students. Appointments for a consultation or evaluation may be made by any member of the university community or the general public. Professional services are provided by certified speech-language pathologists and audiologists and by supervised practica students.

**Doctor of Philosophy in Clinical Audiology**

This graduate audiology program is a four-year post-baccalaureate program of study that culminates in eligibility for certification in audiology granted by the American-Speech-Language-Hearing Association and for licensure in audiology as awarded by the Virginia Board of Audiology and Speech Pathology. Students admitted to this program are matriculated into a focused curriculum developed to prepare doctoral-level practitioners.

No students will be allowed to matriculate with the intention of earning a master’s as the terminal degree, though the master’s degree will still be available should it be determined that such a degree may need to be employed for selected students.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSD 511</td>
<td>Instrumentation in Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CSD 512</td>
<td>Anatomy and Physiology of the Auditory and Vestibular Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSD 514</td>
<td>Audiologic Assessment I</td>
<td>3</td>
</tr>
<tr>
<td>CSD 515</td>
<td>Human Communication and Aural Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>CSD 521</td>
<td>Speech Perception: Models &amp; Theories</td>
<td>3</td>
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<tr>
<td>CSD 523</td>
<td>Psychoacoustics</td>
<td>3</td>
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<tr>
<td>CSD 524</td>
<td>Audiologic Assessment II</td>
<td>3</td>
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<tr>
<td>CSD 531</td>
<td>Industrial Audiology</td>
<td>2</td>
</tr>
<tr>
<td>CSD 532</td>
<td>Counseling in Audiology</td>
<td>2</td>
</tr>
<tr>
<td>CSD 533</td>
<td>Business Applications</td>
<td>3</td>
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<tr>
<td>CSD 600</td>
<td>Research in Audiology</td>
<td>3</td>
</tr>
<tr>
<td>CSD 611</td>
<td>Neurophysiologic Measures I</td>
<td>5</td>
</tr>
<tr>
<td>CSD 612</td>
<td>Hearing Aids I</td>
<td>4</td>
</tr>
<tr>
<td>CSD 621</td>
<td>Neurophysiologic Measures II</td>
<td>5</td>
</tr>
<tr>
<td>CSD 622</td>
<td>Hearing Aids II</td>
<td>4</td>
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</tbody>
</table>
Master of Science in Speech-Language Pathology

The masters degree program in speech-language pathology is designed to provide a broad spectrum of academic and practicum experiences necessary for the education of specialists who deal with disorders of human communication and swallowing.

Clinical practical experiences are available in a wide range of professional settings including the JMU Applied Laboratory, various hospital and rehabilitation programs, and the public schools. The academic and clinical components of the program are consistent with the requirements for certification in speech-language pathology of the American Speech-Language-Hearing Association and for health and education licensures in speech-language pathology by the state of Virginia. Applicants should have completed pre-requisite undergraduate course work in speech pathology and/or related areas of study. Students may be admitted with deficiencies but should be aware that appropriate undergraduate prerequisites must be completed.

Minimum requirements for a major in speech-language disorders include 44 credit hours of prescribed course work. Only one course with a grade of “C” may be accepted in the graduate degree program.
### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CSD 500. Introduction to Research in Communication Sciences and Disorders</td>
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</tr>
<tr>
<td>CSD 522. Communication Disorders of the Traumatically Brain Injured</td>
<td>2</td>
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<tr>
<td>CSD 528. Autism</td>
<td>1</td>
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<tr>
<td>CSD 529. Augmentative Communication</td>
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<tr>
<td>CSD 530. Early Intervention</td>
<td>1</td>
</tr>
<tr>
<td>CSD 544. Evaluation and Treatment of Swallowing Disorders</td>
<td>2</td>
</tr>
<tr>
<td>CSD 560. Neuromotor Speech Disorders</td>
<td>2</td>
</tr>
<tr>
<td>CSD 604. Neuroanatomy and Neurophysiology of Speech and Language</td>
<td>3</td>
</tr>
<tr>
<td>CSD 605. Physiological and Acoustical Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>CSD 623. Advanced Study of Phonological Disorders</td>
<td>2</td>
</tr>
<tr>
<td>CSD 625. Pediatric Dysphagia</td>
<td>1</td>
</tr>
<tr>
<td>CSD 632. Processes and Disorders of Speech Fluency</td>
<td>3</td>
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<tr>
<td>CSD 640. Advanced Children’s Language Disorders</td>
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<tr>
<td>CSD 641. Language Disorders in Adults</td>
<td>3</td>
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<tr>
<td>CSD 651. Disorders of Speech Resonance</td>
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<tr>
<td>CSD 656. Voice Disorders</td>
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<tr>
<td>Clinical Practicum¹</td>
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<tr>
<td>CSD 581. Intern Speech Practicum</td>
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<td>CSD 582. Intern Speech Practicum</td>
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<td>CSD 583. Intern Speech Practicum</td>
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<tr>
<td>CSD 584. Intern Speech Practicum</td>
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<td>CSD 585. Intern Speech Practicum</td>
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<tr>
<td>CSD 586. Intern Speech Practicum</td>
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<tr>
<td>CSD 681. Hearing for SLP</td>
<td>1</td>
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<td>CSD 682. Extern Speech Practicum</td>
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<tr>
<td>CSD 683. Extern Speech Practicum</td>
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<tr>
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<td>CSD 686. Extern Speech Practicum</td>
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<td>CSD 687. Extern Speech Practicum</td>
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<td>CSD 688. Extern Speech Practicum</td>
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<tr>
<td>Electives</td>
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<tr>
<td>CSD 520. Advanced Sign Language</td>
<td>3</td>
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<tr>
<td>CSD 680. Reading and Research</td>
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<tr>
<td>CSD 700. Thesis</td>
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<td><strong>Total</strong></td>
<td><strong>44</strong></td>
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</tbody>
</table>

¹ For teacher licensure, 100 practicum hours must be in an educational setting.

### Doctor of Philosophy in Speech-Language Pathology or Audiology

These programs are typically initiated at the a post-masters degree level and are designed to prepare students in either speech-language pathology or audiology to conduct clinical (applied) or basic research. These programs of study include, in addition to course work related to communication disorders, requirements in statistics, research design, hearing or speech sciences, a teaching\supervision internship, and...
Statistics and Research Design  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSD 500.</td>
<td>Research in Communication Sciences and Disorders</td>
<td>3</td>
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<tr>
<td>MATH 522.</td>
<td>Statistics for Researchers</td>
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<tr>
<td>HTH 655.</td>
<td>Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 600.</td>
<td>Introduction to Measurement and Statistics</td>
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<td>PSYC 605.</td>
<td>Research and Inferential Statistics</td>
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<tr>
<td>PSYC 608.</td>
<td>Multivariate Statistical Methods</td>
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<tr>
<td>PSYC 777.</td>
<td>Psychoeducational Assessment</td>
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<tr>
<td>PSYC 812.</td>
<td>Assessment Methods and Instrument Design</td>
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Speech or Hearing Science and Instrumentation  

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CSD 511.</td>
<td>Instrumentation in Audiology</td>
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<tr>
<td>CSD 512.</td>
<td>Anatomy and Physiology of the Auditory and Vestibular Systems</td>
<td>3</td>
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<tr>
<td>CSD 521.</td>
<td>Speech Perception: Models and Theories</td>
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<td>CSD 523.</td>
<td>Psychoacoustics</td>
<td>3</td>
</tr>
<tr>
<td>CSD 604.</td>
<td>Neuroanatomy and Neurophysiology of Speech</td>
<td>3</td>
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<tr>
<td>CSD 605.</td>
<td>Physiological and Acoustic Phonetics</td>
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<td>CSD 721.</td>
<td>Digital Signal Processing</td>
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<tr>
<td>CSD 805.</td>
<td>Quantitative Measurement of Speech and Voice</td>
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Directed Research  

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</tr>
<tr>
<td>CSD 817.</td>
<td>Directed Research</td>
<td>1 - 3</td>
</tr>
<tr>
<td>CSD 917.</td>
<td>Directed Research</td>
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Teaching/Supervision Internship  

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<td>CSD 841.</td>
<td>Teaching Experience in CSD</td>
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<tr>
<td>CSD 842.</td>
<td>Supervision Experience in CSD</td>
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Electives  

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<tr>
<td>CSD 850-861.</td>
<td>Advanced Seminars in CSD</td>
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<tr>
<td>CSD 510, 525</td>
<td>Seminars in Audiology</td>
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<td>CSD 610, 620, 710.</td>
<td>Seminars in CSD</td>
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<tr>
<td>CSD 718, 818, 918.</td>
<td>Independent Study</td>
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Dissertation  

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<tbody>
<tr>
<td>CSD 920.</td>
<td>Dissertation</td>
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</table>

Financial Aid
Graduate assistantships are available on a competitive basis to both speech-language pathology and audiology students. In addition, fellowships funded by the Scottish Rite Foundation of Virginia are available to graduate students admitted to the graduate program in speech-language pathology. Scottish Rite Fellowships are restricted to Virginia residents who intend to pursue positions with language-impaired children in Virginia.

Course Offerings

Speech-Language Pathology and Audiology

- **CSD 500. Research in Communication Sciences and Disorders.** 2 credits. Focuses on both basic and applied research interpretation.
- **CSD 501. Workshops in Speech Pathology and Audiology.** 3 credits. Designed to provide a detailed study of a particular topic of interest in speech pathology and/or audiology. Prerequisite: Permission of department head.
- **CSD 510. Seminar in Audiology.** 1-3 credits. This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an introductory level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.
- **CSD 511. Instrumentation in Audiology.** 3 credits. A study of topics and procedures of instrumentation that are fundamental to clinical practice including electricity and electronics, filters, calibration, acoustical impedance, analog and digital signals, and acoustics.
- **CSD 512. Anatomy and Physiology of the Auditory and Vestibular Systems.** 3 credits. Advanced study of the anatomy and physiology of the auditory and vestibular systems to include cochlear and neural mechanisms of sound coding.
- **CSD 514. Audiologic Assessment I.** 3 credits. A study of auditory disorders and the measurement of hearing including an overview of behavioral and physiologic measures. Emphasis is placed on the behavioral evaluation of the peripheral system, tests of cochlear and retrocochlear differentiation and immittance measures.
- **CSD 515. Human Communication and Aural Rehabilitation.** 3 credits. This course focuses on the impact of hearing loss on human communication across the lifespan. Aural habilitation and rehabilitation procedures common to the 20th century are compared with today's trends and with projected advances expected for the 21st century.
- **CSD 519. Audiology Internship.** 2 credits. Supervised clinical practicum at the Communication Sciences and Disorders Applied Laboratory and a variety of other settings. Prerequisite: CSD 510.
- **CSD 520. Advanced Sign Language.** 3 credits. Advanced sign language will enhance the communication skills of the student whose core vocabulary and knowledge of application of sign language are basic. The course arranges opportunities for building fluency and reception, as well as expanding knowledge of sign systems and the appropriateness in a given situation. Prerequisites: CSD 420 or permission of instructor.
- **CSD 521. Speech Perception: Models and Theories.** 3 credits. Advanced study of speech perception including acoustics, intelligibility, instrumentation and theoretical models. Emphasis will be placed on the impact of hearing loss on perceptual abilities.
CSD 522. Communication Disorders of the Traumatically Brain Injured. 2 credits.
An overview of the role of speech-language pathology in the interdisciplinary management of cognitive-communicative deficits associated with traumatic brain injury.

CSD 523. Psychoacoustics. 3 credits.
A study of the relationship between a sound stimulus and the behavioral response it produces in a listener.

CSD 524. Audiologic Assessment II. 3 credits.
A study of various measures of auditory function including an overview of common physiologic techniques of hearing and balance, tests of pseudohypacusis, and central auditory dysfunction. Consideration is provided to variation in technique for different age populations and the difficult-to-test.

CSD 525. Seminar in Audiology. 1-3 credits.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an introductory level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

CSD 526. Supervision in Speech Language Pathology and Audiology. 1 credit.
The American Speech-Language-Hearing Association guidelines for clinical supervision form the basis for the study of the supervisory process. Problems in supervision and current research will offer students models and techniques to apply as a supervisee or supervisor.

CSD 528. Autism. 1 credit.
Focus on demographics of autism spectrum disorders, historical and contemporary diagnostic and treatment procedures, and the role of the speech-language pathologist in interdisciplinary programs.

CSD 529. Augmentative Communication. 1 credit.
Assessment and intervention strategies for the speechless population will be presented. Students will participate in demonstrations of alternative communication systems. An interdisciplinary team approach to (re)habilitation will be studied.

CSD 530. Early Intervention. 1 credit.
Introduction to early intervention programs and approaches for infants and toddlers, with emphasis on the role of the speech-language pathologist in team intervention.

CSD 531. Industrial Audiology. 2 credits.
A study of the effects of noise upon humans and topics relevant to hearing conservation, such as noise assessment and risk factors, hearing protectors, audiometric testing, employee training and record keeping.

CSD 532. Counseling in Audiology. 2 credits.
This course introduces graduate students to counseling within the discipline of audiology, particularly treating special needs of individuals and the families/caregivers of individuals with hearing loss. Indicators that suggest counseling as an additional service are also covered.

CSD 533. Business Applications in Audiology. 3 credits.
This course focuses on the various professional and business practices and regulations that impact audiology. Topics include licensure, certification, ethical and professional standards of practice as well as practice management and business methods common to the practice of audiology.

CSD 539. Audiology Internship. 2 credits.
Supervised clinical practicum at the Communication Sciences and Disorders Applied Laboratory and a variety of other settings. Prerequisites: CSD 525, 519.
CSD 540. Language Disorders in Children for Special Educators. 3 credits. A comprehensive study of the etiology and remediation of language disorders in communicatively impaired children.

CSD 544. Evaluation and Treatment of Swallowing Disorders. 2 credits. Current research and clinical management will be presented of individuals showing difficulties in feeding orally and aspirating. Normal physiology of deglutition and the multidisciplinary approach toward the management of dysphagia will be emphasized.

CSD 560. Neuromotor Speech Disorders. 2 credits. The objective of this course is to familiarize students with the theoretical and clinical aspects in the areas of dysarthria and apraxia. Similarities and differences of the speech impairments in these disorders will be demonstrated and applied to diagnosis and treatment.

CSD 561. AR for Audiology. 1 credit. Clinical practicum in aural rehabilitation.

CSD 563. SLP for Audiology. 1 credit. Speech-language pathology practicum for the audiology major.


CSD 582. Intern Speech Practicum. 2 credits. Speech-language pathology practicum.

CSD 583. Intern Speech Practicum. 2 credits. Speech-language pathology practicum.

CSD 584. Intern Speech Practicum. 2 credits. Speech-language pathology practicum.


CSD 600. Research in Audiology. 3 credits. Survey of research methods in audiology. Students will research, write, and present reports. Topics covered will include the WWW and the library as research resources.

CSD 604. Neuroanatomy and Neurophysiology of Speech and Language. 3 credits. Neuroanatomy and neurophysiology with an emphasis on speech and language behavior. Comprehensive examination of the neuroanatomic and neurophysiologic substrate for cognition and communication.

CSD 605. Physiological and Acoustical Phonetics. 3 credits. Respiratory, phonatory, resonatory and articulatory components of speech output are considered. Theoretical models of speech production and reception are discussed.

CSD 610. Seminar in Audiology. 1-3 credits. This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an intermediate level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

CSD 611. Neurophysiologic Measures I. 5 credits. Study of the neurophysiological and electrophysiological properties of the human peripheral and central auditory pathways.

CSD 612. Hearing Aids I. 4 credits. A study of hearing handicap and its management in adults, including amplification
technologies, electroacoustic analyses, and prescription and verification procedures. Emphasis is on the foundations of clinical management.

**CSD 619. Audiology Internship.** 1 credit.
Supervised clinical practicum at the Communication Sciences and Disorders Applied Laboratory and a variety of other settings. *Prerequisite: CSD 539 or permission of instructor.*

**CSD 620. Seminar in Audiology.** 1-3 credits.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an intermediate level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

**CSD 621. Neurophysiologic Measures II.** 5 credits
Advanced study of the neurophysiological and electrophysiological properties of the human auditory and related sensory and motor systems.

**CSD 622. Hearing Aids I.** 4 credits
An advanced study of hearing handicap and its prosthetic management. Various technologies, prescription methods, and verification procedures are critically reviewed.

**CSD 623. Advanced Study of Phonological Disorders.** 2 credits.
Articulatory phonetics, phonological processes and coarticulation are considered. Emphasis is given to analysis of phonological delays/disorders and specific procedures of remediation.

**CSD 625. Pediatric Dysphagia.** 1 credit.
The study of feeding and swallowing disorders in children. Instrumental and neuro developmental evaluation will be presented. Management techniques for feeding and swallowing difficulties will be advanced.

**CSD 629. Audiology Internship.** 2 credits.
Supervised clinical practicum at the Communication Sciences and Disorders Applied Laboratory and a variety of other settings. *Prerequisite: CSD 619 or permission of instructor.*

**CSD 631. Neurophysiologic Measures III.** 3 credits
Advanced study of the anatomy and physiology of the oculomotor and vestibular systems. Detailed study of basic and advanced concepts in clinical testing, treatment and mechanisms of rehabilitation of disorders of the vestibular and balance system.

**CSD 632. Processes and Disorders of Speech Fluency.** 3 credits.
Advanced diagnostic and therapeutic aspects of stuttering for children and adults are studied. Particular emphasis is placed on differentiating incipient stuttering from normal disfluencies.

**CSD 633. Auditory Pathophysiology.** 3 credits.
A study of the various disorders of the external, middle and inner ears; the retrocochlear and central auditory systems; and the vestibular and balance system.

**CSD 639. Audiology Externship.** 3 credits.
Supervised clinical practicum at clinical settings external to the Communication Sciences and Disorders Applied Laboratory. *Prerequisite: CSD 629 or permission of instructor.*

**CSD 640. Advanced Children’s Language Disorders.** 4 credits.
Comprehensive study of children’s pragmatic, semantic, and syntactic impairments. Emphasis is placed upon etiologies, evaluation, and habilitation procedures.

**CSD 641. Language Disorders in Adults.** 3 credits.
Theoretical comparative aspects and clinical management of aphasia in adults are
emphasized. Communication disorders associated with right hemisphere brain damage are also considered.

**CSD 649. Selected Clinical Topics in Audiology.** 4 credits.
Discussion of advanced topics relevant to audiology, emphasizing the synthesis of theory with clinical practice.

**CSD 651. Disorders of Speech Resonance.** 1 credit.
The study of cleft palate and other orofacial abnormalities and their associated speech disorders. Advanced study in the diagnosis and management of cleft palate speech will be provided.

**CSD 656. Voice Disorders.** 3 credits.
The study of laryngeal functions and disorders. In-depth study of acoustic and physiologic parameters of the vocal mechanism. Emphasis is given to the diagnosis and management of vocal pathologies.

**CSD 659. Reading and Research in Audiology.** 1-3 credits.
This course will review recent professional literature of interest with emphasis on content and research design. For students not electing the thesis option, a study of empirical nature will be required.

**CSD 680. Reading and Research.** 1-3 credits.
Designed to allow graduate students to pursue independent study and/or research in the area of speech, language and hearing disorders under appropriate faculty supervision. May be repeated for credit. *Prerequisite: Permission of department head.*

**CSD 681. Hearing for SLP.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 682. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 683. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 684. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 685. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 686. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 687. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 688. Extern Speech Practicum.** 1 credit.
Supervised speech-language pathology practicum.

**CSD 690. Advanced Seminar in Speech Pathology and Audiology.** 1-3 credits.
This course will cover advanced considerations relative to the diagnosis and management of individuals with speech, language and hearing disorders. *Prerequisite: Permission of department head.*

**CSD 691. Professional Seminar in Audiology.** 1-3 credits.
A review of professional training emphasizing case management using a grand rounds approach. This course will serve as a capstone experience integrating theory and practice; it will be offered in conjunction with the full-time externship experience.

**CSD 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated.

**CSD 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed will not be required to complete the written comprehensive examination. Student should talk with their adviser prior to selecting this option.

**CSD 700. Thesis.** 1-6 credits.
The thesis option generally requires three to four semesters to complete. Students choosing the thesis option will not be required to complete the written comprehensive examination. Student should talk with their adviser prior to this option.

**CSD 710. Seminar in Audiology.** 1-3 credits.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an advanced level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

**CSD 711. Pediatric Audiology.** 3 credits.
Normal and pathological development of the auditory system; pediatric audiometric assessment; auditory and communication aspects in the habilitation of hearing-impaired children.

**CSD 717, 817, 917. Directed Clinical Research.** 1 - 3 credits.
This course sequence provides opportunity for applied research in an area of special interest as directed by a faculty mentor. Emphasis on developing a question and hypothesis, selecting subjects and variables to investigate, collecting and analyzing data, and reporting results should provide the student with a meaningful research experience.

**CSD 718, 818, 918. Independent Study.** 1-3 credits.
This course sequence provides opportunities for in-depth study in an area of special interest as directed by a faculty member.

**CSD 719. Audiology Externship.** 3 credits.
Supervised clinical practicum at clinical settings external to the Communication Sciences and Disorders Applied Laboratory. **Prerequisite:** CSD 639 or permission of instructor.

**CSD 720. Seminar in Audiology.** 1 credit.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an advanced level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

**CSD 721. Digital Signal Processing.** 3 credits.
Study of advanced concepts in signal processing as applied to real-world applications in digital speech processing, active noise reduction, and applications in advanced hearing device designs and telecommunications.

**CSD 729. Audiology Externship.** 3 credits.
Supervised clinical practicum at clinical settings external to the Communication Sciences and Disorders Applied Laboratory. **Prerequisite:** CSD 719 or permission of instructor.

**CSD 731. Medical Audiology.** 2 credits.
Advanced study of the diagnosis and evaluation of hearing and balance disorders.

**CSD 791. Directed Clinical Research.** 1 credit.
This course provides the opportunity for applied research in an area of special interest as directed by a faculty mentor. Students are required to participate in gathering data and observing the process of developing new knowledge through research. Emphasis is placed on the student becoming an expert consumer of research, as well as gaining an appreciation for research methodology.
**CSD 792. Directed Clinical Research.** 1 credit.
This course provides the opportunity for applied research in an area of special interest as directed by a faculty mentor. Students are required to participate in gathering data and observing the process of developing new knowledge through research. Emphasis is placed on the student becoming an expert consumer of research, as well as gaining an appreciation for research methodology.

**CSD 793. Directed Clinical Research.** 1 credit.
This course provides the opportunity for applied research in an area of special interest as directed by a faculty mentor. Students are required to participate in gathering data and observing the process of developing new knowledge through research. Emphasis is placed on the student becoming an expert consumer of research, as well as gaining an appreciation for research methodology.

**CSD 805. Quantitative Measurement of Speech and Voice.** 3 credits.
Principles for applying instruments in clinical approaches to speech pathologies. A survey of the principal equipment and instrumentation which will be available to Speech Pathologists in their professional activities within medicine, education and private practice.

**CSD 810. Professional Seminar in Audiology.** 1-3 credits.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an expert level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

**CSD 819. Audiology Residency.** 1-6 credits.
Full-time clinical practicum with limited supervision at clinical settings external to the Communication Sciences and Disorders Applied Laboratory. *Prerequisite: CSD 729 or permission of instructor.*

**CSD 820. Professional Seminar in Audiology.** 1-3 credits.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an expert level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

**CSD 829. Audiology Residency.** 1-6 credits.
Full-time clinical practicum with limited supervision at clinical settings external to the Communication Sciences and Disorders Applied Laboratory. *Prerequisite: CSD 819 or permission of instructor.*

**CSD 830. Professional Seminar in Audiology.** 1-3 credits.
This course addresses selected topics, issues and other content designed to prepare students for clinical practice in audiology. Content is treated on an expert level with emphasis upon problem solving, integration of information across didactic and practical knowledge toward clinical skill development.

**CSD 839. Audiology Residency.** 1-6 credits.
Full-time clinical practicum with limited supervision at clinical settings external to the Communication Sciences and Disorders Applied Laboratory. *Prerequisite: CSD 829 or permission of instructor.*

**CSD 841. Teaching Experience in CSD.** 3 credits.
With a faculty member, the student will engage in team-teaching of selected undergraduate/graduate course(s).

**CSD 842. Supervision Experience in CSD.** 3 credits.
Students enrolled in the course may be supervised in a clinical assignment or, if ASHA certification has been awarded, as a supervisor. Students and supervisors will be equipped for participation in the clinical teaching process. The tasks and skills of clinical
teaching is a specialty area of practice as it relates to the interaction between a clinician and client. Clinical teaching will be examined through observation, conferences, review of records, and communication skills. Competencies for the student clinician and for the clinical teacher will be incorporated into presentation of research in supervision and current trends in work settings.

**CSD 850. Advanced Seminar in CSD: Adult Language Disorders.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of adult language disorders.

**CSD 851. Advanced Seminar in CSD: Child Language Disorders.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of child language disorders.

**CSD 852. Advanced Seminar in CSD: Communication Enhancement.** 2-3 credits. This seminar focuses on the current views of assessment and treatment procedures of communication enhancement.

**CSD 853. Advanced Seminar in CSD: Aerodigestive Concerns.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of aerodigestive disorders.

**CSD 854. Advanced Seminar in CSD: Early Intervention.** 2-3 credits. This seminar focuses on the current views of assessment and treatment procedures of early intervention.

**CSD 855. Advanced Seminar in CSD: Fluency Disorders.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of fluency disorders.

**CSD 856. Advanced Seminar in CSD: Normal Communication Development.** 2-3 credits. This seminar focuses on the current views of human communication development over the life span.

**CSD 857. Advanced Seminar in CSD: Motor Speech Disorders.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of motor speech disorders.

**CSD 858. Advanced Seminar in CSD: Neurolinguistics.** 2-3 credits. This seminar would be devoted to study and discussion of one or more topics current in neurolinguistic investigation. Possible topics include: PET and fMRI studies of language processing; event-related potentials; connectionist models of speech errors and paraphasias; morphosyntactic disorders in language disorders; role of prosody in language processing and neurological disorders; pragmatic studies of populations with brain damage.

**CSD 859. Advanced Seminar in CSD: Clinical Phonology Disorders.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of phonological disorders.

**CSD 860. Advanced Seminar in CSD: Disorders of Resonance.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of disorders of resonance.

**CSD 861. Advanced Seminar in CSD: Voice Disorders.** 2-3 credits. This seminar focuses on the current views of etiology, assessment and treatment procedures of voice disorders.

**CSD 920. Doctoral Dissertation in CSD.** 1-12 credits. Culminating research project.
Computer Science

Dr. Malcolm G. Lane, Department Head

Dr. Christopher J. Fox, Graduate Program Coordinator

For information, call (540) 568-8772
Web site: http://www.cs.jmu.edu/csprogram.htm

Professors
  C. Fox, J. A. Harris, M. Heydari, M. Lane, J. Marchal, R. Mata-Toledo

Associate Professors
  C. Abzug, E. Adams, D. Bernstein, P. Cushman, M. Eltoweissy, R. Grove, R. Prieto-Diaz, S. Redwine

Assistant Professors
  M. Aboutabl, M. Norton, R. Tucker

Adjunct Assistant Professor
  S. Greenwald

Mission

The graduate program in Computer Science prepares highly skilled professionals with advanced expertise in creating and maintaining secure and reliable computing systems.

The Computer Science department offers two programs of study leading to the Master of Science in Computer Science. The on-campus program in Secure Software Engineering combines studies in the areas of software engineering and information security. The distance-education program in Information Security features intensive study of information security. Both programs achieve their goals through courses in core areas of Computer Science, followed by course work and directed study in software engineering and information security.

Admission to the program is competitive. Preference is given to students with undergraduate preparation in Computer Science, or industrial or government experience in computing. Strong students from other disciplines are encouraged to apply. Students judged able to complete the program but lacking preparation in Computer Science will generally be admitted conditionally and required to complete remedial courses.

Full-time on-campus graduate students can expect to complete their course work in four semesters, and distance-education students in five semesters. Part-time students seeking to advance their careers may pursue their academic objectives at a pace commensurate with their professional and personal obligations.

Concentrations

Concentration in Secure Software Engineering
  Dr. Christopher J. Fox, Concentration Coordinator

This concentration is available only to on-campus students. The program requires 36 credit hours, half of which must be at the 600-level or above. Ten courses comprising 30 credits are required and six credits are electives. For electives students may choose independent studies, reading and research courses, a thesis, or courses offered by
faculty on topics of interest. Students with exceptional undergraduate preparation may make substitutions for selected required courses with the permission of the faculty.

### Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 530. Programming Languages</td>
<td>3</td>
</tr>
<tr>
<td>CS 550. Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 552. Applied Complexity Theory</td>
<td>3</td>
</tr>
<tr>
<td>CS 555. Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CS 557. Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CS 574. Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 610. Networking and Security</td>
<td>3</td>
</tr>
<tr>
<td>CS 635. Secure Network Operations</td>
<td>3</td>
</tr>
<tr>
<td>CS 665. Software Requirements and Design</td>
<td>3</td>
</tr>
<tr>
<td>CS 666. Software Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>Approved Electives in Computer Science</td>
<td>6</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

### Concentration in Information Security

**Dr. Mohammad H. Heydari, Concentration Coordinator**

This concentration is offered in a remote, electronic distance-learning format that, while satisfying all requirements for the Master of Science program, is especially appropriate for people with professional interests in information security. Further information can be obtained from the InfoSec Program Web site at [www.infosec.jmu.edu](http://www.infosec.jmu.edu). The distance-learning courses are available only to students in the Information Security concentration, who will pay a higher tuition rate than students taking traditional courses at the university.

### Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 523. Ethics, Law and Policy in Cyberspace</td>
<td>3</td>
</tr>
<tr>
<td>CS 550. Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 555. Software Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CS 560. Networks and Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CS 574. Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 625. Information Security Audit Controls</td>
<td>3</td>
</tr>
<tr>
<td>CS 627. Cryptography: Algorithms and Applications</td>
<td>3</td>
</tr>
<tr>
<td>CS 652 Formal Methods for Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CS 660. Advanced Network Security</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

### Thesis Route

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CS 700. Thesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

### Non-Thesis Route

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 621. Trusted Systems</td>
<td>3</td>
</tr>
</tbody>
</table>
Depending on undergraduate background and work experience, students may be required to take one or more of the following preparatory courses. These courses do not satisfy graduation requirements for the Information Security concentration.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 510. Accelerated Fundamentals of Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 511. Accelerated Fundamentals of Computer Systems</td>
<td>3</td>
</tr>
<tr>
<td>CS 512. Advanced Fundamentals of Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 515. Foundations of Computer Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course Offerings**

**CS 501. Workshop in Computer Science.** 1-3 credits.
Designed to provide workshop experience in a variety of computing areas. Does not satisfy graduation requirements for the Master of Science degree in computer science. *Prerequisite: Permission of the program coordinator.*

Fundamental programming techniques using the C programming language to support algorithm development and procedural abstraction as a means of problem solving. Students also learn elementary data structures including character strings, records and files. Does not satisfy graduation requirements for the Master of Science degree in computer science. *Prerequisite: CS 510 or equivalent.*

An explanation of elementary computer organization and network communication by using the Unix operating system including use of a distributed hierarchic file system, other network resources and command scripting. Does not satisfy graduation requirements for the Master of Science degree in computer science. *Prerequisite: CS 510 or equivalent.*

Various advanced problem-solving strategies that use object-oriented techniques to develop algorithms in the C++ programming language. Students also learn advanced data structures including stacks, queues and lists using both static and dynamic memory allocations and including elementary performance analysis of these data structures. Does not satisfy graduation requirements for the Master of Science degree in computer science. *Prerequisite: CS 510 or equivalent.*

**CS 515. Foundations of Computer Science.** 3 credits.
Survey of fundamental Computer Science concepts such as iteration, recursion, induction, analysis of algorithms, combinations and probability, data structures, automata theory and regular expressions, context-free grammars and parsing, propositional and predicate logic. This course does not satisfy graduation requirements for the program.

**CS 523. Ethics, Law and Policy in Cyberspace.** 3 credits.
Study of ethical issues, legal resources and recourses, and policy implications inherent in our evolving on-line society. Provides an overview of the ethical challenges faced by
individuals and organizations in the information age. Introduces the complex and
dynamic state of the law as it applies to behavior in cyberspace. Prerequisite: CS 550.

**CS 530. Programming Languages.** 3 credits.
Study of the fundamental principles of programming language design and their
realization in actual programming languages. Examines programming languages from
the procedural, object-oriented, functional and declarative paradigms. Introduces basic
concepts of grammars and parsing. Prerequisites: CS 240 and CS 350, or CS 511 and
CS 512, or equivalent.

**CS 550. Operating Systems.** 3 credits.
Concepts and principles of multiple-user operating systems. Memory, CPU, I/O device
allocation, scheduling and security. Memory hierarchies, performance evaluation,
analytic models, simulation, concurrent programming and parallel processors.
Completion of a student project is a significant part of the course. Prerequisite: CS 350
or CS 511 or equivalent.

**CS 552. Applied Complexity Theory.** 3 credits.
Algorithms (sorting and searching, graph theory, arithmetic) with space and time
complexity and analyses; formal models of computation; theoretical aspects of
computational complexity, including complexity measures and hierarchies, and
intractable problems and the P=NP question. Other topics in theoretical computer
science with applications. Prerequisite: CS 240 or CS 512 or equivalent.

**CS 555. Software Engineering.** 3 credits.
The software development life cycle, software project management, development tools
and methods, and software quality assurance. Teams of students will complete a
significant development project. Prerequisite: CS 240 or CS 512 or equivalent.

**CS 557. Information Security.** 3 credits.
Fundamental concepts of Information Security including identification and
authentication, access control, security models, security kernels, and Windows and
Unix security. Discussions will cover the historical development of information security,
cryptology, PKI key management, application level security issues and security
evaluation. Prerequisite: CS 550.

**CS 560. Networks and Network Security.** 3 credits.
Fundamental concepts, principles, and practical networking and internetworking issues
relevant to the design, analysis, and implementation of enterprise-level trusted
networked information systems. Topics include networking and security architectures,
techniques, and protocols at the various layers of the Internet model. Prerequisite: CS
550.

**CS 574. Database Systems.** 3 credits.
Types of physical storage and access methods; data models; relational algebra and
calculus, data definition and query languages; dependencies, decomposition and
normalization; database design; recovery; consistency and concurrency; distributed
databases. Examples from commercial databases. Prerequisite: CS 350 or CS 511 or
equivalent.

**CS 585. Selected Topics I.** 3 credits.
Study of selected topics not otherwise covered in the regular offerings of the
department. May be repeated for credit when course content changes.

**CS 588. Introduction to Computer Graphics.** 3 credits.
Problems, objectives and study of computer graphics to include hardware, software and
applications. Graphics data structures and languages. Vectors, curves and character
generation. Interactive display devices. Construction of hierarchical image lists. Surface
representations. Discussion of problems of current interest. Prerequisite: CS 510 and
knowledge of calculus.
**CS 610. Networking and Security.** 3 credits.
Fundamental concepts, principles, and practical networking and internetworking issues relevant to the design, analysis, and implementation of enterprise-level trusted networked information systems. Topics include networking and security architectures, techniques and protocols at the various layers of the Internet model. *Prerequisite: CS 550.*

**CS 620. Introduction to Information Security.** 3 credits.
Provides the manager with a broad overview of the threats to the security of information systems, the responsibilities and basic tools for information security, and for the areas of training and emphasis needed in organizations to reach and maintain a state of acceptable security. The course provides an introduction to the language of information security and provides an overview of hardware, software, and firmware components of an information security system, and their integration into an organization’s information system operations for policy makers. The object of this course is to enable managers to make more informed policy and procedural evaluations in the information security area.

**CS 621. Trusted Systems.** 3 credits.
Definition of a trusted system and considerations pertaining to the design, evaluation, certification and accreditation of trusted systems, to include hardware considerations, software considerations such as developmental controls, validation/verification, assured distribution and other assurance issues. Implementation, configuration management and systems administration of trusted systems. Trusted applications and trusted database issues. Importance of aggressive monitoring and setting traps for the intruder. Importance of understanding the psychology and successful *modus vivendi* of the attacker to generating and maintaining a powerful defense. *Prerequisite: CS 620.*

**CS 625. Information Security Audit Controls.** 3 credits.
A course for the information system security professional emphasizing administrative roles in the audit and control of information systems. The administrator’s role in secure system accountability and documentation will be stressed. *Prerequisite: CS 620.*

Cryptographic techniques to achieve confidentiality, integrity, authentication and non-repudiation are examined. The underlying mathematical concepts are introduced. Topics to be covered include symmetric and public key encryption, hashing, digital signatures, cryptographic protocols and other recent developments in the field. *Prerequisite: CS 252, MATH 227 or CS 515.*

**CS 634. Natural Language Processing.** 3 credits.
Implementation of computer-based, natural language understanding systems; natural language syntax and processing knowledge representation, natural languages generation. *Prerequisite: CS 555.*

**CS 635. Secure Network Operations.** 3 credits.
Standard network security techniques for monitoring and maintaining an organization’s internal and external networks. Students will learn how to detect network-based attacks, diagnose an attacker’s intent, and respond to and recover from intrusions. *Prerequisite: CS 610.*

**CS 644. Artificial Intelligence.** 3 credits.
Application of heuristics to problem solving; perception and pattern recognition; search methods, production systems and knowledge representation; applications to expert systems, automatic programming and natural language processing. *Prerequisite: CS 555.*

**CS 649. Operating Systems II.** 3 credits.
A study of various topics in operating systems such as distributed file systems, security, architectural support for operating systems, performance measurement,
recovery management and real-time systems. **Prerequisite:** CS 550.

**CS 650. Computer Networks.** 3 credits.
The Open Systems Interface reference model. Network hardware, topologies and routing algorithms, reliability and security, application programs. Examples of various networks and protocols such as Ethernet, TCP/IP, NFS, USENET. **Prerequisite:** CS 550.

**CS 652. Formal Methods for Information Security.** 3 credits.
A formal specification language is presented with case studies, proofs, and the formal specification of software components. Additional topics may include formal security policy modeling, seminal formal systems, first-order logic, set theory, relations, functions, sequences, bags, free types, formal and rigorous proof, immanent reasoning, reification, decomposition, and Floyd-Hoare logic.

**CS 655. Programming Languages II.** 3 credits.
A study of various topics in programming languages such as proof techniques, formal specification of syntax and semantics, operational, denotational and axiomatic semantics. **Prerequisite:** CS 555.

**CS 660. Advanced Network Security.** 3 credits.
This is a project-based course. Students will learn advanced Network Security concepts, conduct Information Security research, and apply what they have learned throughout the Information Security masters program to better secure critical Information Infrastructure.

**CS 665. Software Requirements and Design.** 3 credits.
In-depth study of the state-of-the-art in requirements engineering, analysis, and design. Topics include formal techniques for system specification and verification, security models, software analysis and design methods and techniques, software architectures, and design patterns. **Prerequisite:** CS 555.

**CS 666. Software Quality Assurance.** 3 credits.
In-depth study of selected topics in software quality assurance. Topics include reviews and inspections, testing, formal verification methods, process management and improvement, and defect prevention. **Prerequisite:** CS 555.

**CS 674. Database Systems II.** 3 credits.
Continuation of CS 574. **Prerequisite:** CS 574.

**CS 676. Distributed Databases.** 3 credits.
Distributed databases and networks, levels of distribution, transparency, fragments and their allocation, distributed queries, optimization and concurrency. **Prerequisite:** CS 574.

**CS 680. Reading and Research.** 3 credits.
Opportunity for supervised reading and research in areas of special interest to the student. Reading and research may be done only in the major field of study.

**CS 685. Selected Topics II.** 3 credits.
An in-depth study of selected topics not otherwise covered in the regular offerings of the department. May be repeated for credit when course content changes.

**CS 690. Practicum.** 3 credits.
Provides a variety of supervised project, laboratory, leadership and instructional experiences. This course is graded on a satisfactory/unsatisfactory (S/U) basis. May be repeated for credit, but no more than six hours can be counted toward a degree program. **Prerequisite:** Consent of instructor and program coordinator.

**CS 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**CS 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

**CS 700. Thesis.** 6 credits.
This course is graded on a satisfactory/unsatisfactory (S/U) basis.
Graduate Education Programs in Early Childhood, Elementary, Middle and Secondary Education

Dr. Michael D. Rettig, Graduate Coordinator
For information, call (540) 568–2813
Web site: http://www.coe.jmu.edu

Master of Arts in Teaching Programs

Mission
The mission of the M.A.T. programs in Education is to provide excellent graduate curricula that prepare qualified professionals for educational roles in PreK-12 schools through advanced course work and field experiences.

Goals
These school professionals will:

- design and deliver curricula that effectively impact student learning,
- integrate technology in learning settings,
- value diversity of faculty and students in the school,
- collaborate with colleagues, parents, and others,
- be reflective practitioners who continually evaluate their actions, and
- value lifelong learning and engage in professional development.

Students pursuing the Master of Arts in Teaching (M.A.T.) degree must concentrate in one of the following areas:

- Early Childhood Education
- Elementary Education
- Middle School Education
- Secondary Education

The Master of Arts in Teaching at JMU is designed to lead to initial licensure to teach in some areas. Two program formats exist for completing a M.A.T. degree. One program format (the Fifth-Year Format) forms the last phase of five-year teacher licensure programs. This format is designed to serve candidates who have completed the appropriate prerequisite requirements in an undergraduate education program at JMU. (The course offerings listed in the fifth-year M.A.T. may not be offered until the summer or fall semester of 2004, to accommodate first year undergraduate students entering JMU in the fall of 2000.) The second M.A.T. program format (the Post-Baccalaureate Format) provides an option for individuals who have completed an undergraduate degree and wish to complete requirements for a teaching license. Currently, the Post-Baccalaureate M.A.T. format pertains to Early Childhood Education candidates only. See Page 67 for information.

Admission Criteria
To be fully admitted to the M.A.T. degree program, students must have:

- satisfied all requirements for admission to teacher education, and
Satisfied all requirements for admission to the College of Graduate and Professional Programs, including
- Completed requirements for a baccalaureate degree from an accredited college/university, and
- Taken the Graduate Record Examination or Miller Analogy Test (contact the coordinator for specific concentration requirements) and scored at the 25th percentile or above. Exception: Students completing their undergraduate degree and the appropriate teacher education pre-professional programs (majors and minors) at JMU are not required to take the Graduate Record Exam or the Miller Analogy Test. They must, however, have passed the appropriate PRAXIS II exam.

The Fifth-Year Format
The fifth-year M.A.T. is designed to allow students to meet requirements for a license to teach in the public schools of Virginia. (Courses in the fifth-year MAT licensure programs may not be offered until the summer or fall semester of 2004.) Students who are admitted to these programs must have completed prerequisite courses and experiences in education at the undergraduate level.

Undergraduate students and post-baccalaureate students planning to teach at the PreK-6, 6-8 and 6-12 levels should consult with a program coordinator or adviser to ensure completion of the required prerequisites. A specific arts and sciences major or equivalent course work and experiences may be required for admission to some programs of the M.A.T. and for licensure to teach in certain disciplines and grade levels. Because the fifth-year M.A.T. program format is new at JMU, minor changes may be made over the next few years, in the offerings and requirements listed. Therefore, students should check with their adviser frequently to be apprised of changes that may affect them.

The fifth-year licensure programs build on the extensive foundational course work and experiences students have completed in their undergraduate programs. Students will have completed the prescribed course work to develop the knowledge, skills, attitudes and behaviors needed for successful completion of the M.A.T.

The requirements for the fifth-year M.A.T. programs and licensure areas in the School of Education are listed in the sections below. Students interested in the requirements for the M.A.T. program in Physical and Health Education (PK-12) should refer to the description for that program in the School of Kinesiology and Recreation Studies.

Elementary Education Concentration, Grades PreK-6

Dr. Gerald Green, Graduate Concentration Coordinator
For information, call (540) 568–3580

The Elementary Education Master of Arts in Teaching concentration prepares candidates to become teachers of students in grades PreK-6. The Elementary Education Program is based on the successful completion of the Interdisciplinary Liberal Studies major or equivalent. The program is designed to provide students with a background of content information necessary for teaching children in the elementary grades.

Note: Acceptance into the ECED licensure program and its completion at the undergraduate level is no guarantee for acceptance into the ELED licensure program. Undergraduate students who wish to become licensed in ELED, PreK-6, must first complete the license for ECED, PreK-3. To add the grades 4-6 portion and the M.A.T., candidates must apply and be accepted through the College of Graduate and Professional Programs. Acceptance will be limited by available space and student qualifications.

The program of study for Elementary Education is as follows:

B.A./B.S. Undergraduate Degree

<table>
<thead>
<tr>
<th>General Education</th>
<th>41-44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdisciplinary Liberal Studies Major</td>
<td>42-44</td>
</tr>
<tr>
<td>Early Childhood Licensure Program</td>
<td>49</td>
</tr>
</tbody>
</table>
M.A.T. Program
Graduate Level Pre-professional Studies 34
166-171

Undergraduate Requirements
It is strongly recommended that all students in the Elementary Education concentration major in Interdisciplinary Liberal Studies. This program, with its expanded approach to the core disciplines, and its dual concentrations in either the Humanities and Social Sciences or Natural Sciences and Mathematics meets the requirements for licensure in the Commonwealth of Virginia.

Undergraduate Course Requirements

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td><strong>G</strong> PSYC 160. Life Span Human Development</td>
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</tr>
<tr>
<td>EDUC 360. Foundations of American Education</td>
<td>3</td>
</tr>
<tr>
<td>ECED 371. Practicum in the Early Childhood Education</td>
<td>2</td>
</tr>
<tr>
<td>ECED 372. Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>READ 366. Early Literacy Development and Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>ECED 441. Practicum in Child Development</td>
<td>1</td>
</tr>
<tr>
<td>ECED 442. Child Development</td>
<td>3</td>
</tr>
<tr>
<td>ECED 443. Practicum in Primary Grades</td>
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</tr>
<tr>
<td>ELED 444. Children and Math</td>
<td>3</td>
</tr>
<tr>
<td>READ 436. Literacy Learning in the Elementary Grades</td>
<td>3</td>
</tr>
<tr>
<td>Major requirements</td>
<td>11</td>
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<tr>
<td><strong>36</strong></td>
<td></td>
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</tbody>
</table>
Middle School Education Concentration, Grades 6-8

Dr. Gerald Green, Graduate Concentration Coordinator

For information, call (540) 568-3580

The program of study for Middle School Education is as follows:

**B.A./B.S. Undergraduate Degree**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>General Education</td>
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</tr>
<tr>
<td>Interdisciplinary Liberal Studies Major</td>
<td>42-44</td>
</tr>
<tr>
<td>Pre-Professional Studies in Education</td>
<td>48</td>
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</table>

**M.A.T. Program (Graduate)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Graduate Level Professional Studies</td>
<td>31</td>
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</tbody>
</table>

**Undergraduate Requirements**

It is required that all students in the Middle Education concentration major in Interdisciplinary Liberal Studies. This program, with its expanded approach to the General Education Core, and its dual concentrations in either the Humanities (English, History, Social Sciences) or Natural Sciences and Mathematics, meets the requirements for the Commonwealth of Virginia and most other states that require a two-subject endorsement for middle grades teachers. In addition, students may choose Integrated Science and Technology as a concentration that meets the subject endorsement criteria.

**Undergraduate Course Requirements**

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPSYC 160. Life Span Human Development</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 360. Foundations of American Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 310. Teaching in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 311. Field Experience in Middle and Secondary Education</td>
<td>2</td>
</tr>
<tr>
<td>READ 312. Reading and Writing across the Curriculum</td>
<td>3</td>
</tr>
</tbody>
</table>
Middle Grades
MSSE 370. General Methods and Technology 3
MSSE 371. Field Experience in Middle and Secondary Education 2
READ 472. Literacy, Assessment, and Instruction in Content Areas for the Middle Grades 3

Fourth Year
Students complete two of the courses below (3 credits each)
MSSE 470B. Methods in English/Language Arts
MSSE 470C. Methods in Foreign Language
MSSE 470H. Methods in Social Studies
MSSE 470I. Methods in Science
MSSE 470K. Methods in Mathematics
MSSE 471. Field Experience in Middle and Secondary Education
Students complete this course twice in appropriate areas (2 credits each)
EDUC 420. Classroom Management and Collaboration 3
SPED 460. Differentiation of Instruction and Academic Collaboration 3

Graduate Requirements
Candidates beginning the graduate portion of the program must meet all College of Graduate and Professional Programs requirements and criteria for admission; it is expected that candidates will complete the admission process early in their senior year. In addition, candidates must meet all graduate level graduation requirements (comprehensive project, etc.)

Graduate Course Requirements
EDUC 540. Educational Technology 3
MSSE 580. Internship 8
MSSE 630. Inquiry the Classroom 3
MSSE 650. Internship Seminar 2
MIED 610. Collaborative Leadership in Schools 3
MIED 620. Applied Research in Middle Education 3
MIED 656. Seminar in Middle Education 3
SPED 512. Behavior Management in the Classroom 3
Approved Electives 3

Secondary Education Concentration, Grades 6-12
Dr. Elizabeth L. Ihle, Graduate Concentration Coordinator
For information, call (540) 568-6486

The Secondary Education Master of Arts in Teaching prepares individuals for initial licensure to teach students of grades 6 through 12, in all the fields listed below except foreign language. Foreign language licensure is grades PreK-12.
The Secondary Education concentration emphasizes the preparation of effective and reflective teachers who are knowledgeable in the content they are preparing to teach and cognizant of the characteristics of adolescents, 12-18. The licensure areas for which individuals are prepared include biology, chemistry, earth and space science,
English, foreign language (PreK-12), mathematics, physics, and social studies. The concentration is designed to enable candidates to develop a strong professional education on a foundation of undergraduate preparation in General Education, an appropriate major and introductory professional education experiences. Although individual candidates’ programs of study will vary depending upon major and licensure area, the following represents the breakdown of the required credits in a typical program of study.

The program of study for Secondary Education is as follows:

<table>
<thead>
<tr>
<th>Undergraduate Prerequisites</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>41-44</td>
</tr>
<tr>
<td>Major Field of Study</td>
<td>36-60</td>
</tr>
<tr>
<td>Undergraduate Pre-Professional Studies</td>
<td>22-23</td>
</tr>
<tr>
<td></td>
<td><strong>108-135</strong></td>
</tr>
</tbody>
</table>

**Undergraduate Requirements**

Undergraduate students minoring in secondary education must complete an arts and sciences major or the equivalent in a specific discipline related to the teacher licensure area of intent. Majors related to approved licensure areas at JMU include biology, chemistry, English, foreign languages, geology, interdisciplinary social sciences (ISS), mathematics, and physics.

**Undergraduate Course Requirements**

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G</strong> PSYC 160. Life Span Human Development</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 360. Foundations of American Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**Third and Fourth Years**

| EDUC 310. Teaching in a Diverse Society                                    | 3            |
| EDUC 311. Field Experience in Middle and Secondary Education, Practicum I | 2            |
| READ 312. Reading and Writing Across the Curriculum in the Middle and Secondary Grades |
| (EDUC 310, EDUC 311, and READ 312 are corequisites)                        | **3**        |
| MSSE 370. General Teaching Methods and Instructional Technology            | 3            |
| MSSE 371. Field Experience in Middle and Secondary Education, Practicum II | 2            |
| READ 472. Literacy Assessment and Instruction in the Content Areas for Middle and Secondary Grades (MSSE 370, MSSE 371, and READ 472 are corequisites) | **3**        |
|                                                                           | **16**       |

**Graduate Requirements**

<table>
<thead>
<tr>
<th>Graduate Course Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSSE 607. Middle and Secondary School Curriculum and Co-Curriculum</td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>
MSSE 625. Learning and Assessment in Middle and Secondary Education 2
EDUC 540. Educational Technology 3
SPED 512. Behavior Management in the Classroom 3
(It is preferred that the four courses above be completed prior to taking the courses listed below)
MSSE 630. Educational Inquiry 3
SPED 520. Differentiation of Instruction and Academic Collaboration 3
MSSE 570. Methods of Teaching Grades 6-12 (content specific section) 3
MSSE 571. Field Experience in Middle and Secondary Education, Practicum III 2
MSSE 675. Internship in Middle and Secondary Education 8
MSSE 650. Internship Seminar 2

1 Candidates pursuing a Foreign Language teaching license take EDUC 570
2 Candidates pursuing a Foreign Language teaching license take EDUC 675

The Post-Baccalaureate M.A.T. Format

Additional Admission Criteria
Candidates admitted to this program of study are expected to have completed an arts and sciences undergraduate major from an accredited college or university with a 2.5 grade-point average or above (on a 4.0 scale). Candidates are required to provide transcript evidence that they have completed liberal studies and specialty area courses comparable in content and total hours to those expected of an undergraduate major. Those applicants not having such course work will be required to complete any specifically required undergraduate-level general education and/or subject matter content courses under terms of provisional admission to graduate study as a degree-seeking candidate.

Candidates must also apply for and be admitted to teacher education at JMU. Candidates must initiate their application by contacting the Education Support Center. Criteria for admission are described in the undergraduate catalog and include a 2.5 grade point average and PRAXIS I scores.

Early Childhood Education Concentration, Grades PreK-3

Dr. Teresa Harris, Graduate Concentration Coordinator
For information, call (540)-568-3866

The early childhood education Master of Arts in Teaching is designed for individuals who hold a bachelor’s degree and are interested in a careers as teachers of young children. Through successful completion of a sequence of courses and integrated field experiences, students will be prepared to teach in preschool, kindergarten and primary grades. The ECED M.A.T. includes a teaching license (PreK-3) granted by the state of Virginia.

Course Requirements
Applicants’ transcripts will be reviewed to identify any prerequisite course work and to verify content knowledge requirements.

GPSYC 160. Lifespan Human Development 3
EDUC 360. Foundations of American Education 3
READ 566. Literacy Acquisition and Development of the Young Reader 3
Master of Education Programs

Students pursing the Master of Education degree must choose a concentration in one of the following areas:

- Early Childhood Education
- Educational Technology
- Middle Education
- Reading Education
- School Administration
- Secondary Education

These are advanced preparation programs designed to provide advanced preparation for teachers and other school personnel who are already eligible for or hold initial teaching licenses.

Mission

The mission of the Master of Education degree is to prepare master teachers, reading specialists and school administrators for roles in NK-12 schools. These school professionals will possess the knowledge, skills and dispositions to:

- design and deliver curricula for diverse learners,
- create and maintain learning climates,
- use assessment strategies,
- be reflective practitioners who continually evaluate their actions,
- collaborate with colleagues, parents and others, and
- engage in professional development.

Admissions Criteria

All criteria are considered when reviewing the candidates for admission to this Master of Education degree program. However, no one criterion will be the sole reason for lack of admission to the program. Criteria include:

- GRE scores at the 25th percentile or higher for both verbal and quantitative sections
- Undergraduate grade point average of 2.75 or higher
- Baccalaureate degree from a regionally accredited college/university
- Professional resumé
- Hold or have held a valid teaching license
β A two- to three-page written statement (double spaced) describing the applicant’s professional background, the educational issues that the applicant would like to address in the master’s program and the applicant’s long-term professional goals.
β Interview with one or more representatives of their chosen concentration area to ensure the applicant understands the particular perspectives, goals and requirements of the concentration area program they will be entering.

Other Requirements
Prerequisites and other requirements of this Master of Education degree are:
β Entering students must possess basic literacy skills in computing and the use of electronic technologies to access and exchange information. If a student lacks these skills, he or she must take EDUC 505, Technology Skills for Educational Inquiry for one credit.
β It is strongly recommended that candidates take core courses before taking concentration courses. The core is foundational and influences, generalizes to and relates to other components of the master’s program.

Advanced Preparation Programs
Candidates take a core of courses (minimum of 12 credit hours) and a set of courses in a concentration (minimum of 18 credit hours). Concentrations are available in early childhood education, middle school education, reading education, school administration and secondary education. Candidates may elect to concentrate in more than one area; however, all requirements of each concentration must be met.

The program of study for a Master of Education degree is as follows:

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 620. Changing Contexts of American Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 630. Inquiry in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 631. Seminar in Educational Inquiry</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 640. Teaching, Learning and Curriculum</td>
<td>5</td>
</tr>
<tr>
<td>Concentration courses</td>
<td>12-31</td>
</tr>
<tr>
<td>Electives</td>
<td>0-9</td>
</tr>
</tbody>
</table>

30-43

1 Education Leadership/School Administration candidates substitute ADSU 658D for this course.

Early Childhood Education Concentration

Dr. Teresa Harris, Graduate Concentration Coordinator
For information, call (540) 568–3866

The Master of Education degree with a concentration in early childhood education is for teachers working in preschool through third-grade classrooms. It is designed for those who want to extend their professional competence through an in-depth examination of their own practice using the perspectives of child development theories and the knowledge of current research in early childhood education. Building on the foundation of the professional core, the early childhood education concentration will provide opportunities for students to apply their knowledge through individual and collaborative projects and presentations, field-based curriculum implementation and evaluation, and the use of reflective classroom inquiry and portfolios.

This program meets the requirements for the advanced preparation in early childhood education as established by the National Association for the Education of Young Children.
### Minimum Requirements

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Education core courses</td>
<td>12</td>
</tr>
<tr>
<td>EDTC 510. Seminar in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTC 520. Principles of Instruction Design</td>
<td>3</td>
</tr>
<tr>
<td>EDTC 670. Practicum in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives¹</td>
<td>12</td>
</tr>
</tbody>
</table>

1 Electives must come from completing two of the three Educational Technology concentrations: multimedia development, technology management, and data visualization.

---

### Educational Technology Concentration

**Dr. Richard G. Clemens, Graduate Concentration Coordinator**

For information call (540) 568-6302

The Master of Education degree with a concentration in educational technology is designed for teachers, administrators and professionals in the field of staff development and training. Candidates completing the program will have developed a broad and deep framework for identifying, implementing, and assessing educational technology in the teaching and learning process. Candidates will have an opportunity to explore future trends in educational technology, allowing them to continue to expand their skills at the completion of the program. Candidates will complete course work in two concentration areas, giving them extensive experience in designing, developing and assessing different educational technology applications. Candidates complete the program with a practicum experience to apply their skills and knowledge in a school or workplace setting.

To complete a Masters of Education with a concentration educational technology, the candidate will complete a minimum of 33 hours of course work organized as follows: professional core, 12 hours; seminar in educational technology, instructional design and practicum, 9 hours; two concentrations, 6 hours each. In addition, candidates must take a comprehensive examination.

### Minimum Requirements

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Education core courses</td>
<td>12</td>
</tr>
<tr>
<td>EDTC 510. Seminar in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>EDTC 520. Principles of Instruction Design</td>
<td>3</td>
</tr>
<tr>
<td>EDTC 670. Practicum in Educational Technology</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives¹</td>
<td>12</td>
</tr>
</tbody>
</table>

---

### Mathematics Concentration

The Master of Education degree in Mathematics is designed to prepare secondary teachers for positions of instructional leadership in mathematics as master teachers of mathematics. This graduate program is currently pending approval. Refer to the Education Web site for more information.
Middle Education Concentration, Grades 4-8

Dr. Gerald Green, Graduate Concentration Coordinator

For information, call (540) 568–3580

The Master of Education degree with a concentration in middle education is designed as advanced preparation for teachers working with fourth- through eighth-grade students. This program helps candidates create an intellectual framework as the basis for implementing new curricular programs as well as evaluating current curricular programs in middle education. Through examination and analysis of current theory and research, as well as completing school-based research projects, candidates become equipped to better manage educational changes, actively collaborate with professional peers and perform in a manner based on current research and standards of expert professional practice.

To complete a Master of Education with a concentration in middle education, the candidate will complete a minimum of 30 semester hours of course work organized as follows: professional core, 12 hours; concentration, nine hours; approved electives, nine hours. The candidate must also complete a comprehensive examination associated with MIED 620, Applied Research in Middle Education.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Education core courses</td>
<td>12</td>
</tr>
<tr>
<td>MIED 610. Collaborative Leadership in Schools</td>
<td>3</td>
</tr>
<tr>
<td>MIED 620. Applied Research in Middle Education</td>
<td>3</td>
</tr>
<tr>
<td>MIED 656. Seminar in Middle Education</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

1 Courses included as electives must be selected to develop the professional needs and interests of the student. Electives must be approved by the major adviser and selected from the graduate offerings of the university.

Reading Education Concentration

Dr. Gay Ivey, Graduate Concentration Coordinator

For information, call (540) 568-3698

The Master of Education degree with a concentration in reading education is designed for persons who currently have a license to teach and are preparing to fill one of two roles in school settings:

- Classroom teacher who seeks to improve his or her knowledge and teaching of literacy. This program meets course work requirements for the preparation of reading specialists and reading teachers established by the Virginia Department of Education and the International Reading Association standards for the classroom teacher.
- Reading specialist who works with teachers in a school to teach reading and who will collaborate with a wide array of school personnel (e.g., teachers, principals, specialist) and parents; develops reading curricula, implements reading curricula, and administers reading assessments; and conducts in-service training. Those seeking the reading specialist strand will satisfy the requirements for the preparation of reading specialists established by the International Reading Association.

To complete a Master of Education degree with a concentration in reading education, the candidate will complete one of two strands in the program: Reading Specialist Strand or Classroom Teacher Strand. Candidates who take the Classroom Teacher Strand will complete 36 credit hours of course work organized as follows: 12 hours of
the professional core and 24 credit hours of required reading courses. Candidates who take the Reading Specialist Strand will complete the 36 hours required of the Classroom Teacher Strand plus an additional course in which they complete an internship as a reading specialist in the schools. This internship will accommodate teachers who are currently working full time.

In addition, students in both strands must complete any necessary prerequisites and take a comprehensive examination (refer to “Comprehensive Examinations” in this catalog).

### Minimum Requirements

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Education core courses</td>
<td>12</td>
</tr>
<tr>
<td>READ 582. Foundations of Early and Elementary Literacy</td>
<td>3</td>
</tr>
<tr>
<td>READ 584. Foundations of Middle and Secondary Literacy</td>
<td>3</td>
</tr>
<tr>
<td>READ 586. Children’s and Adolescent Literature</td>
<td>3</td>
</tr>
<tr>
<td>READ 588. Writing Instruction</td>
<td>3</td>
</tr>
<tr>
<td>READ 590. Reading Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>READ 658. Principles, Practices and Applications of Reading Assessment</td>
<td>3</td>
</tr>
<tr>
<td>READ 660. Practicum in Principles, Practices and Applications of Reading Assessment</td>
<td>3</td>
</tr>
<tr>
<td>READ 665. Organization and Supervision of Reading Programs</td>
<td>3</td>
</tr>
<tr>
<td>READ 670. Internship in Reading Supervision¹</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Required only for the Reading Specialist Strand

### School Administration Concentration

**Dr. Michael D. Rettig, Graduate Concentration Coordinator**

For information, email rettigmd@jmu.edu or call (540) 568-3889

The concentration offers a graduate degree in school administration which is designed to provide candidates with the knowledge, skills and experiences to function effectively as a school principal, assistant principal or central office administrator in a PreK-12 educational setting. The concentration is organized around the administrator’s central role as the interpreter, facilitator and initiator of educational change leading to effective schools. Candidates seeking to meet these requirements should confer with the program coordinator. The following combination of criteria, in addition to the College of Graduate and Professional Programs and Master of Education requirements, are used to recommend a candidate for admission to the school administration concentration.

- Three years of full-time teaching experience in the school setting.
- Recommendations from school personnel (administrative and instructional) familiar with the candidate’s teaching performance and leadership potential.
- Faculty interview session results (to assess conceptual and oral performance).
- Writing samples provided by the candidate in response to questions administered by program faculty (to assess organizational and writing performance).

Candidates may be required to complete several other tasks and activities which are designed to assess leadership ability and other skills and competencies as a part of the admissions, retention, and program completion processes. All candidates must pass a comprehensive examination and submit a portfolio before completing the concentration. The comprehensive examination will be designed to assess attainment of...
some of the desired instructional outcomes of the concentration. Some offerings require prerequisites or corequisites for enrollment. These requirements enable a systematic and developmental approach to preparing school administrators. (See course descriptions for prerequisites and corequisites.) The concentration is fully aligned with the standards of the Educational Leadership Constituent Consortium. Candidates who already possess a master’s degree in a related field may enter the endorsement program. The endorsement program requirements are exactly the same as for the master’s degree; however, educational leadership course requirements already completed in the previous masters may count towards fulfilling these requirements. For example, a candidate with a master’s degree in reading may already have completed the Professional Core (11 credits), and thus would need only to complete the Leadership Concentration, Practica, and Internship (as well as all relevant assessments). A minimum of 21 credits is required (most endorsement candidates complete 30+) and a second master’s degree is not conferred.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Education Professional Core courses</td>
<td>11</td>
</tr>
</tbody>
</table>

**Leadership Concentration**

- ADSU 540. Technology for School Administrators1 |
- ADSU 640. The Fundamentals of Educational Administration |
- ADSU 642. Leadership for School-Community Relations |
- ADSU 643. The Principalship |
- ADSU 644. Supervision and Development of School Personnel |
- ADSU 641. School Law |
- ADSU 652. School Finance and Business Management |
- EDUC 625. Evaluation in Education |

**Practicum and Internship Experiences**

- ADSU 658A. Practicum in School Community Relations |
- ADSU 658B. Practicum in Principalship |
- ADSU 658C. Practicum in Supervision and Development of Personnel |
- ADSU 658D. Practicum in School Finance and Business Management |
- ADSU 668. Internship for Principals |

39-42

1 Successful completion of the Administrative Technology Portfolio may be substituted for ADSU 540. A description of the requirements for the portfolio is available from the program coordinator.

**Licensure Requirements**

A candidate who has the appropriate teaching license and who completes the aforementioned program is eligible for the Master of Education degree and provisional endorsement in preK-12 administration and supervision in the Commonwealth of Virginia. Candidates desiring full endorsement as preK-12 administrators also must complete a minimum of 90 days or the equivalent of full-time (full school days) internship. State Department of Education guidelines offer the option of completing the internship either prior to graduation or during the first semester of employment as a school administrator. The internship is designed to have candidates experience the full range of duties encountered by an administrator and may be completed either during the program or after the master’s degree has been awarded. Candidates will enroll in ADSU 678, Full-Time Internship for School Administrators, to complete this requirement. Students enrolling in the program after July 1, 2001 must take the School Leadership Licensure Assessment prior to program completion.
Secondary Education Concentration

Dr. Elizabeth L. Ihle, Graduate Concentration Coordinator

For information, call (540) 568–6486

The Master of Education degree with a concentration in secondary education is designed to promote the continuing professional development of graduate students and practicing educators. Emphasis in the concentration is on helping candidates to gain the knowledge, understandings, attitudes and skills needed to enhance their professional qualities and competencies. These gains should enable candidates to become change agents for improving practices and conditions in education. Candidates are challenged to reflect on trends and issues impacting secondary schools, develop inquiry attitudes and skills for addressing problems and be active problem solvers and effective communicators, as well as be knowledgeable about secondary schools, curriculum and students.

To complete a Master of Education degree with a concentration in secondary education, the candidate will complete a minimum of 33 semester hours of course work organized as follows: professional core, 12 hours; concentration, 12 hours; and appropriate elective options, 9-12 hours. The candidates also must complete any necessary prerequisites and a comprehensive examination. Candidates should consult with their adviser to plan a program to meet their educational and career objectives as well as minimum requirements for graduation.

Minimum Requirements

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Education core courses</td>
<td>12</td>
</tr>
<tr>
<td>EDUC 625. Evaluation in Education</td>
<td>3</td>
</tr>
<tr>
<td>SEED 600. Secondary Education in America: Past, Present and Future</td>
<td>3</td>
</tr>
<tr>
<td>SEED 607. Secondary School Curriculum and Co-curriculum</td>
<td>3</td>
</tr>
<tr>
<td>SEED 660. Instructional Development in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>9-12</td>
</tr>
<tr>
<td></td>
<td>33-36</td>
</tr>
</tbody>
</table>

Master of Science in Education

This degree includes a nine-credit-hour minor in secondary education or a nine-credit-hour minor in higher education (see Adult Education/Human Resource Development section), and is available to students majoring in health sciences or human resource development.

Master of Science in Education Degree

Minimum Requirements

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEED 600. Secondary Education in America: Past, Present and Future</td>
<td>3</td>
</tr>
<tr>
<td>SEED 607. Secondary School Curriculum and Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>SEED 660. Instructional Development in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Elective Option
Candidates must also choose one of the following three elective options.

**Complementary Course Option**
A candidate may plan with his/her adviser a selection of courses designed to meet the educational and career needs of the candidate. The course selections must reflect appropriate relationships to the candidate's overall program and goals. Courses of special interest may include those from administration and supervision, guidance and counseling, special education services, and reading.

**Content Minor Option**
Some discipline minors may require 12 credits while others require only 9 credits. Acceptable minors include art, biology, English, health sciences, higher education, history, kinesiology, mathematics, music, political science and psychology.

**Thesis Option**
Candidates must take at least nine credit hours including EDUC 700, Thesis (six credits), and SEED 680, Reading and Research (three credits).

**Master of Music**
The music education degree under the Master of Music may include a nine-credit-hour option in secondary education or in higher education.

**Licensure to Teach ESL**
Individuals who have completed requirements for an initial teaching license in Virginia may complete requirements at the graduate level for adding a teaching endorsement in English as a Second Language (ESL). The requirements for adding the ESL teaching endorsement include the following courses or equivalents: SCOM 248, ENG 417A, 6 credits in a modern foreign language, READ 515, an additional 3-credit reading course, EDUC 522, EDUC 525 and EDUC 528. Students interested in the ESL endorsement should contact the appropriate adviser and coordinator of the program and refer to the appropriate section in the Undergraduate Catalog.

**Graduation**
All requirements for the degree must be completed by the date the degree is conferred to receive a diploma dated the day of graduation. Applications for graduation should be completed early in the term in which the candidate plans to graduate. Candidates who will satisfy all degree requirements in the summer may participate in the Spring commencement ceremony if they have completed an Application for Graduation form signed by their adviser and program coordinator, and they must be preregistered for summer classes prior to the May commencement ceremony. It should be noted that applicants actually graduate and receive their degrees only when all requirements are satisfied. Candidates who do not satisfy all requirements for graduation will be notified of deficiencies and may reactivate their applications for a later graduation date.
Education Programs at James Madison University

Dr. Phillip M. Wishon, Dean
Dr. Alvin Pettus, Associate Dean
Dr. Steven Fairchild, Assistant Dean

For information, call (540) 568-6572
Web site: http://www.coe.jmu.edu

Early Childhood Education
Professors
S. Fairchild, M. Ross

Associate Professors
M. Carter, T. Harris, D. Martin, J. Whitenack

Assistant Professor
M. Hughes

Instructors
S. Barnes, S. Hutchinson

Middle Education
Associate Professors
G. Green, E. Savage-Davis

Assistant Professor
L. Lovin

Reading Education
Professor
R. Short

Associate Professors
K. Broaddus, G. Ivey, T. Jetton

Assistant Professor
M. Baker

Instructor
J. Smith

School Administration
Professor
M. Rettig

Assistant Professor
J. Fahey

Secondary Education
Professors
V. Allain, E. Ihle, A. Pettus
Associate Professors
L. Bolt, S. Lopes-Murphy, M. Noblitt, B. Stern, D. Zimmerman

Assistant Professors
L. Cavey, R. Clemens, S. Purcell

Professor
D. Foucar-Szocki

Programs
Graduate programs in the College of Education are designed for students seeking careers in education professions. The college offers programs leading to the Master of Arts in Teaching degree, the Master of Education degree and the Master of Science in Education degree. Individuals must meet the College of Graduate and Professional Programs admission requirements before entering programs in the College of Education.

The M.A.T. program in Education includes concentrations in Early Childhood Education, Elementary Education, Middle School Education and Secondary Education. Students who hold a baccalaureate degree from James Madison University with a major in Interdisciplinary Liberal Studies, or the equivalent, and who completed the undergraduate pre-professional program in Early Childhood Education are eligible to complete the concentration in Elementary Education upon admission through the College of Graduate and Professional Programs. Those who majored in Interdisciplinary Liberal Studies and completed the pre-professional program in Middle Education select the Middle School Education Concentration. Students with an undergraduate degree from James Madison University who completed the pre-professional program in Secondary Education enroll in the Secondary Education Concentration upon admission through the College of Graduate and Professional Programs. A post-baccalaureate M.A.T. in Early Childhood Education is available to individuals who completed an arts and sciences undergraduate major from an accredited college or university without completing an undergraduate program in education.

The concentrations described in the previous paragraph lead to initial licensure. The College of Education also offers an advanced preparation program for teachers and other school personnel who are already eligible for or who hold initial teaching licensure. This program culminates in a Master of Education degree and includes concentrations in Early Childhood Education, Educational Technology, Middle Education, Reading Education, School Administration, and Secondary Education.

Individuals interested in Special Education complete a Master of Education Degree with specific areas of concentration in teaching students with emotional disturbance, learning disabilities, mental retardation, or early childhood special education. A non-teaching program in special education is available to individuals currently working in an area that requires knowledge and some related skills for working with individuals with disabilities, but not necessarily teaching. Additionally, the 5th year K-12 Special Education Concentration and the 5th year Early Childhood Special Education Concentration are designed for those who hold an undergraduate degree from James Madison University and who completed the Interdisciplinary Studies major or an approved alternative major.

The College of Education also offers the Master of Science in Education degree with a major in adult education/human resource development. This program is designed for college graduates entering or advancing in positions associated with learning in education, business, industry, government, and other public and private sector organizations.
Adult Education/Human Resource Development

Dr. Diane Foucar-Szocki, Coordinator
For information, call (540) 568-6794/6486

Associate Professor
O. Griffin

Assistant Professor
G. Wang

The Master of Science in Education degree with a major in adult education/human resource development (AHRD) is designed for persons entering or advancing in positions associated with learning in education, business, industry, government, and other public and private sector organizations. The program is targeted to college graduates pursuing a career in the AHRD field, experienced AHRD professionals who want to expand their skills and enhance their career potential, and working managers and professionals in leadership roles where skills in developing and leading people have become critical to their organization’s success. A major strength of the program is that it allows individuals to tailor their programs to individual career needs and objectives.

Mission

The mission of the AHRD program is to prepare professionals to lead, design, implement and evaluate learning programs within education, business, industry, government, military, health care and other public and private sector organizations. In addition to delivering effective instruction, AHRD professionals design ways to improve the human performance, facilitate change, and enhance creativity. By completing our program graduates will be able:

1. To understand and apply systems theory, analytic systems, principles of adult development, learning theory, leadership theory and current trends.
2. To understand business, industry, educational and other organizational settings.
3. To identify, understand and build effective organizational relationships that support teaching, learning and continuous human performance improvement appropriate to the context.
4. To organize, manage and evaluate teaching, learning and continuous human performance improvement efforts.
5. To analyze, design, develop, implement and evaluate appropriate curriculum in appropriate modes (including distance, action, self-directed, transformative, informal learning, etc.) for individual, team, organizational, social learning and continuous human performance improvement.
6. To facilitate and lead team-based learning, planning, organizing and evaluating appropriate to the context.
7. To be aware of and apply appropriate technologies.
8. To recognize and respond responsibly to issues of diversity and ethics.
9. To demonstrate the ability to articulate and forecast the vision and role for teaching, learning and continuous human performance improvement appropriate to the context.
10. To interpret and conduct research.

Admission

Admission requirements to the Master of Science in Education program with a major in
AHRD include submission of:
- Official transcripts reflecting all post-secondary education with a cumulative grade point average of 2.75 or higher
- An official record of scores on the general test of the Graduate Record Examination (scores must be less than five years old)

Send these documents along with the application for graduate admission and the nonrefundable, nontransferable application fee of $55 to

College of Graduate and Professional Programs, MSC 6702
James Madison University
Harrisonburg, VA 22807

The following items are also required for admission:
- A two to three page essay explaining why the applicant is pursuing a Masters in AHRD.
- Two letters of recommendation from employers or educators who can attest to the applicant’s potential for graduate-level course work.

Send these documents to:
Program Coordinator, Adult Education/Human Resource Development
School of Education, MSC 1908
James Madison University
Harrisonburg, VA 22807

Learners majoring in adult education/human resource development must follow several fundamental guidelines:
- Consult major and concentration advisers for advice and approval regarding the program.
- Plan to count no more than six credit hours of workshop credit in any degree program. To be accepted, workshop courses must be approved for credit in the program. The program will not accept workshop courses offered by departments outside the College of Education for elective credit.
- Adhere to the College of Graduate and Professional Programs policy that at least half of the courses in any major of concentration be at the 600 level.
- Secure the required approval of major and concentration advisers for any course credits to be transferred into a JMU degree program.

**Degree Requirements**
The major consists of a minimum of 36 credit hours of course work organized into four components: professional core, concentration area courses, research paper or thesis, and oral comprehensive examination.

<table>
<thead>
<tr>
<th>Core courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRD 520. Foundations of Adult Education/Human Resource Development</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 540. Leadership and Facilitation</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 580. Learning in Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 590. Technology in AHRD</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 610. Instructional Design in Adult Education/Human Resource Development</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 630. Research Methods and Inquiry in Adult Education/Human Resource Development</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 640: Program Evaluation and Measurement in Adult Education/Human Resource Development</td>
<td>3</td>
</tr>
<tr>
<td>Research Paper or Thesis (choose one of the following)</td>
<td>3-6</td>
</tr>
</tbody>
</table>
Core Courses
The core requirements consist of foundational courses that are the basis for the understanding of adult education/human resource development. These core courses encourage learners to investigate adult education/human resource development and to appreciate all facets of this dynamic field.

Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRD 520. Foundations of Adult Education/Human Resource Development</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 540: Leadership and Facilitation</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 580. Learning in Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 590: Technology in AHRD</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 610. Instructional Design in Adult Education/Human Resource Development</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 630. Research Methods and Inquiry in Adult Education/ Human Resource Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Courses
The purpose of the 6-9 hour concentration is to complement the learner’s studies in Adult Education/Human Resource Development and to support his/her professional goals. Concentration areas for Adult Education/Human Resource Development include the following defined areas of study: leadership and facilitation, technology, research, human resource management, and higher education. Details for each defined concentration are listed below. A learner, in conjunction with his or her adviser, can also define a concentration in another area of study such as public administration, counseling psychology, secondary education or any content area that is complementary with the learner’s professional objectives. Concentrations should be decided in conjunction with the learner’s adviser.

Concentration in Leadership and Facilitation
This concentration is designed for learners who wish to combine leadership, facilitation and creativity with an approved Adult Education/Human Resource Development program.
Minimum Requirements – Select a minimum of six hours from the electives listed below.

AHRD 501. Workshop in Adult Education/Human Resource Development
AHRD 550. Human Resource Work Experience
MBA 600. Organizational Behavior
MGT 633. Leadership and Human Relations
AHRD 560. Facilitating in Adult Education/Human Resource Development
Concentration in Technology
This concentration is designed to equip learners with the technical skills to assess and implement learning strategies using principles of instructional design and use of technology in Adult Education/Human Resource Development settings.

Minimum Requirements – Select a minimum of six hours from the electives listed below:

AHRD 501. Workshop in Adult Education/Human Resource Development
AHRD 550. Human Resource Work Experience
AHRD 620. Consulting in AHRD
AHRD 650. Instructional Design for E-Learning
AHRD 690. Special Studies in Adult Education/Human Resource Development
ISAT 630. Computer Modeling and Simulations
ISAT 640. Information and Technology Management
ISAT 651. Systems Requirements Analysis

Concentration in Human Resource Management
This concentration is designed to acquaint learners with business and industry and practices related to the management of human resources.

Minimum Requirements – Select a minimum of six hours from the electives listed below:

AHRD 501. Workshop in Adult Education/Human Resource Development
AHRD 550. Human Resource Work Experience
AHRD 620. Consulting in AHRD
AHRD 635. Organization and Administration of Adult Education Human Resource Development
AHRD 690. Special Studies in Adult Education/Human Resource Development
MBA 600. Organizational Behavior
MBA 650. Managing Human Resources/Personnel Administration
MBA 651. Labor Relations

Concentration in Research
This concentration is designed to provide learners with in-depth exposure to and practice of effective research practices related to adult education/human resource development in business and industry, government, educational institution and non-profit organizations.

Minimum Requirements - Select a minimum of six hours from the electives listed below:

AHRD 501. Workshop in Adult Education/Human Resource Development
AHRD 550. Human Resource Work Experience
AHRD 620. Consulting in AHRD
AHRD 690. Special Studies in Adult Education/Human Resource Development
EDUC 630. Inquiry in Education  
PSYC 600. Introduction to Measurement and Statistics  
PSYC 605. Research and Inferential Statistics  
PSYC 606. Advanced Measurement Theory  
PSYC 608. Multivariate Statistical Methods in Psychology  
ISAT 620. Research Methods in a Multidisciplinary Environment

**Concentration in Higher Education**

For minimum requirements suggested in the higher education concentration, see the minor.

**Oral Comprehensive Examination**

During the final semester in which the learner is enrolled in this program, he/she will participate in an oral comprehensive examination to be conducted by the learner’s advisory committee. This examination will cover course work and research paper or thesis. Any faculty member who has taught the learner may participate in this oral examination.

**Minor in Higher Education**

The minor in higher education is a nine-credit-hour program that is offered for learners majoring in an academic area and planning to enter college teaching at the undergraduate level. Learners pursuing the Master of Science in Education Degree (in Adult Education/Human Resource Development or Health Sciences) and learners pursuing Master of Arts degrees may enroll in the minor in higher education. The minor is designed to prepare learners who have experience and/or in-depth preparation in an academic area to provide instruction for undergraduate learners and adapt to other aspects of the undergraduate teaching environment in institutions of higher education.

**Minimum Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRD 670. American Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>AHRD 671. Teaching &amp; Learning Processes in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>Elective (choose one)</td>
<td></td>
</tr>
<tr>
<td>EDUC 630. Inquiry in Education</td>
<td></td>
</tr>
<tr>
<td>ADSU 632. Leadership for School-Community Relations</td>
<td></td>
</tr>
<tr>
<td>AHRD 635. Organization and Administration of Adult Education/Human Resource Development</td>
<td></td>
</tr>
<tr>
<td>AHRD 673. The Community College</td>
<td></td>
</tr>
<tr>
<td>PSYC 669. Career Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 645. Student Personnel Services</td>
<td></td>
</tr>
<tr>
<td>PSYC 646. The American College Student</td>
<td></td>
</tr>
</tbody>
</table>

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**Graduation**

All requirements for the degree must be completed by the date the degree is conferred to receive a diploma dated the day of graduation. Applications for graduation should be completed early in the term in which the candidate plans to graduate. Candidates who will satisfy all degree requirements in the summer may participate in the Spring commencement ceremony if they have completed an Application for Graduation form signed by their adviser and program coordinator, and they must be preregistered for summer classes prior to the May commencement ceremony. It should be noted that
applicants actually graduate and receive their degrees only when all requirements are satisfied. Candidates who do not satisfy all requirements for graduation will be notified of deficiencies and may reactivate their applications for a later graduation date.
Graduate Education Program in Special Education

Dr. Karen Santos, Program Coordinator
Dr. Reid Linn, Graduate Program Coordinator

For information, call (540) 568-6193

Professors
D. Herr, R. Linn, F. Luth, E. Minskoff, K. Santos

Associate Professor
C. Beverly

Assistant Professor
M. Kyger

Mission
The Special Education Program at James Madison University is committed to excellence in teaching, scholarship and service that will influence policy and practice related to the education of individuals with disabilities. Our mission is to prepare exemplary professionals to generate, use, and disseminate knowledge about teaching, learning, and human development to solve critical educational and human service problems in a diverse global community. To that end, graduates of the program will be able to:

- Demonstrate knowledge of characteristics and issues surrounding those areas of disability identified for services through federal and state legislative and judicial mandates.
- Demonstrate knowledge of historical, current, and emerging perspectives on theory and practice.
- Demonstrate understanding of social, cultural, and linguistic influences on children, youth, and adults with special needs.
- Demonstrate an understanding of principles of learning and theoretical approaches for cognitive, physical, and behavioral intervention.
- Demonstrate a level of skill competence sufficient to assure positive growth and development in those individuals served.
- Serve as reflective, resilient teachers or professional service providers who are advocates for children and youth with disabilities.

Special Education
The program in special education currently offers a Master of Education degree in special education with specific areas of concentration in teaching students with emotional disturbance, learning disabilities, mental retardation or early childhood special education. The licensure programs are designed to prepare resilient teachers who are advocates for children and youth with disabilities, are qualified for the complexity of their professional roles, and are reflective problem-solvers. The program also offers a non-teaching Master of Education degree.

In addition, for students completing their four year undergraduate program, a 5th year Master of Education degree in special education is offered (See 5th year K-12 Special Education Concentration).

An undergraduate, pre-professional program in special education will complement this
professionally oriented master’s degree program designed to prepare special education teachers for resource, self-contained or inclusion settings grades K - 12. The undergraduate pre-professional program provides the requisite course offerings and experiences that form the foundation for admission to the 5th year Master of Education (M.Ed.) degree program.

Candidates working toward the completion of the Master of Education degree in special education must obtain at least a letter grade of “B” in all graduate level special education required or elective courses. Candidates who receive a letter grade lower than “B” must repeat the course. Should a candidate receive a letter grade of “C” in a required or elective course external to the special education program, that “C” may be offset by a letter grade of “A” as stipulated in the College of Graduate and Professional Programs grading policy; however, the three “C” dismissal policy still applies. Each teaching endorsement in special education requires the completion of a block of common core courses. For some candidates, these requirements will have been met at the undergraduate level as part of an initial licensure program in special education. Candidates entering the graduate program with course deficiencies will be required to remediate such deficiencies prior to the granting of unconditional status and the Master of Education.

The common core typically includes the following areas:

- Psychoeducational assessment
- Social/cultural and vocational aspects of disabilities
- Modifications of curriculum and instruction for students with disabilities
- Language development/disorders
- Current trends and legal issues
- Teaching methods (elementary reading and math)
- Behavior management
- Technology trends
- Consultation and Collaboration

Candidates wishing to work with individuals with disabilities in areas other than teaching may wish to complete the non-teaching sequence. Graduates of this program often find employment in vocational programs, residential programs or other alternative service settings.

Exceptions to all program requirements must be approved in writing by the program coordinator and by the dean of the College of Graduate and Professional Programs. When exceptions relate to licensure, the approval of the dean of the College of Education is also required.

**Emotional Disturbance Concentration**

The purpose of this concentration is to prepare classroom teachers to work with students with emotional and behavioral disorders. Candidates are prepared to assume teaching responsibilities in a variety of settings including public and private schools, mental hospitals and institutions, and facilities for adjudicated juveniles. In addition, graduate candidates are taught to deal with behavior problems presented by these students.

The minimum requirement for the graduate concentration in emotional disturbance is the satisfactory completion of 32 credit hours of prescribed course work. A candidate admitted to the program with deficiencies may be required to take appropriate course work beyond the minimum program requirement. In some instances it is possible to meet endorsement requirements prior to completion of the master’s program. Candidates who do not hold Virginia licensure will need to complete additional requirements to obtain the degree. A candidate not already endorsed in special education in Virginia may be required to take the general special education core courses.
### Minimum Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 512</td>
<td>Behavior Management in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPED 612</td>
<td>Psychoeducational Assessment of Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 613</td>
<td>Teaching Individuals with Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 640</td>
<td>Survey of Emotional Disturbance</td>
<td>3</td>
</tr>
<tr>
<td>SPED 650</td>
<td>Student Teaching in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>Electives (by advisement only)</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSD 540</td>
<td>Language Disorders</td>
</tr>
<tr>
<td>ECED 541</td>
<td>Working with Parents of Young Children</td>
</tr>
<tr>
<td>EDUC 540</td>
<td>Educational Technology</td>
</tr>
<tr>
<td>MIED 530</td>
<td>Teaching Mathematics in the Elementary and Middle Grades</td>
</tr>
<tr>
<td>PSYC 515</td>
<td>Basic Counseling Skills</td>
</tr>
<tr>
<td>PSYC 620</td>
<td>Advanced Adolescent Psychology</td>
</tr>
<tr>
<td>PSYC 622</td>
<td>Advanced Abnormal Psychology</td>
</tr>
<tr>
<td>PSYC 641</td>
<td>Counseling in Elementary and Middle Schools</td>
</tr>
<tr>
<td>READ 590</td>
<td>Reading Across the Curriculum</td>
</tr>
<tr>
<td>SPED 501</td>
<td>Workshops in Special Education</td>
</tr>
<tr>
<td>SPED 607</td>
<td>Curriculum and Methods in Special Education</td>
</tr>
<tr>
<td>SPED 611</td>
<td>Survey of Learning Disabilities</td>
</tr>
<tr>
<td>SPED 615</td>
<td>Transition Services for Students with Disabilities</td>
</tr>
<tr>
<td>SPED 621</td>
<td>Introduction to Early Childhood Special Education</td>
</tr>
</tbody>
</table>

### Learning Disabilities Concentration

The purpose of the concentration in learning disabilities is to prepare specialists in the area of learning disabilities. Such specialists are prepared to serve as resource teachers, teacher consultants and special class teachers who work with children and youth with learning disabilities. Program graduates will be eligible for professional licensure with an endorsement in the area of learning disabilities as specified by the Commonwealth of Virginia. In some instances it is possible to meet endorsement requirements prior to the completion of the master's program. The minimum requirement for the graduate concentration in learning disabilities is the satisfactory completion of 32 credit hours of prescribed course work. A candidate admitted to the program with deficiencies will be required to take appropriate course work beyond the minimum program requirement.

Candidates who do not hold an initial Virginia license will need to complete additional requirements to obtain the degree. Candidates who are not already endorsed in special education in Virginia may be required to take the special education common core courses.
Learning and Behavior Problems
SPED 613. Teaching Individuals with Learning and Behavior Problems 3
SPED 614. Issues and Trends in Special Education 3
SPED 650. Student Teaching in Special Education 4
SPED 650. Student Teaching in Special Education 4
Electives (by advisement only) 12
  CSD 540. Language Disorders
  EDUC 540. Educational Technology
  MIED 530. Teaching Mathematics in the Elementary School
  PSYC 515. Basic Counseling Skills
  PSYC 614. Advanced Developmental Psychology
  PSYC 622. Advanced Abnormal Psychology
  READ 590. Reading Across the Curriculum
  SPED 512. Behavior Management in the Classroom
  SPED 607. Curriculum and Methods in Special Education
  SPED 615. Transition Services for Students with Disabilities
  SPED 621. Introduction to Early Childhood Special Education
  SPED 630. Survey of Mental Retardation
  SPED 640. Survey of Emotional Disturbance

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1 Other courses as determined by the individual needs of the student and upon approval of the adviser.

Mental Retardation Concentration
The purpose of the concentration or teaching endorsement program in mental retardation is to prepare classroom teachers to work with children and youth diagnosed with mental retardation. Candidates are prepared to assume teaching responsibilities in a variety of settings including public and private schools as well as residential settings. The minimum requirement for the satisfactory completion of the concentration in mental retardation is 32 credit hours of prescribed course work. A candidate admitted to the program with deficiencies will be required to complete appropriate course work beyond the minimum program requirement. For example, candidates who do not hold Virginia licensure will need to complete additional requirements to obtain the degree. A candidate not already endorsed in special education in Virginia may be required to take the general special education core courses. In some cases, it may be possible to meet endorsement requirements prior to the completion of the master’s degree program.

Minimum Requirements1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 512. Behavior Management in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPED 612. Psychoeducational Assessment of Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 613. Teaching Individuals with Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 630. Survey of Mental Retardation</td>
<td>3</td>
</tr>
<tr>
<td>SPED 650. Student Teaching in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>SPED 650. Student Teaching in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>Electives (by advisement only)</td>
<td>12</td>
</tr>
<tr>
<td>CSD 540. Language Disorders</td>
<td></td>
</tr>
<tr>
<td>EDUC 540. Educational Technology</td>
<td></td>
</tr>
</tbody>
</table>
Multiple Endorsement Options
The program is designed to accommodate those who wish to pursue multiple special education endorsements in their program of study. Candidates may select to complete courses leading to two or three endorsements from the following three concentrations: emotional disturbance, learning disabilities and mental retardation.

Candidates seeking multiple endorsements should select a primary concentration based on their professional interests. The adviser for that concentration will also serve as the adviser for the additional endorsements. Each additional endorsement can generally be added with the completion of approximately 3-6 credit hours.

Early Childhood Special Education Concentration
The purpose of the concentration in early childhood special education is to prepare either early intervention specialists (ages 0-2) or early childhood special educators (ages 2-5). Graduates of the program are prepared to assume positions as either center-based or home-based early childhood special educators. Graduates are also prepared to seek employment as early intervention specialists for home-based infant and toddler programs. The program is formulated on the principles of developmentally appropriate programming as a result of diagnostic-prescriptive activities conducted in collaboration with parents and/or family.

The minimum requirement for the graduate concentration in early childhood special education is the satisfactory completion of 36 credit hours of prescribed course work. A candidate admitted to the program with deficiencies may be required to take appropriate course work beyond the minimum program requirement. Candidates must complete the required course sequence, as well as elective offerings, as designated by the adviser. Candidates who do not hold a Virginia teaching license may need to complete additional requirements to obtain the degree.

Minimum Requirements1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 622. Assessment in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623. Programming in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 624. Service Delivery Systems in Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Other courses as determined by the individual needs of the student and upon approval of the adviser.
SPED 625. Medical and Technological Aspects of Early Childhood Special Education 3
SPED 626. Practicum: Infants and Toddlers with Disabilities 3
SPED 627. Practicum: Early Childhood Special Education 3
SPED 628. Internship: Early Childhood Special Education 6

Electives (by advisement only) 9
- CSD 540. Language Disorders
- ECED 509. Curriculum for Early Childhood Education
- ECED 510. The Creative Arts in Early Childhood Education
- ECED 541. Working with Parents of Young Children
- ECED 612. Trends and Issues in Early Childhood Education
- EDUC 540. Educational Technology
- PSYC 610. Advanced Learning Theories
- PSYC 614. Advanced Developmental Psychology
- PSYC 622. Advanced Abnormal Psychology
- SPED 512. Behavior Management in the Classroom
- SPED 607. Curriculum and Methods in Special Education
- SPED 611. Survey of Learning Disabilities
- SPED 612. Psychoeducational Assessment of Learning and Behavior Problems
- SPED 630. Survey of Mental Retardation
- SPED 640. Survey of Emotional Disturbance

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1 Other relevant courses may be substituted for those above, based on the needs of the student and approval of the adviser.

**Special Education Non-Teaching Program**

The graduate special education nonteaching program is a 30-hour program with a minimum of 18 hours in special education and related graduate courses. The remaining 12 hours include courses that meet specific individual needs and career objectives. The program is not designed to meet Virginia requirements for teacher licensure or endorsement. This program is primarily for those individuals currently working in an area that requires knowledge and some related skills for working with individuals with disabilities, but not necessarily in a pedagogical role. Included in the 18-hour concentration is an internship that may occur as a formal placement by the university or as a result of supervised employment.

Students may select course work from existing special education courses (relating to
emotional disturbance, learning disabilities, mental retardation and/or early childhood special education) and from various interdepartmental graduate courses. Each student will be required, using the direct guidance of his or her adviser, to design a program of study that will meet individual needs and career objectives.

<table>
<thead>
<tr>
<th>Minimum Requirements¹</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose from the following:</td>
<td>18</td>
</tr>
<tr>
<td>SPED 512. Behavior Management in the Classroom</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>SPED 630. Survey of Mental Retardation</td>
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</tr>
<tr>
<td>SPED 640. Survey of Emotional Disturbance</td>
<td></td>
</tr>
<tr>
<td>SPED 653. Internship in Special Education: Non-teaching</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (by advisement only)¹</th>
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<tbody>
<tr>
<td>PSYC 515. Basic Counseling Skills</td>
<td></td>
</tr>
<tr>
<td>SPED 501. Workshop in Special Education</td>
<td></td>
</tr>
<tr>
<td>SPED 615. Transition Services for Students With Mild Disabilities</td>
<td></td>
</tr>
<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
<td></td>
</tr>
</tbody>
</table>

¹ Electives may also be chosen from the areas of communication sciences and disorders, human resource development, psychology, secondary education, speech pathology, early childhood and middle education. Acceptable courses are determined by the individual needs of the student and upon approval of the adviser.

**5th Year K-12 Special Education Concentration**

Completion of the K-12 concentration is required for K-12 licensure in special education with endorsements in emotional disturbance, learning disabilities and mental retardation. Completion of the early childhood special education 5th year concentration is required for the birth through age five endorsement.

This concentration is offered in conjunction with an undergraduate pre-professional program in special education. Candidates completing the professional licensure program must meet a set of content and endorsement-specific criteria that have been established by the Commonwealth of Virginia. In order to meet these requirements, students at the undergraduate level will have completed the Interdisciplinary Liberal Studies (IDLs) major or an approved alternative major (e.g., psychology, English, math) concurrently with the pre-professional program.

It is important for candidates to understand that they must meet the requirements for a baccalaureate degree and successfully complete all undergraduate pre-professional courses and experiences prior to being fully admitted to this M.Ed. program. Additionally, candidates must submit satisfactory scores on PRAXIS I and demonstrate satisfactory performance at each program evaluation point.

<table>
<thead>
<tr>
<th>Minimum Requirements¹</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 630. Inquiry in Education</td>
<td>3</td>
</tr>
</tbody>
</table>
SPED 500. Individualized Education Programs and Curriculum-Based Assessment 3
SPED 510. Systematic Behavioral Interventions 3
SPED 520. Differentiation of Instruction & Collaboration in Special Education 3
SPED 600. Instructional Methods in Special Education 3
SPED 610. Practicum in Special Education Instructional Methods 2
SPED 615. Transition Services for Students with Disabilities 3
SPED 650. Student Teaching in Special Education 4
SPED 650. Student Teaching in Special Education 4
SPED 670. Professional Practice Seminar 2
SPED 675. Applied Research in Special Education 3

1 Completion of an additional student teaching (SPED 650) is required for endorsements in emotional disturbance, learning disabilities and mental retardation; a total of 40 credit hours.

5th Year Early Childhood Special Education Concentration
Completion of the early childhood special education concentration is required for licensure and endorsement in early childhood special education. This concentration is also offered in conjunction with an undergraduate pre-professional program in special education. As with the K-12 concentration, candidates completing this program must meet a set of content and endorsement-specific criteria that have been established by the Commonwealth of Virginia. In order to meet these requirements, students at the undergraduate level will have completed the IDLS major or an approved alternative major (e.g., psychology, English, math) concurrently with the pre-professional program.

It is important that candidates understand that they must meet the requirements for a baccalaureate degree and successfully complete all undergraduate pre-professional courses and experiences prior to being fully admitted to the M.Ed. program. Additionally, candidates must submit satisfactory scores on PRAXIS I and the GRE.

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<td>SPED 510. Systematic Behavioral Interventions</td>
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<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 622. Service Delivery Systems in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623. Programming in Early Childhood Special Education</td>
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<tr>
<td>SPED 624. Service Delivery in Early Childhood Special Education</td>
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<tr>
<td>SPED 625. Medical and Technological Aspects of Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 626. Practicum: Infants and Toddlers with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 627. Practicum: Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 628. Internship: Early Childhood Special Education</td>
<td>6</td>
</tr>
</tbody>
</table>
Graduation
All requirements for the degree must be completed by the date the degree is conferred to receive a diploma dated the day of graduation. Applications for graduation should be completed early in the term in which the candidate plans to graduate. Candidates who will satisfy all degree requirements in the summer may participate in the Spring commencement ceremony if they have completed an Application for Graduation form signed by their adviser and program coordinator, and they must be preregistered for summer classes prior to the May commencement ceremony. It should be noted that applicants actually graduate and receive their degrees only when all requirements are satisfied. Candidates who do not satisfy all requirements for graduation will be notified of deficiencies and may reactivate their applications for a later graduation date.

Dr. Karen Santos, Program Coordinator
Dr. Reid Linn, Graduate Program Coordinator
For information, call (540) 568-6193

Professors
D. Herr, R. Linn, F. Luth, E. Minskoff, K. Santos

Associate Professor
C. Beverly

Assistant Professor
M. Kyger

Mission
The Special Education Program at James Madison University is committed to excellence in teaching, scholarship and service that will influence policy and practice related to the education of individuals with disabilities. Our mission is to prepare exemplary professionals to generate, use, and disseminate knowledge about teaching, learning, and human development to solve critical educational and human service problems in a diverse global community. To that end, graduates of the program will be able to:

- Demonstrate knowledge of characteristics and issues surrounding those areas of disability identified for services through federal and state legislative and judicial mandates.
- Demonstrate knowledge of historical, current, and emerging perspectives on theory and practice.
- Demonstrate understanding of social, cultural, and linguistic influences on children, youth, and adults with special needs.
- Demonstrate an understanding of principles of learning and theoretical approaches for cognitive, physical, and behavioral intervention.
- Demonstrate a level of skill competence sufficient to assure positive growth and development in those individuals served.
- Serve as reflective, resilient teachers or professional service providers who are advocates for children and youth with disabilities.

Special Education
The program in special education currently offers a Master of Education degree in special education with specific areas of concentration in teaching students with emotional disturbance, learning disabilities, mental retardation or early childhood special education. The licensure programs are designed to prepare resilient teachers who are advocates for children and youth with disabilities, are qualified for the complexity of their professional roles, and are reflective problem-solvers. The program also offers a non-teaching Master of Education degree.
In addition, for students completing their four year undergraduate program, a 5th year Master of Education degree in special education is offered (See 5th year K-12 Special Education Concentration).

An undergraduate, pre-professional program in special education will complement this professionally oriented master’s degree program designed to prepare special education teachers for resource, self-contained or inclusion settings grades K - 12. The undergraduate pre-professional program provides the requisite course offerings and experiences that form the foundation for admission to the 5th year Master of Education (M.Ed.) degree program.

Candidates working toward the completion of the Master of Education degree in special education must obtain at least a letter grade of “B” in all graduate level special education required or elective courses. Candidates who receive a letter grade lower than “B” must repeat the course. Should a candidate receive a letter grade of “C” in a required or elective course external to the special education program, that “C” may be offset by a letter grade of “A” as stipulated in the College of Graduate and Professional Programs grading policy; however, the three “C” dismissal policy still applies.

Each teaching endorsement in special education requires the completion of a block of common core courses. For some candidates, these requirements will have been met at the undergraduate level as part of an initial licensure program in special education. Candidates entering the graduate program with course deficiencies will be required to remediate such deficiencies prior to the granting of unconditional status and the Master of Education.

The common core typically includes the following areas:
- Psychoeducational assessment
- Social/cultural and vocational aspects of disabilities
- Modifications of curriculum and instruction for students with disabilities
- Language development/disorders
- Current trends and legal issues
- Teaching methods (elementary reading and math)
- Behavior management
- Technology trends
- Consultation and Collaboration

Candidates wishing to work with individuals with disabilities in areas other than teaching may wish to complete the non-teaching sequence. Graduates of this program often find employment in vocational programs, residential programs or other alternative service settings.

Exceptions to all program requirements must be approved in writing by the program coordinator and by the dean of the College of Graduate and Professional Programs. When exceptions relate to licensure, the approval of the dean of the College of Education is also required.

**Emotional Disturbance Concentration**

The purpose of this concentration is to prepare classroom teachers to work with students with emotional and behavioral disorders. Candidates are prepared to assume teaching responsibilities in a variety of settings including public and private schools, mental hospitals and institutions, and facilities for adjudicated juveniles. In addition, graduate candidates are taught to deal with behavior problems presented by these students.

The minimum requirement for the graduate concentration in emotional disturbance is the satisfactory completion of 32 credit hours of prescribed course work. A candidate admitted to the program with deficiencies may be required to take appropriate course work beyond the minimum program requirement. In some instances it is possible to meet endorsement requirements prior to completion of the master’s program. Candidates who do not hold Virginia licensure will need to complete additional requirements to obtain the degree. A candidate not already endorsed in special
education in Virginia may be required to take the general special education core courses.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 512. Behavior Management in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPED 612. Psychoeducational Assessment of Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 613. Teaching Individuals with Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 640. Survey of Emotional Disturbance</td>
<td>3</td>
</tr>
<tr>
<td>SPED 650. Student Teaching in Special Education</td>
<td>4</td>
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<tr>
<td>SPED 650. Student Teaching in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>Electives (by advisement only)</td>
<td>12</td>
</tr>
<tr>
<td>CSD 540. Language Disorders</td>
<td></td>
</tr>
<tr>
<td>ECED 541. Working with Parents of Young Children</td>
<td></td>
</tr>
<tr>
<td>EDUC 540. Educational Technology</td>
<td></td>
</tr>
<tr>
<td>MIED 530. Teaching Mathematics in the Elementary and Middle Grades</td>
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<tr>
<td>PSYC 515. Basic Counseling Skills</td>
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</tr>
<tr>
<td>PSYC 620. Advanced Adolescent Psychology</td>
<td></td>
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<tr>
<td>PSYC 622. Advanced Abnormal Psychology</td>
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<tr>
<td>PSYC 641. Counseling in Elementary and Middle Schools</td>
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</tr>
<tr>
<td>READ 590. Reading Across the Curriculum</td>
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<tr>
<td>SPED 501. Workshops in Special Education</td>
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</tr>
<tr>
<td>SPED 607. Curriculum and Methods in Special Education</td>
<td></td>
</tr>
<tr>
<td>SPED 611. Survey of Learning Disabilities</td>
<td></td>
</tr>
<tr>
<td>SPED 615. Transition Services for Students with Disabilities</td>
<td></td>
</tr>
<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

1 Other courses as determined by the individual needs of the student and upon approval of the adviser.

### Learning Disabilities Concentration

The purpose of the concentration in learning disabilities is to prepare specialists in the area of learning disabilities. Such specialists are prepared to serve as resource teachers, teacher consultants and special class teachers who work with children and youth with learning disabilities. Program graduates will be eligible for professional licensure with an endorsement in the area of learning disabilities as specified by the Commonwealth of Virginia. In some instances it is possible to meet endorsement requirements prior to the completion of the master’s program. The minimum requirement for the graduate concentration in learning disabilities is the satisfactory completion of 32 credit hours of prescribed course work. A candidate admitted to the program with deficiencies will be required to take appropriate course work beyond the minimum program requirement.

Candidates who do not hold an initial Virginia license will need to complete additional requirements to obtain the degree. Candidates who are not already endorsed in special education in Virginia may be required to take the special education common core courses.
Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>SPED 611. Survey of Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 612. Psychoeducational Assessment of Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 613. Teaching Individuals with Learning and Behavior Problems</td>
<td>3</td>
</tr>
<tr>
<td>SPED 614. Issues and Trends in Special Education</td>
<td>3</td>
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<tr>
<td>SPED 650. Student Teaching in Special Education</td>
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<tr>
<td>SPED 650. Student Teaching in Special Education</td>
<td>4</td>
</tr>
<tr>
<td>Electives (by advisement only)</td>
<td>12</td>
</tr>
<tr>
<td>CSD 540. Language Disorders</td>
<td></td>
</tr>
<tr>
<td>EDUC 540. Educational Technology</td>
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<tr>
<td>MIED 530. Teaching Mathematics in the Elementary School</td>
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</tr>
<tr>
<td>PSYC 515. Basic Counseling Skills</td>
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<tr>
<td>PSYC 614. Advanced Developmental Psychology</td>
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<tr>
<td>PSYC 622. Advanced Abnormal Psychology</td>
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<tr>
<td>READ 590. Reading Across the Curriculum</td>
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<td>SPED 512. Behavior Management in the Classroom</td>
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<td>SPED 607. Curriculum and Methods in Special Education</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>SPED 640. Survey of Emotional Disturbance</td>
<td></td>
</tr>
</tbody>
</table>

32

1 Other courses as determined by the individual needs of the student and upon approval of the adviser.

Mental Retardation Concentration

The purpose of the concentration or teaching endorsement program in mental retardation is to prepare classroom teachers to work with children and youth diagnosed with mental retardation. Candidates are prepared to assume teaching responsibilities in a variety of settings including public and private schools as well as residential settings. The minimum requirement for the satisfactory completion of the concentration in mental retardation is 32 credit hours of prescribed course work. A candidate admitted to the program with deficiencies will be required to complete appropriate course work beyond the minimum program requirement. For example, candidates who do not hold Virginia licensure will need to complete additional requirements to obtain the degree. A candidate not already endorsed in special education in Virginia may be required to take the general special education core courses. In some cases, it may be possible to meet endorsement requirements prior to the completion of the master’s degree program.
Electives (by advisement only) 12

- CSD 540. Language Disorders
- EDUC 540. Educational Technology
- MIED 530. Teaching Mathematics in the Elementary and Middle Grades
- PSYC 515. Basic Counseling Skills
- PSYC 622. Advanced Abnormal Psychology
- READ 590. Reading Across the Curriculum
- SPED 607. Curriculum and Methods in Special Education
- SPED 611. Characteristics of Individuals with Learning Disabilities
- SPED 615. Transition Services for Students with Mild Disabilities
- SPED 621. Introduction to Early Childhood Special Education
- SPED 640. Survey of Emotional Disturbance

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1 Other courses as determined by the individual needs of the student and upon approval of the adviser.

Multiple Endorsement Options
The program is designed to accommodate those who wish to pursue multiple special education endorsements in their program of study. Candidates may select to complete courses leading to two or three endorsements from the following three concentrations: emotional disturbance, learning disabilities, and mental retardation.

Candidates seeking multiple endorsements should select a primary concentration based on their professional interests. The adviser for that concentration will also serve as the adviser for the additional endorsements. Each additional endorsement can generally be added with the completion of approximately 3-6 credit hours.

Early Childhood Special Education Concentration
The purpose of the concentration in early childhood special education is to prepare either early intervention specialists (ages 0-2) or early childhood special educators (ages 2-5). Graduates of the program are prepared to assume positions as either center-based or home-based early childhood special educators. Graduates are also prepared to seek employment as early intervention specialists for home-based infant and toddler programs. The program is formulated on the principles of developmentally appropriate programming as a result of diagnostic-prescriptive activities conducted in collaboration with parents and/or family.

The minimum requirement for the graduate concentration in early childhood special education is the satisfactory completion of 36 credit hours of prescribed course work. A candidate admitted to the program with deficiencies may be required to take appropriate course work beyond the minimum program requirement. Candidates must complete the required course sequence, as well as elective offerings, as designated by the adviser. Candidates who do not hold a Virginia teaching license may need to complete additional requirements to obtain the degree.

<table>
<thead>
<tr>
<th>Minimum Requirements1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 622. Assessment in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623. Programming in Early Childhood Special Education</td>
<td>3</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>SPED 624</td>
<td>Service Delivery Systems in Special Education</td>
</tr>
<tr>
<td>SPED 625</td>
<td>Medical and Technological Aspects of Early Childhood Special Education</td>
</tr>
<tr>
<td>SPED 626</td>
<td>Practicum: Infants and Toddlers with Disabilities</td>
</tr>
<tr>
<td>SPED 627</td>
<td>Practicum: Early Childhood Special Education</td>
</tr>
<tr>
<td>SPED 628</td>
<td>Internship: Early Childhood Special Education</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives (by advisement only)</td>
</tr>
<tr>
<td>CSD 540</td>
<td>Language Disorders</td>
</tr>
<tr>
<td>ECED 509</td>
<td>Curriculum for Early Childhood Education</td>
</tr>
<tr>
<td>ECED 510</td>
<td>The Creative Arts in Early Childhood Education</td>
</tr>
<tr>
<td>ECED 541</td>
<td>Working with Parents of Young Children</td>
</tr>
<tr>
<td>ECED 612</td>
<td>Trends and Issues in Early Childhood Education</td>
</tr>
<tr>
<td>EDUC 540</td>
<td>Educational Technology</td>
</tr>
<tr>
<td>PSYC 610</td>
<td>Advanced Learning Theories</td>
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<td>PSYC 614</td>
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<td>PSYC 622</td>
<td>Advanced Abnormal Psychology</td>
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<td>SPED 607</td>
<td>Curriculum and Methods in Special Education</td>
</tr>
<tr>
<td>SPED 611</td>
<td>Survey of Learning Disabilities</td>
</tr>
<tr>
<td>SPED 612</td>
<td>Psychoeducational Assessment of Learning and Behavior Problems</td>
</tr>
<tr>
<td>SPED 630</td>
<td>Survey of Mental Retardation</td>
</tr>
<tr>
<td>SPED 640</td>
<td>Survey of Emotional Disturbance</td>
</tr>
</tbody>
</table>

36

1 Other relevant courses may be substituted for those above, based on the needs of the student and approval of the adviser.

**Special Education Non-Teaching Program**

The graduate special education nonteaching program is a 30-hour program with a minimum of 18 hours in special education and related graduate courses. The remaining 12 hours include courses that meet specific individual needs and career objectives. The program is not designed to meet Virginia requirements for teacher licensure or endorsement. This program is primarily for those individuals currently working in an area that requires knowledge and some related skills for working with individuals with disabilities, but not necessarily in a pedagogical role. Included in the 18-hour concentration is an internship that may occur as a formal placement by the university or as a result of supervised employment.
Students may select course work from existing special education courses (relating to emotional disturbance, learning disabilities, mental retardation and/or early childhood special education) and from various interdepartmental graduate courses. Each student will be required, using the direct guidance of his or her adviser, to design a program of study that will meet individual needs and career objectives.

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<td>SPED 640. Survey of Emotional Disturbance</td>
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</tr>
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</tr>
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<td>PSYC 515. Basic Counseling Skills</td>
<td></td>
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<tr>
<td>SPED 501. Workshop in Special Education</td>
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<tr>
<td>SPED 615. Transition Services for Students With Mild Disabilities</td>
<td></td>
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<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
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</tbody>
</table>

1 Electives may also be chosen from the areas of communication sciences and disorders, human resource development, psychology, secondary education, speech pathology, early childhood and middle education. Acceptable courses are determined by the individual needs of the student and upon approval of the adviser.

5th Year K-12 Special Education Concentration
Completion of the K-12 concentration is required for K-12 licensure in special education with endorsements in emotional disturbance, learning disabilities and mental retardation. Completion of the early childhood special education 5th year concentration is required for the birth through age five endorsement.

This concentration is offered in conjunction with an undergraduate pre-professional program in special education. Candidates completing the professional licensure program must meet a set of content and endorsement-specific criteria that have been established by the Commonwealth of Virginia. In order to meet these requirements, students at the undergraduate level will have completed the Interdisciplinary Liberal Studies (IDLS) major or an approved alternative major (e.g., psychology, English, math) concurrently with the pre-professional program.

It is important for candidates to understand that they must meet the requirements for a baccalaureate degree and successfully complete all undergraduate pre-professional courses and experiences prior to being fully admitted to this M.Ed. program. Additionally, candidates must submit satisfactory scores on PRAXIS I and demonstrate satisfactory performance at each program evaluation point.
EDUC 630. Inquiry in Education 3
SPED 500. Individualized Education Programs and Curriculum-Based Assessment 3
SPED 510. Systematic Behavioral Interventions 3
SPED 520. Differentiation of Instruction & Collaboration in Special Education 3
SPED 600. Instructional Methods in Special Education 3
SPED 610. Practicum in Special Education Instructional Methods 2
SPED 615. Transition Services for Students with Disabilities 3
SPED 650. Student Teaching in Special Education 4
SPED 670. Professional Practice Seminar 2
SPED 675. Applied Research in Special Education 3

1 Completion of an additional student teaching (SPED 650) is required for endorsements in emotional disturbance, learning disabilities and mental retardation; a total of 40 credit hours.

5th Year Early Childhood Special Education Concentration

Completion of the early childhood special education concentration is required for licensure and endorsement in early childhood special education. This concentration is also offered in conjunction with an undergraduate pre-professional program in special education. As with the K-12 concentration, candidates completing this program must meet a set of content and endorsement-specific criteria that have been established by the Commonwealth of Virginia. In order to meet these requirements, students at the undergraduate level will have completed the IDLS major or an approved alternative major (e.g., psychology, English, math) concurrently with the pre-professional program.

It is important that candidates understand that they must meet the requirements for a baccalaureate degree and successfully complete all undergraduate pre-professional courses and experiences prior to being fully admitted to the M.Ed. program. Additionally, candidates must submit satisfactory scores on PRAXIS I and the GRE.

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<tbody>
<tr>
<td>EDUC 630. Inquiry in Education</td>
<td>3</td>
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<tr>
<td>SPED 510. Systematic Behavioral Interventions</td>
<td>3</td>
</tr>
<tr>
<td>SPED 621. Introduction to Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 622. Service Delivery Systems in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623. Programming in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 624. Service Delivery in Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 625. Medical and Technological Aspects of Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 626. Practicum: Infants and Toddlers with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 627. Practicum: Early Childhood Special Education</td>
<td>3</td>
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SPED 628. Internship: Early Childhood Special Education

Graduation

All requirements for the degree must be completed by the date the degree is conferred to receive a diploma dated the day of graduation. Applications for graduation should be completed early in the term in which the candidate plans to graduate. Candidates who will satisfy all degree requirements in the summer may participate in the Spring commencement ceremony if they have completed an Application for Graduation form signed by their adviser and program coordinator, and they must be preregistered for summer classes prior to the May commencement ceremony. It should be noted that applicants actually graduate and receive their degrees only when all requirements are satisfied. Candidates who do not satisfy all requirements for graduation will be notified of deficiencies and may reactivate their applications for a later graduation date.
Education Courses

Adult Education/ Human Resource Development

Designed to provide workshop experience in a variety of areas involving adult education/human resource development. Workshop content will be determined by demand, interest, and input from local, regional and state clientele. May be repeated up to six hours.

AHRD 520. Foundations of Adult Education/Human Resource Development. 3 credits.
Historical beginnings of adult education and human resource development programs are examined in order to understand current practices. Current issues and trends, research, legislation and publications will be incorporated into the course.

AHRD 540. Leadership and Facilitation. 3 credits
This course examines the multi-faceted concept of leadership and facilitation, focusing on facilitative leadership approaches and how these contribute to organizational and individual performance. Traditional and emergent paradigms will be explored. Emphasis will be placed on knowledge, attitudes and skills that enable a facilitator to work effectively with diverse work groups, enhance creativity and draw from organizational and community resources.

Designed to provide learners a workplace learning experience that will reinforce their academic learning to make it more meaningful, develop specific on-the-job skills, make the transfer of skills and concepts to job applications more efficient, and increase the likelihood of successful transition to the position of human resource development professional.

AHRD 560. Facilitating in Adult Education/Human Resource Development. 3 credits.
This course equips students to participate in and facilitate groups in organizational settings. Students examine theories and tools for developing and supporting effective learning groups and will practice facilitation skills. The course will address group dynamics, clarification of group task/agenda, meeting goals, and use of the self as a facilitating instrument.

AHRD 580. Learning in Adulthood. 3 credits.
This course provides a comprehensive overview of learning in adulthood. Emphasis is placed on learning contexts, what and why adults learn, the nature of learning, learning theories, adult development and the development of adult learning theory. Ways and means to enhance learning opportunities in the lives of adults at work, school, worship, in leisure, and for better health are explored.

AHRD 590. Technology in Adult Education/Human Resource Development. 3 credits.
Participants will develop competence in instructional technologies in adult education and human resource settings. Emphasis is placed on software applications to create
modules for designing and implementing training. The use of digital cameras, camcorders, scanners, audio, editing, and videoconferencing technologies is included. 

**,Prerequisites:** Students should discuss with the instructor their prior experience in technology before registering.


Focuses on knowledge and skills basic to organization, process, and task analyses, including approaches and steps in identifying root causes of performance problems. Current performance analysis practices in AHRD will be discussed. Methods and techniques in developing specific instruments for performance improvement data collection and data analysis will also be covered. **Prerequisites:** AHRD 520.

**AHRD 610. Instructional Design in Adult Education/Human Resource Development.** 3 credits.

Course focuses on teaching strategies, techniques, and methods suitable for adult learners that are supported by research and tested in practice. Course examines adult education and training and development programs to determine appropriate learning strategies for differing learners.

**AHRD 620. Consulting in AHRD.** 3 credits.

This course focuses on models, techniques and practices of consulting skills in developing programs for learners as individuals, groups and organizations. Emphasis is placed on performance analysis, needs assessment, instructional design processes, approaches and practices, implementation procedures and evaluation approaches to various learning settings and clients. **Prerequisites:** AHRD 520, AHRD 560, AHRD 580, AHRD 600, ARHD 610, or equivalent or permission of the instructor.

**AHRD 630. Research and Inquiry in Adult Education/Human Resource Development.** 3 credits.

This course provides students with knowledge and skills in research and inquiry. This course will focus on different qualitative and quantitative research methods, research designs, approaches to doing literature reviews and analyses, and determining the size and scope of research projects. Data collection instruments and analyses approaches will also be covered. **Prerequisite:** AHRD 520 or students in the stage of conducting R&R projects.

**AHRD 635. Organization and Administration of Adult Education/Human Resource Development Programs.** 3 credits.

This course examines current and proposed legislation, program development and organizational structures found in adult education and human resource development. Emphasis is placed on changing existing structures to lifelong learner-driven structures.


Focuses on theories and practices in evaluation and measurement of AHRD programs from the perspective of impact on organizations, work processes, and individuals, as well as follow-up decisions. Methods and processes in developing specific instruments for program evaluation data collection and data analysis will also be discussed. **Prerequisites:** AHRD 520: Foundations of AHRD.

**AHRD 650. Instructional Design for E-Learning.** 3 credits.

This course focuses on applications of instructional design theories and principles to e-learning. Built on students’ learning in AHRD 580 and AHRD 610, this course provides opportunities for students to apply theories and develop skills for real-world e-learning design and development. Design planning, storyboarding, online authoring and other critical e-learning design skills will be addressed. **Prerequisites:** AHRD 580 Learning in Adulthood and AHRD 610 Instructional Design in 610. Students who have not met the...
prerequisites but still wish to take the course can meet with the instructor for an assessment prior to registration.

**AHRD 660. Facilitating Experiential and Action Learning.** 3 credits.
This course examines the historical roots of action learning, organizational learning, various experiential and action methodologies; and a thorough description of action learning including what it is, key elements, when it works, organizational applications, and how it benefits the organization. Prerequisites: AHRD 540 or permission of the instructor.

**AHRD 670. American Higher Education.** 3 credits.
The objective and organization of prevalent types of institutions are studied. Current issues and problems in American higher education are explored.

**AHRD 671. Teaching and Learning Processes in Higher Education.** 3 credits.
Instructional practices and themes are studied in relationship to programs in higher education.

**AHRD 673. The Community College.** 3 credits.
The history, functions and personnel of the comprehensive community college in the American system of higher education are studied. Current issues facing the community college are explored.

**AHRD 680. Reading and Research.** 3 - 6 credits.
Designed to provide the opportunity for supervised reading and research in a special interest area of adult education/human resource development. Prerequisite: Approval from major adviser and completion of a basic research course.

**AHRD 690: Special Studies in Adult Education/Human Resource Development.** 3 credits.
Designed to provide learners the opportunity to explore topics of special interest that are more limited than the traditional three credit course. Prerequisite: Approval of major adviser

**AHRD 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**AHRD 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the areas of thesis concentration. Course may be repeated as needed.

**AHRD 700. Thesis.** 6 credits.
Continued study, research and writing in the areas of thesis concentration. Course may be repeated as needed. Prerequisite: EDUC 630 and approval of graduate adviser.

**AHRD 700. Thesis.** 6 credits.
Prerequisite: EDUC 630 and approval of graduate adviser.

**Early Childhood Education**

**ECED 501. Workshop in Early Childhood Education.** 1-3 credits.
Designed to provide students with workshop experiences related to current needs evident in early childhood programs. Topics selected will be determined by interest and demand. No more than six credit hours earned in workshops in education can be applied to a major program.

**ECED 508. Observation and Study of the Young Child.** 3 credits.
Skills for observing, recording and interpreting the behavior of the young child as a basis for adult intervention and guidance are developed. Laboratory experience is required. Prerequisite: Six credit hours of psychology.
**ECED 510. The Creative Arts in Early Childhood Education.** 3 credits.
This course introduces theory and writing about creativity, and requires critical analysis of theory in terms of application in the early childhood classroom. Students plan, implement and evaluate activities in music, literature and the visual arts that are consistent with creativity theory.

**ECED 511. Early Childhood Practicum with Attention to Diversity.** 3 credits.
This practicum provides a setting for observations and experiences in ECED classrooms and in the guiding and teaching of young children including those whose cultures or languages represent diverse family contexts. The accompanying seminar provides opportunities for activities and discussion related to PreK-3 classrooms and accompanying texts. **Corequisite: READ 566.**

**ECED 512. Facilitating Children’s Natural and Social Science Constructions.** 3 credits.
Study of the history, content, processes, teaching methods, and materials for teaching natural and social sciences in PreK-3. Focus is on constructivist learning theory, levels of inquiry, and national and state standards as applied to the selection of content, method, and learning environment.

**ECED 540. Education for Parenthood.** (Alternate Springs) 3 credits.
Study of the role and responsibility of parents in the development of the child. The ability to apply child development principles to day-to-day child rearing practices is emphasized. Resources for parents are considered.

**ECED 541. Working with Parents of Young Children.** (Spring Only) 3 credits.
Study of the role of the teacher in relating to and working with parents. Methods of involving parents and providing for effective communication and parent education are emphasized. Resources for supporting parents in their roles are considered.

**ECED 542. Child Development Programs.** (Fall Only) 3 credits.
Study of programs in child development centers and nursery schools. Emphasis is placed on meeting the needs of young children in groups. Consideration is given to facilities, equipment and materials, program development, staff training and community resources.

**ECED 544. Children and Mathematics in Grades PreK-3.** 3 credits.
This course provides students with the knowledge, skills, and understandings to design and implement effective mathematics programs in PreK-3 grades. Focus is on appropriate mathematics content, teaching strategies and curriculum materials from a developmental perspective.

**ECED 609. Constructivist Curriculum Design and Evaluation.** 3 credits.
Theories and practices in the design, implementation, and evaluation of curriculum for nursery and kindergarten through third-grade children are examined with an emphasis on development through play.

**ECED 611. Early Childhood Practicum with Attention to Special Education.** 3 credits.
This practicum provides a setting for observations and experiences in ECED classrooms and in the guiding and teaching of young children including those with special needs. The accompanying seminar provides opportunities for activities and discussion related to PreK-3 classrooms including those whose abilities require accommodations and adaptations. **Prerequisite: ECED 511. Corequisite: READ 636.**

**ECED 613. Professionalism and Advocacy in Early Childhood Education.** (Fall) 3 credits.
An in-depth study of selected early childhood issues related to professionalism,
advocacy, leadership, and working with families in a diverse community.

**ECED 614. Advanced Theories in Child Development.** 3 credits.
In-depth study of selected child development theories and direct observation as a foundation for purposeful and consistent instructional decision making. Emphasizes articulating a personally meaningful theory and gathering assessment data through direct observation for theory support. **Prerequisites:** Core of M.Ed. and ECED 613. **Corequisites:** ECED 616

**ECED 615. Administration and Supervision in Early Childhood Education. (Alternate Springs.)** 3 credits.
Study of the role of the administrator in facility planning, budgeting, staff development and personnel supervision in programs for young children. The role of the administrator as a change agent is examined. **Prerequisite:** Permission of instructor.

**ECED 616. Advances in Early Childhood Practices.** 3 credits.
This field-based course provides opportunity for the student to synthesize and apply child development and curriculum theory. As educational decision-makers, students plan, implement and evaluate learning experiences for a multiage group of children. **Prerequisites:** Master of Education core courses and ECED 613. **Corequisite:** ECED 614.

**ECED 619. Seminar in Early Childhood Education.** 3 credits.
Seminar experience providing in-depth consideration of the impact of research related to early childhood. Provides for integration and consolidation of knowledge acquired in graduate study and its application through inquiry experiences as the basis for instructional decisions. **Prerequisites:** Master of Education core courses and ECED 613 or permission of the instructor.

**ECED 680. Reading and Research.** 3 credits.
Directed reading and research in areas of student interest. Reading and research may be done only in the major field of study. A plan of study must be submitted in prescribed form and approved prior to registration for the course. **Prerequisites:** EDUC 630 or equivalent and written permission of the adviser and department head.

**ECED 690. Student Teaching Internship in Early Childhood Education.** 3 credits.
Student teaching provides a context in which to demonstrate and integrate the skills, knowledge and dispositions that are essential for success as a classroom teacher. Under the guidance of a university supervisor students are expected to reflect on the teaching role as they assume the full responsibilities typical of teachers in grades PreK-3. **Prerequisites:** ECED 508, 510, 511, 512, 541, 544, 609 and 611; READ 566 and 636; ELED 632. **Corequisite:** ELED 633.

**Elementary**

**ELED 521. Practicum in Preadolescent Development.** 1 credit.
Supervised practicum in upper elementary grades focusing on individual differences and developmental characteristics of the age group. **Corequisite:** ELED 522 A&B and ELED 524.

**ELED 524. Differentiated instruction: Abilities, Culture and Language.** 3 credits.
Focus on the variation that is inherent in working with school-age children, particularly the variation that occurs as a result of ability, environment and experience, and how instructional strategies and the curriculum must be designed to build on the strengths each child brings to the learning experiences. Beginning in the Summer of 2002, **Corequisites:** ELED 521 and 522 A&B.

**ELED 632. Inquiry in Elementary Education.** 3 credits.
Focus on inquiry as the basis for learning, philosophical foundations of qualitative and naturalistic methodology and instruction in the use of qualitative methods in the study of education and to inform practice. For M.A.T. ECED: Prerequisites: ECED 508 & 511, READ 566, ECED 512 or ECED 544.

**ELED 633. Seminar in Education Inquiry.** 2 credit.
Focus on the application of education inquiry and its application to teaching. Prerequisite: ELED 632. For M.A.T. ECED: Corequisite ECED 690.

**Education**

**EDUC 501. Workshop in Education.** 1-3 credits.
Workshop experience relative to the current needs evident in elementary and secondary school programs. No more than six credit hours earned in workshops in education may be applied to a major program in education or no more than three hours may be applied to a minor program in education.

**EDUC 505. Technology Skills for Educational Inquiry.** 1 credit.
This course is designed to prepare students for the effective use of the technology applications needed to conduct educational inquiry.

**EDUC 520. Clinical Supervision Seminar.** 3 credits.
Designed to help teachers and other school personnel develop skills for guiding, supervising and evaluating persons receiving clinical experiences in the school setting. Emphasis will be on cooperative supervision of clinical experiences, exploring various clinical models and reacting to simulated situations involving students receiving clinical and field experiences. Prerequisite: Full-time teaching experience.

This course will help students gain familiarity with second language acquisition research and practice, characteristics of second language learners, assessment and teaching strategies for second language acquisition.

**EDUC 525. Cross Cultural Education.** 3 credits.
The course provides students with knowledge of the effects of socio-cultural variables in an instructional setting.

**EDUC 528. Assessment and Curriculum Development in English as a Second Language.** 3 credits.
The course provides students with a variety of assessment practices for profiling non-native students’ abilities and for developing appropriate curriculum.

**EDUC 540. Educational Technology.** 3 credits.
Develops concepts and skills related to educational technology including selecting, producing, evaluating and using traditional forms of media and newer information technologies, including computers and videodiscs, to enhance delivery of instruction.

**EDUC 570. Methods of Teaching Foreign Languages.** 3 credits.
Research findings about Foreign Languages teaching will be used to identify the most effective instructional strategies for teaching Foreign Language to students in grades preK-12. Emphasis will be on developing plans for employing the strategies and making appropriate instructional decisions based on instructional goals, the learner, and available resources. Prerequisites: MSSE 370, admission to Teacher Education and admission to the M.A.T. program. Corequisite: MSSE 571.

**EDUC 620. Changing Contexts of American Schools.** 3 credits.
This course focuses on the nature of educational change in American schooling. Emphasis will be placed upon contemporary issues facing education, their historical and
philosophical roots and the implementation of educational change.

**EDUC 625. Evaluation in Education.** 3 credits.
The course is designed to help practicing educators improve their development and use of assessment tools and techniques. Attention will also be given to analyzing and interpreting assessment results and investigating newer developments in the evaluation of learning and instructional programs. **Prerequisite: An instructional methods course.**

**EDUC 630. Inquiry in Education.** 3 credits.
Develop skills, insights and understandings which will enable the student to become an intelligent and critical consumer of educational inquiry, and a productive participant in the inquiry process. **Prerequisites: Appropriate technology skills or EDUC 505.**

**EDUC 631. Seminar in Educational Inquiry.** 1 credit.
Studies of topics related to educational inquiry. Emphasis on inquiry designs and skills specific to students’ areas of inquiry interests. **Prerequisite: EDUC 630. This course is graded on an S/U basis.**

**EDUC 640. Teaching, Learning and Curriculum.** 5 credits.
Focuses on the diverse nature of learners, the processes of learning and development, the role of the teacher, the design and delivery of instruction, and the processes and strategies of teaching as they relate to the development of curriculum. **Prerequisites: EDUC 620 and EDUC 630.**

**EDUC 675. Internship in Foreign Language Education.** 3 credits.
Participants will experience the full range of conditions and tasks expected of a teacher for students in grades K-12. They will be expected to develop and demonstrate competencies in teaching with the supervision and support of experienced teachers. **Prerequisites: Admission to Teacher Education and the MAT program and completion of the foreign language methods course.**

**EDUC 680. Reading and Research.** 3 credits.
Opportunities for directed reading and research in areas of special interest. Reading and research may be done only in the major field of study. **Prerequisites: EDUC 630 or equivalent, and written permission of the adviser and program coordinator.**

**EDUC 698. Comprehension Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**EDUC 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

**EDUC 700. Thesis.** 6 credits.
This course is graded on an S/U basis.

**Educational Technology**

**EDTC 510. Seminar in Educational Technology.** 3 credits.
A survey in educational technology laying a framework for the effective selection, utilization, and assessment of emerging technologies for learning. Provides the foundation for research in educational technology and development of the required electronic portfolio at the conclusion of the Educational Technology Masters degree.

**EDTC 520. Principles of Instructional Design.** 3 credits.
Examines the overarching process of instructional design as it relates to the design, development, and implementation of technology-based instruction. Instructional design
models will be compared and contrasted, and students will be challenged to develop their own model that reflects the relationships between learners, teachers, and technology. Includes discussions on design methodologies, principles, and instructional strategies.

**EDTC 611. Multimedia and Use-interface Design.** 3 credits. Design and evaluation of effective user interfaces, beginning with principles for product design. Considers the process for user interface development as a separate process from software design and development including such topics as life cycle development, usability, prototyping, and formative user-based evaluation.

**EDTC 612. Design and Development of Digital Media.** 3 credits. The course introduces the processes for the design, development, and distribution of digital media elements. Topics will include the creation and modification of digital images and digital video for instructional settings. Effective utilization of these media elements will be explored based on specific deployment strategies.

**EDTC 621. Technology Planning.** 3 credits. This course introduces the process of building a technology plan for a school district or other unit. It explores the roles of the different stakeholders in the process and focuses on issues of funding, implementation and assessment. *Prerequisite: EDTC 510 recommended.*

**EDTC 622. Staff Development in Educational Technology.** 3 credits. This course will focus on instructional models, strategies and assessment of professional development activities among adult leaders of K-12 educational settings. Course will focus on research supported instructional strategies and techniques to meet educational technology learned societies guidelines for instructional personnel.

**EDTC 631. Imagery and Data Display.** 3 credits. Detailed study of different data visualization tools, including image processing and geographic information systems. Clear and concise displays of data are emphasized, along with the research base supporting the use of these tools in inquiry-based learning. *Prerequisite: EDTC 510 recommended.*

**EDTC 632. Simulation and Modeling.** 3 credits. Exploration of simulation and modeling tools and their application to science and mathematics learning. Software addressing a variety of grade levels and content areas will be explored and assessed for its value in inquiry-based learning. Emphasis will be given to curricular design and implementation. *Prerequisite: EDTC 631.*

**EDTC 670. Instructional Technology Practicum.** 3 credits. Presents various topics that provide students with opportunities to integrate and apply instructional technology theories, practices, and skills in a variety of authentic client-designer settings. This course represents a clinical approach to project development in which students will become part of design teams assigned to work with real-world clients in an effort to produce real-world instructional and training solutions.

### Middle Education

**MIED 501. Workshop in Middle Education.** 1-3 credits. Designed to provide students with workshop experiences related to current needs evident in middle education. The topics considered will be determined by interest and demand. No more than six credit hours earned in workshops in education can be applied to a major program.

**MIED 505. Program Development in the Middle Grades.** 3 credits. An examination of the developmental characteristics of children in grades four through
eight as these traits influence program design. Specific attention is given to interdisciplinary instructional teams, teacher advisory programs and exploratory study.

**MIED 512. Curriculum for the Middle Grades.** 4 credits. 
Review of educational research and practice as it relates to curriculum development for children in grades four through eight. Emphasis is given to interdisciplinary study involving all curriculum areas with special focus on the areas of science and social studies.

**MIED 520. Instructional Strategies in the Middle Grades.** 3 credits. 
Study of educational research, theory and practice as related to the development and implementation of instruction in grades four through eight. Specific attention is given to planning, questioning skills, grouping strategies, evaluation and working with parents.

**MIED 530. Teaching Mathematics in the Elementary and Middle Grades.** 3 credits. 
Individual and group study of content, methodology and instructional materials necessary to the design and implementation of instructional programs in modern mathematics. Attention is given to differentiation of instruction in terms of learning ability.

**MIED 609. The Middle Grades Curriculum.** 3 credits. 
A study of the current practices and alternatives in curriculum development for the middle grades. Attention is given to differentiation of curriculum for pupils with differing learning abilities.

**MIED 610. Collaborative Leadership In Schools.** 3 credits. 
Designed to provide students with research, theories and practices regarding teacher leadership and collaboration in school contexts and methods for addressing school-based improvement efforts and processes. Specific attention is given to collaboration and leadership toward community involvement and communication in middle schools.

**MIED 620. Applied Research In Middle Education.** 3 credits. 
Provides students with resources, skills and knowledge required to successfully carry out a school-based, problem-centered research activity. Scholarly presentation of the research activity is required for completion of the program. **Prerequisites:** EDUC 6303, EDUC 6311.

**MIED 656. Seminar in Middle Education.** 3 credits. 
An intensive study of selected problems in middle education. Research findings are reviewed and educational theory is explored.

**MIED 680. Reading and Research.** 3 credits. 
Directed reading and research in areas of student interest. Reading and research may be done only in the major field of study. A plan for study must be submitted in prescribed form and approved prior to registration for the course. **Prerequisites:** Written permission of adviser and program coordinator.

## Middle and Secondary Education

**MSSE 570 (B, D, H, I, or K) Teaching Methods, Grades 6-12 (content specific).** 3 credits. 
Research findings about teaching in the content area will be used to identify the most effective instructional strategies for teaching that content to students in grades 6-12. Emphasis will be on developing plans for employing the strategies and making appropriate instructional decisions based on instructional goals, the learner, and available resources. **Prerequisites:** MSSE 370, admission to Teacher Education, and admission to the MAT Program. Corequisite: MSSE 571.
**B. English Teaching Methods, Grades 6-12.** 3 credits.

**D. Business and Marketing Teaching Methods, Grades 6-12.** 3 credits

**H. Social Studies Teaching Methods, Grades 6-12.** 3 credits.

**I. Natural Sciences Teaching Methods, Grades 6-12.** 3 credits.

**K. Mathematics Teaching Methods, Grades 6-12.** 3 credits.

**MSSE 571. Field Experience in Middle and Secondary Education, Practicum III.** 2 credits.

Provides practical classroom experience for middle and secondary education students under the supervision of an in-service teacher and a clinical professor. Students engage in classroom activities that provide an opportunity for them to practice the strategies and concepts learned in the methods class. **Corequisite: MSSE 570.**

**MSSE 580. Internship in Middle and Secondary Education.** 8 credits.

Participants will experience the full range of conditions and tasks expected of a teacher for students in grades 6-12. They will be expected to develop and demonstrate competencies in teaching with the supervision and support of experienced teachers. **Prerequisite: Admission to Teacher Education and the M.A.T. Program.**

**MSSE 600. Middle and Secondary Education in America: Past, Present and Future.** 3 credits.

This course provides a study of the middle and secondary school from historical, sociological, and philosophical perspectives and offers examinations of current social issues facing teachers and administrators, grades 6-12.

**MSSE 607. Middle and Secondary Curriculum and Co-Curriculum.** 2 credits.

The course is designed to help prospective teachers develop the knowledge, skills and dispositions necessary for their role in curriculum development and delivery in a diverse school and classroom environment. **Prerequisites: MSSE 370, admission to Teacher Education, and admission to the MAT Program.**

**MSSE 625. Learning and Assessment in Middle and Secondary Education.** 2 credits.

The course is designed to help prospective teachers develop competencies for designing and utilizing effective assessment strategies for determining student performance and progress in a variety of instructional situations and for making a range of instructional decisions. **Prerequisite: MSSE 370, admission to Teacher Education and admission to the MAT Program.**

**MSSE 630. Inquiry in the Classroom.** 3 credits.

Skills, methods, insights, and understandings which will enable the beginning teacher to become an intelligent and critical consumer of educational inquiry and a productive participant in the process of classroom-based inquiry. **Prerequisites: Admission to Teacher Education and the M.A.T. Program.**

**MSSE 650. Internship Seminar.** 2 credits.

A seminar designed to promote reflective decision making among students during their internship experience. During seminar sessions students will engage in case analysis and portfolio development. **Corequisite to MSSE 580, Internship.**

**MSSE 675. Internship in Middle and Secondary Education.** 8 credits.

Participants will experience the full range of conditions and tasks expected of a teacher for students in grades 6-12. They will be expected to develop and demonstrate competencies in teaching with the supervision and support of experienced teachers. **Prerequisite: Admission to Teacher Education and the M.A.T. Program and completion of the appropriate content methods course.**

**MSSE 680. Applied Research in Middle and Secondary Education.** 3 credits.
Provides students with the resources, skills, and knowledge required to conduct an individualized classroom-based inquiry project as a capstone activity in the MAT program. **Prerequisite:** MSSE 630.

**MSSE 580. Internship in Middle and Secondary Education.** 8 credits. Participants will experience the full range of conditions and tasks expected of a teacher for students in grades 6-12. They will be expected to develop and demonstrate competencies in teaching with the supervision and support of experienced teachers. **Prerequisite:** Admission to Teacher Education and the M.A.T. Program.

**MSSE 600. Middle and Secondary Education in America: Past, Present and Future.** 3 credits. This course provides a study of the middle and secondary school from historical, sociological, and philosophical perspectives and offers examinations of current social issues facing teachers and administrators, grades 6-12.

**MSSE 625. Learning and Assessment in Middle and Secondary Education.** 3 credits. The course is designed to help prospective teachers develop competencies for designing and utilizing effective assessment strategies for determining student performance and progress in a variety of instructional situations and for making a range of instructional decisions. **Prerequisite:** Admission to Teacher Education and the M.A.T. Program.

**MSSE 630. Inquiry in the Classroom.** 3 credits. Skills, methods, insights, and understandings which will enable the beginning teacher to become an intelligent and critical consumer of educational inquiry and a productive participant in the process of classroom based inquiry. **Prerequisites:** Admission to Teacher Education and the M.A.T. Program.

**MSSE 650. Internship Seminar.** 2 credits. A seminar designed to promote reflective decision making among students during their internship experience. During seminar sessions students will engage in case analysis and portfolio development. **Corequisite to MSSE 580, Internship.**

**MSSE 675. Internship in Middle and Secondary Education.** 8 credits. Participants will experience the full range of conditions and tasks expected of a teacher for students in grades 6-12. They will be expected to develop and demonstrate competencies in teaching with the supervision and support of experienced teachers. **Prerequisites:** Admission to Teacher Education and the M.A.T. program and completion of the appropriate content methods course.

**MSSE 680. Applied Research in Middle and Secondary Education.** 3 credits. Provides students with the resources, skills, and knowledge required to conduct an individualized classroom-based inquiry project as a capstone activity in the MAT program. **Prerequisite:** MSSE 630.

### Reading Education

**READ 501. Workshop in Reading.** 3 credits. Designed to provide students with workshop experiences related to current needs in reading. The topics considered will be determined by interest and demand. No more than six credit hours earned in workshops in education can be applied to a major program.

**READ 566. Literacy Acquisition and Development of the Young Reader.** 3 credits. This course will provide pre-service teachers with an understanding of the foundations of early literacy development and instructional strategies and assessment techniques, which support the acquisition of literacy. **Corequisite:** ECED 511.
READ 582. Foundations of Early and Elementary Literacy. 3 credits.
This course emphasizes the traditions, theories, and practices in early and elementary literacy that have emanated from a long history of research and practice. Through this course, participants will examine how particular theories of literacy impact the practices of teaching reading and writing in the pre K-5 classrooms.

READ 584. Foundations of Middle Grades and Secondary Literacy. 3 credits.
This course emphasizes the traditions, theories, and practices in middle grades and secondary literacy that have emanated from a long history of research and practice in the schools. Through this course, participants will examine how particular theories of literacy impact the practices of teaching reading and writing in the middle grades and secondary classrooms.

READ 586. Children’s and Adolescent Literature. 3 credits.
This course is designed to acquaint participants with the nature, scope, and uses of children’s and young adult literature for instructional, informational, and recreational purposes. The implications of current theory, significant research, and issues in literature study will be investigated and examined as they relate to the PreK-12 learner.

READ 588. Writing Instruction. 3 credits.
This course focuses on the current theories and practices that pertain to writing instruction in K-12 school settings. Through this course, participants will examine historical and developmental perspectives, instructional contexts, assessment, and the uses of technology in writing instruction.

READ 590. Reading Across the Curriculum. 3 credits.
This course explores reading in the K-12 curriculum and the interdisciplinary nature of reading.

READ 636. Primary Grades Literacy Learning. 3 credits.
This course will provide pre-service teachers with an understanding of developmentally appropriate instructional strategies and assessment techniques to help all students in elementary grades become literate using reading, writing, listening and speaking in strategic and authentic ways. Prerequisites: ECED 511, READ 566; Corequisite: ECED 611.

READ 658 Principles, Practices and Applications of Reading Assessment. 3 credits.
The course emphasizes the principals, practices and applications of a variety of reading assessments for students with different learning abilities and needs.

READ 660. Practicum in Principles, Practices and Applications of Reading Assessment. 3 credits.
This practicum is designed to give students practice in the application of a variety of reading assessments with pupils with individual differences. Prerequisites: READ 582 READ 584, READ 586, READ 588, READ 590, READ 658 or permission of instructor.

READ 665. Organization and Supervision of Reading Programs. 3 credits.
This course emphasizes the organization and supervision of elementary, middle and secondary reading programs. The roles of the reading specialist, special reading teacher, administrator and supervisor are explored in relationship to the reading program. Prerequisites: READ 660 or permission of instructor.

READ 670. Internship in Reading Supervision. 3 credits.
This internship allows reading specialist candidates to work with a reading/language arts or curriculum supervisor in a local school division in individual and collaborative projects. Prerequisite: READ 665 or permission of the instructor.

READ 680. Reading and Research. 3 credits.
Directed reading and research in areas of special student interest. Reading and research may be done only in the major field of study. The plan for the study must be submitted in prescribed form and approved prior to registration for the course. **Prerequisite:** EDUC 630 and written permission of the adviser and coordinator.

**READ 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**School Administration**

**ADSU 640. The Fundamentals of Educational Administration.** 3 credits.
Examines the fundamental principles and concepts of organizational theory, structure and climate. There is an emphasis on the administrative processes and professional ethics of leadership, motivation, decision making, communication, organizational change and strategic planning. The course offers opportunities to apply theory to professional practice through the use of case studies.

**ADSU 641. School Law.** 3 credits.
Acquaints teachers and prospective school administrators with the laws governing public education and the legal responsibilities and powers of state and local governing bodies and individuals. Emphasis is given to federal and Virginia statutes and case law affecting due process, liability, equal protection, and the rights of teachers and students.

**ADSU 642. Leadership for School-Community Relations.** 3 credits.
The influence of the social and political structures and conditions on school leadership, personnel, programs and activities is explored. Strategies for interacting and cooperating with parents, community leaders, businesses, and organizations for support in the effective attainment of school objectives and the educational goals of the community are emphasized. **Corequisite:** ADSU 658A.

**ADSU 643. The Principalship.** 3 credits.
Emphasis will be on instructional leadership and effective school management that promotes positive student achievement, a safe and secure environment, and the efficient use of resources. Curriculum planning, scheduling, school improvement planning, assessment of student progress, school change, and program evaluation will be key topics covered by this course. **Corequisite:** ADSU 658B.

**ADSU 644. Supervision and Development of School Personnel.** 3 credits.
Concepts and approaches for planning and implementing activities for effective human resource management are explored. Theories and practices related to recruitment, development and appraisal of personnel are covered. Evaluation of personnel for the purpose of meeting school objectives and for professional development receives emphasis. **Corequisite:** ADSU 658C.

**ADSU 652. School Finance and Business Management.** 3 credits.
This course emphasizes the history and principles of public school financing and the roles of federal, state and local governments and agencies in financing public education. Taxation for school purposes, the economics of education, equity and disparity issues, budgetary concerns, strategic planning, and procedures for school-site management are included. **Corequisite:** ADSU 658D.

**ADSU 658. Practicum in School Administration.** 3 credits.
The practicum provides administrative field experience in a school setting. Students spend a minimum of 75 hours during the semester working under the guidance of a practicing school administrator and university supervisor. Other course requirements
include seminars and the completion of an administrative project. Course graded on a P/U basis. Prerequisites: Completion of a minimum of 15 credits and permission of instructor.

**ADSU 658A. Practicum in School and Community Relations.** 1 credit.
This practicum provides administrative field experience in school and district settings related to school and community relations. Candidates will spend a minimum of twenty-five hours in a school setting and twenty-five hours in a district-level placement working under the guidance of a practicing school administrator and university supervisor. Corequisite: ADSU 642.

**ADSU 658B. Practicum in The Principalship.** 1 credit.
This practicum provides administrative field experience in two school settings. Candidates will spend a minimum of 50 hours during the semester working under the guidance of a practicing school administrator and university professor. Twenty-five hours are required at the candidate's school and twenty-five are required at another school level. Corequisite: ADSU 643.

**ADSU 658C. Practicum in Supervision and Development of Personnel.** 1 credit.
This practicum provides administrative field experience in school and district settings related the supervision and development of school personnel. Candidates will spend a minimum of twenty-five hours in a school setting and twenty-five hours in a district-level placement working under the guidance of a practicing school administrator and university supervisor. Corequisite: ADSU 644.

**ADSU 658D. Practicum in School Business Management and Finance.** 1 credit.
This practicum provides administrative field experience in school and district settings related to fiscal and business operations. Candidates will spend a minimum of twenty-five hours in a school setting and twenty-five hours in a district-level placement working under the guidance of a practicing school administrator and university supervisor. Corequisite: ADSU 652.

**ADSU 668. Internship for Principals.** 3 credits.
Students spend a minimum of 200 hours over six months working under the supervision of a practicing school administrator and a university professor. The student should experience the full range of duties, problems and issues encountered by a school administrator, and receive developmental and evaluative feedback. Course graded on an S/U basis. Prerequisite: Completion of 30 credits in the Educational Leadership Program or permission of adviser.

**ADSU 678. Full-time Internship for School Administrators.** 3 credits.
Candidates spend a minimum 90 full-time days working under the working under the supervision of a practicing school administrator and a university professor. The candidate should experience the full range of duties, problems and issues encountered by an administrator, and receive developmental and evaluative feedback. Course graded on an S/U basis. Prerequisite: Attainment of a full-time administrative position and permission of adviser.

**Secondary Education**

**SEED 600. Secondary Education in America: Past, Present and Future.** 3 credits.
The changing face of the American secondary school will be studied and attention will be given to many of the philosophical, social, cultural, demographic and other factors impacting those changes. Emphasis will be placed on problems, current trends and future perspectives. Prerequisite: EDUC 620.
SEED 660. Instructional Development in the Secondary School. 3 credits.
Effective teaching techniques and innovative forms of organization and instruction in secondary education will be studied. Emphasis will be on teaching strategies and behaviors and materials selection for serving secondary school students. Prerequisite: An instructional methods course.

SEED 680. Reading and Research. 1-3 credits.
Opportunities for directed reading and research in secondary English, foreign language, mathematics, science and/or social studies. Prerequisites: EDUC 630 or equivalent and written permission of the adviser and program coordinator.

Special Education

Note: A renumbering of the graduate courses in special education has taken place regarding the courses to be offered in the new 5th year program with a projected start-up date of 2003. Courses designated as (2003) reflect new and renumbered courses.

SPED 500. IEP and Curriculum-Based Assessment. 3 credits. (2003)
A detailed study of purposes and procedures involved in the development of Individualized Education Programs (IEP) for students with disabilities. In addition, this course emphasizes the selection or design of curriculum based assessment to plan and evaluate instruction in academics, social behaviors, and life skills. Corequisites: SPED 420, 430, 510.

SPED 501. Workshop in Special Education. 3 credits.
Designed to provide an intensive study of a particular topic in Special Education. Prerequisite: SPED 200 or permission of instructor.

An application of various systematic behavioral interventions to the management of behavior and learning of individuals with disabilities. Approaches to teaching social skills are also addressed. Corequisites: SPED 420, 430, 500.

SPED 512. Behavior Management in the Classroom. 3 credits.
An application of behavior modification techniques to the control of discipline problems in the classroom. The use of these principles as an aid in learning is also stressed.

SPED 520. Differentiation of Instruction and Collaboration In Special Education. 3 credits. (2003)
Understanding students with disabilities and making accommodations in the general education classroom is paramount for student success. This course will address collaboration as related to teacher roles, the interface between general and special education, and creating instructional opportunities that are differentiated for diverse learners. Corequisites: SPED 600, 610.

SPED 600. Instructional Methods in Special Education. 3 credits. (2003)
A detailed study of specialized methods for teaching academic skills to individuals with disabilities. The course emphasizes special education instructional approaches, such as task analysis, direct instruction, diagnostic/prescriptive teaching, and strategy training. Focus is on specific remedial methods for reading, math, and writing. Corequisites: SPED 520 & SPED 610. Corequisites: SPED 510, 610.

SPED 607. Curriculum and Methods in Special Education. 3 credits.
A study of modifications needed in the school curriculum to fit the unique needs of the learners with disabilities. Procedures involved in individualized educational plans, and methods and materials for academic and school-related problems of individuals with disabilities are examined. Prerequisites: SPED 600 and permission of instructor.

This course provides field experience opportunities to practice the skills in differentiating instruction in general education settings developed in SPED 520 and the special education instructional methods developed in SPED 600. **Corequisites: SPED 520 & SPED 600.**

**SPED 611. Survey of Learning Disabilities.** 3 credits.
A detailed study of the nature and needs of individuals with specific learning disabilities. The focus of the course is on terminology, etiology, characteristics, diagnosis and special problems.

**SPED 612. Psychoeducational Assessment of Learning and Behavior Problems.** 3 credits.
A detailed study of psychoeducational assessment procedures and instruments used in determining eligibility, and planning and evaluating instruction for students with mental retardation, specific learning disabilities and emotional disturbance. The course emphasizes administration of formal and informal instruments, interpretation of results, and formulation of individual educational plans based on assessment findings. **Prerequisite:** SPED 611 or permission of instructor.

**SPED 613. Teaching Individuals with Learning and Behavior Problems.** 3 credits.
A detailed study of curriculum and methods for teaching individuals with learning and behavior problems. The course emphasizes a task analysis approach to developing academic, personal/social and functional life skills. **Prerequisites:** SPED 611, SPED 630, SPED 640 or permission of instructor.

**SPED 615. Transition Services for Students with Disabilities.** 3 credits.
A detailed study of elementary, secondary and post-secondary transition services needed for students with disabilities to achieve successful adult outcomes.

**SPED 621. Introduction to Early Childhood Special Education.** 3 credits.
This course is designed to provide the student with an introduction to educational programming for children with disabilities, ages 0 to 5. Particular attention is given to federal legislation, state procedures and practice, and the status of children served in early childhood special education and early intervention programs. **Prerequisite:** Permission of instructor.

**SPED 622. Assessment in Early Childhood Special Education.** (Cross-listed as PSYC 822.) 3 credits.
This course provides a student with exposure to screening, assessment and diagnostic procedures used in the identification of children with disabilities, ages 0 to 5. A case study approach to diagnosis is emphasized. Family assessment is also an integral part of the course. **Prerequisites:** Permission of instructor and SPED 621.

**SPED 623. Programming in Early Childhood Special Education.** 3 credits.
This course is designed to acquaint students with curriculum, methods and materials related to establishing and maintaining programs for children with disabilities, ages 0 to 5. Attention is directed to designing developmentally appropriate environments in a variety of settings. **Prerequisites:** Permission of instructor and SPED 622.

**SPED 624. Service Delivery Systems in Special Education.** 3 credits.
This course offers the student detailed experience in the numerous ways in which educational services are made available to children with disabilities, ages 0 to 5. Particular emphasis is placed on working cooperatively with parents in the development of the IEP and IFSP. **Prerequisite:** Permission of instructor.

**SPED 625. Medical and Technological Aspects of Early Childhood Special Education.** 3 credits.
This course is designed to give the early childhood special educator exposure to
working with children with medical disabilities, ages 0 to 5, who may have significant medical complications. The role and function of early childhood special educators as team members are addressed. The role of technology will receive extensive attention as will issues of etiology and remediation. Prerequisite: Permission of instructor.

**SPED 626. Practicum: Infants and Toddlers with Disabilities.** 3 credits.
This is the introductory field experience with infants and toddlers with disabilities. Settings include medical centers, rehabilitation facilities and community-based programs. Students are expected to demonstrate competencies which have been developed in early childhood special education courses. Prerequisites: Permission of instructor and SPED 623.

**SPED 627. Practicum: Early Childhood Special Education.** 3 credits.
This is the introductory field experience with children with disabilities, ages 2 to 5. Settings include medical centers, rehabilitation facilities and community-based programs. Students are expected to demonstrate competencies which have been developed in early childhood special education courses. Prerequisites: Permission of instructor and SPED 623.

**SPED 628. Internship: Early Childhood Special Education.** 6 credits.
This is a supervised experience in an early childhood special education setting (infants and toddlers, ages 2 to 5 or early childhood special education class) in which the student has the opportunity to implement a comprehensive set of services for at least five children with disabilities. Settings may include a medical center, a rehabilitation facility, an outreach program or public schools. Prerequisites: Permission of instructor and SPED 626 and 627.

**SPED 630. Survey of Mental Retardation.** 3 credits.
A detailed study of the characteristics, diagnosis, treatment and education of individuals with mental retardation. Least restrictive settings, resources and instructional techniques are analyzed to facilitate integration for individuals with mental retardation. Prerequisites: SPED 600 or permission of instructor.

**SPED 640. Survey of Emotional Disturbance.** 3 credits.
An in-depth study of the characteristics of individuals with behavior and/or emotional problems. The course will also address theories of development of problem behaviors; screening and assessment procedures; classroom, nonclassroom, and ancillary therapies; and school/community resources.

**SPED 650. Student Teaching in Special Education.** 4 credits. (2003)
Advanced, supervised teaching experiences in the area of learning and behavior disorders enabling the student to develop and apply the educationally prescriptive and management competencies acquired in previous course work and relevant field experiences. Prerequisite: Permission of instructor.

**SPED 653. Internship in Special Education: Nonteaching.** 3-6 credits.
A supervised nonteaching experience in a setting related to populations with disabilities in order to provide the student the opportunity to demonstrate competencies developed in previous course work. Prerequisite: Permission of instructor.

A seminar designed to accompany the student teaching experience. Student teachers will have the opportunity to reflect on their skills, problem-solve school and classroom experiences, and increase awareness of the need to continue career-long learning. Corequisite: SPED 650.

Provides students with the resources, skills, and knowledge required to conduct an
individualized classroom-based inquiry project as a capstone activity in the M.Ed. program. **Prerequisite:** EDUC 630.

**SPED 680. Reading and Research.** 1-6 credits. Provides the opportunity for directed reading and research in a student’s area of concentration. This activity must be done in the major field of study. **Prerequisite:** Permission of adviser and program coordinator. **May be repeated for credit.**

**SPED 698. Comprehensive Continuance.** 1 credit. Continued preparation in anticipation of the comprehensive examination. **Course may be repeated as needed.**

1 Corequisite of EDUC 310 and READ 432
2 Offered during fall semester only
3 Corequisite of MSSE 470 and SPED 460
English

Dr. David Jeffrey, Department Head
Dr. Annette Federico, Graduate Coordinator

For information, call (540) 568-6202/6170
Web site: http://www.jmu.edu/english

Professors

Associate Professors
D. Bankert, S. Cote, M. Favila, B. Johnson, L. Kutchins

Assistant Professors
L. Corin, L. Henigman, R. Osotsi, N. Rahman

Mission
The English department emphasizes preparation for Ph.D. work, but we accept all qualified students who have an interest in literature, critical theory, or creative writing. We welcome students who, for whatever reasons, are eager to read literature on an advanced level, who enjoy research and writing, and who appreciate the responsibilities and pleasures of pursuing one’s intellectual goals within an academic community.

Goals
β to excite and maintain in students a permanent desire for an expanded knowledge and understanding of the world through the study of diverse authors and genres
β to help students to discover and appreciate the English language, and to learn how richly language clothes our responses to the world
β to actively promote, through formal study, both the self-examination and the imaginative understanding that are among the central values of advanced study in the humanities
β to encourage in post-baccalaureate students a broader, more formal inquiry into specific authors and movements in both western and non-western literatures, and to teach them by example the professional practices of reading and interpretation
β to cultivate the practical talents gained by the study of literature: the ability to recognize the functions of analysis and synthesis in one’s professional life, to construct an argument, to think critically, to write efficiently, clearly, and gracefully, to develop confidence in the validity of one’s judgments about many kinds of writing, and to learn to see the interstices as well as the architectural whole in widely different encounters with the written word
β to stimulate the kind of intellectual self-scrutiny and the passion for reading that will lead to successful work on the doctoral level, and to help students gain admittance into excellent Ph.D. programs throughout the country
β to provide an opportunity for qualified students who are considering teaching as a career to work with faculty in large sections of sophomore literature classes or to teach their own first-year composition class through the awarding of graduate and teaching assistantships
β to foster in those who are interested in pursuing careers in writing and editing, politics, business, non-profit work, or other less obviously English-related fields the kinds of attention and analysis that are concomitant with the formal study of vastly different kinds of writing — fiction, poetry, and drama, argumentation and analysis,
opinion, review essays, creative nonfiction
β to both broaden and deepen the needed practical knowledge of the fields of
writing, literature and literary history for future English teachers in high schools, 
business schools and community colleges
β to offer career teachers of English a place to improve their knowledge of these 
fields and rejuvenate their commitment to the study and teaching of literature
β to enhance the professional opportunities of career teachers of English through 
advanced study
β to contribute to fulfilling the requirements for the M.A.T. degree

The JMU graduate faculty in English is committed to the belief that encountering and 
interacting with literature, thinking critically about texts, learning the skills of scholarly 
research, and writing about one's ideas effectively provide the kind of education from 
which the world continues to benefit.

To fulfill these beliefs, we offer students a superior faculty who are recognized for their 
scholarship, their excellence in teaching, and their supportive relationships with 
graduate students. Most classes are small seminars.

The Department of English offers the Master of Arts degree.

**Admission**

Students must submit scores for the Graduate Record Examination General Test (GRE), 
official undergraduate transcripts and two letters of recommendation as part of their 
applications to the College of Graduate and Professional Programs. A writing sample or 
statement of purpose is also recommended.

**Degree Requirements**

The minimum requirement for the Master of Arts degree is 33 hours of graduate credit 
in English. All students, regardless of program, must take ENG 599, Bibliography and 
Methods of Research, in their first semester. Before beginning a teaching assistantship 
students must take ENG 501, Professional Seminar in College Composition. Completion 
of the third year of a college foreign language course or passing a reading examination 
in a foreign language is required for all students of the Master of Arts degree. Toward 
the end of their course work, students must pass a formal examination based on a 
required reading list in order to receive the degree.

The department also offers a concentration in creative writing. Students choosing this 
option will take 15 hours in literature and language courses, 12 hours in creative 
writing, and will write a creative thesis. The 12-hour concentration normally requires 
either ENG 581 or 582 as a prerequisite for subsequent creative writing courses and 
ENG 700 as a creative writing thesis.

All students must plan a program of study with the coordinator of graduate studies in 
English before registering for graduate courses in English.

In the following list, those courses designated as limited to a specific concentration are 
not available to students outside that concentration (unless specifically noted 
otherwise).

**Course Offerings**

**ENG 501. Professional Seminar in College Composition.** 3 credits.
Practical examination of the content and methodology of freshman English (GWRIT 101, 102) for the training of beginning teaching assistants. (Required for all beginning 
teaching assistants; may be taken by Ph.D.-bound traditional students; open informally 
on a noncredit basis for new part-time faculty in the department.)

**ENG 503. Old English.** 3 credits.
Old English language, with readings in poetry and prose.

**ENG 505. Middle English.** 3 credits.
Middle English language and representative literary works.

**ENG 508. History of Literary Criticism.** 3 credits.
Survey of the nature, function and development of literary criticism.

**ENG 509. Contemporary Critical Practices.** 3 credits.
Major debates in current critical discourse, covering such topics as formalism, structuralism, deconstruction, feminism, hermeneutics, reader response criticism, Marxism and new historicism.

**ENG 510. Special Authors Seminar.** 3 credits.
One major author or a selected group of authors. (May be repeated for credit when course content changes.)

**ENG 512. Special Topics Seminar.** 3 credits.
One literary school, movement, genre, or other literary or linguistic topic. (May be repeated for credit when course content changes.)

**ENG 581. Poetics.** 3 credits.
Poetic forms for writers, with emphasis on theory and current practice. (May be included in the concentration in creative writing; normally a prerequisite for other poetry courses in the concentration for creative writing.)

**ENG 582. Narrative Form.** 3 credits.
Narrative theory and current practices for writers. (May be included in the concentration in creative writing; normally a prerequisite for other fiction courses in the concentration in creative writing.)

**ENG 583. Poetry Workshop.** 3 credits.
Poetry writing for those with demonstrated skill, with emphasis on perfecting voice and poetic form. (May be included in the concentration in creative writing; admission by permission of the instructor.)

**ENG 584. Fiction Workshop.** 3 credits.
Fiction writing for those with demonstrated skill, with emphasis on perfecting narrative form and personal style. (May be included in the concentration in creative writing; admission by permission of the instructor.)

**ENG 595A. Careers in English.** 1 credit.
The graduate-level component of ENG 295A. Graduate students will act as assistants to the instructor by leading small group discussions, conducting workshops in resume writing and other job-related skills, reading and evaluating student portfolios, and tutoring. Graduate students will also identify prospective employers and assemble credentials that emphasize writing and research skills. **Prerequisite: graduate student status.**

**ENG 595B. Graduate Internship in English.** 1-3 credits.
English graduate student internships. Graduate students identify a prospective employer and work as an intern during the summer, fall or spring semester. Academic work may include reflective essays, bibliographies, resume writing and meetings or presentations with graduate advisors. **Prerequisite: graduate student status.**

**ENG 599. Bibliography and Methods of Research.** 3 credits.
Use of scholarly materials, procedures and techniques, including scholarly writing and computer-based library and research technology. (Required for all Master of Arts and Master of Arts in Teaching students.)

**ENG 602. Growth and Structure of the English Language.** 3 credits.
History of the English language with attention to the changing forms of speech in phonology, morphology, syntax and semantics.

**ENG 604. Contemporary Approaches to English Linguistics.** 3 credits.
Survey of English linguistics and its current applications.

**ENG 615. Chaucer.** 3 credits.
Major works, with attention to their medieval context as well as traditional and contemporary critical approaches.

**ENG 618. Medieval Drama.** 3 credits.
Drama from its liturgical foundations through the morality play, with emphasis on historical context and modern critical approaches.

**ENG 620. Shakespeare.** 3 credits.
Selected plays by Shakespeare.

**ENG 625. Studies in 16th-Century Literature.** 3 credits.
Major British nondramatic works of the early Renaissance.

**ENG 628. Elizabethan and Jacobean Drama.** 3 credits.
Drama from the morality plays to 1642.

**ENG 630. Studies in 17th-Century Literature.** 3 credits.
Authors and movements in the literature of the 17th century.

**ENG 635. Milton.** 3 credits.
Milton’s poetry and prose (along with selected works by contemporary writers), with attention to the political, religious and cultural milieu in which Milton and his contemporaries worked.

**ENG 640. Studies in Restoration and 18th-Century Literature.** 3 credits.
Authors of the era studied in the context of the cultural and intellectual currents of the time.

Authors and movements in the literature of the 19th century.

**ENG 651. Studies in American Romanticism.** 3 credits.
Works by authors such as Poe, Hawthorne, Emerson, Thoreau, Melville and Whitman.

**ENG 656. Studies in American Realism.** 3 credits.
Works by authors such as Mark Twain, William Dean Howells, Stephen Crane, Henry James or others.

**ENG 658. Studies in Southern Literature.** 3 credits.
Major works in Southern Literature; content may be limited either to works before 1945 or to contemporary works. (May be repeated for credit when content changes.)

**ENG 661. Studies in 20th-Century British Literature.** 3 credits.
Works in selected genres.

**ENG 662. Studies in 20th-Century Literature of the United States.** 3 credits.
Works in selected genres.

**ENG 664. Modernist Drama.** 3 credits.
Plays from Ibsen through Pinter.

**ENG 666. Post-Modernist Drama.** 3 credits.
Plays since Pinter.

**ENG 671. Studies in World Literature.** 3 credits.
Non-U.S., non-British literature in English or in translation. Content may be limited by period or by geographical, cultural, political or thematic parameters. (May be repeated for credit when content differs.)

**ENG 672. Studies in African-American Literature.** 3 credits.
African-American authors of the 20th century in the context of the cultural and intellectual currents of their time.


**ENG 674. Studies in Women’s Literature.** 3 credits. Works by, about, and relating to women, with attention to feminist criticism.

**ENG 675. Reading and Research.** 3 credits. Supervised reading and research in the literature of the student’s major field. (Admission by permission of the director of graduate studies; may not be repeated.)

**ENG 683. Advanced Poetry Writing.** 3 credits. Individualized projects and workshops for second-year students. (May be included in the concentration in creative writing; may be repeated once; may be used once for preparation and development of a thesis.) **Prerequisite ENG 583.**

**ENG 684. Advanced Fiction Writing.** 3 credits. Individualized projects and workshops for second-year students. (May be included in the concentration in creative writing; may be repeated once; may be used once for preparation and development of a thesis.) **Prerequisite ENG 584.**

**ENG 685. Advanced Independent Work in Creative Writing.** 3 credits. Individualized projects in genres other than poetry or prose fiction for second-year students. (May be included in the concentration in creative writing; admission by permission of the instructor; may be repeated once; may be used once for preparation and development of a thesis.)

**ENG 698. Comprehensive Continuance.** 1 credit. Continued preparation for the comprehensive examinations. (May be repeated as needed.)

**ENG 699. Thesis Continuance.** 2 credits. Continued study, research and writing for the thesis. (May be repeated as needed.)

**ENG 700. Thesis.** 6 credits. Required for Master of Arts candidates in the creative writing concentration. This course is graded on a satisfactory/unsatisfactory (S/U) basis.
Health Sciences

Dr. Stephen Stewart, Department Head
Dr. Robert Koslow, Graduate Coordinator, Health Sciences
Dr. Janet Gloeckner, Graduate Concentration Coordinator, Dietetics
Mr. James Hammond, P.A., Graduate Coordinator, Physician Assistant Studies

For information, call (540) 568-6510
Web site: http://www.healthsci.jmu.edu/

Professors
A. Bopp, P. Brevard, R. Koslow, S. Stewart, J. Thompson, H. Travis, M. Wessel

Associate Professors

Assistant Professor
P. Bailey, T. Wagner

Instructors
J. Hammond, D. Knitter, S. Maiewski

Mission
The graduate programs in Health Sciences are committed to preparing students to become research-based critical thinkers in the health sciences arena. Specifically, these programs build upon the undergraduate health sciences programs by providing a more detailed knowledge base that is fortified by self-directed learning experiences and the development of practical research skills.

Goals
The specific goals of the graduate programs in Health Sciences are designed to help students develop their critical thinking abilities while expanding their knowledge in the rapidly changing health-related environments. Specifically, students will be able to:

- critically evaluate the current research in the ever-broadening field of health.
- access current literature in the health fields.
- interpret current health-related research.
- develop basic research skills.
- describe and evaluate various health education models.
- critically evaluate past and present health care administration strategies.

The mission and goals are based, in part, on the Standards for the Preparation of Graduate-Level Health Educators.

The mission of the Master of Science degree program in Health Sciences – Dietetics is to provide graduate education for practicing dietitians, those seeking to become Registered Dietitians, and for those from closely related fields who want to pursue graduate study in nutrition. Each student in the program will complete a research project in a selected area.

The mission of the Dietetic Internship at James Madison University is to provide a six-month supervised dietetic experience to qualified students in the Master of Science program in Health Sciences – Dietetics in order for them to achieve the competence of
entry-level dietitians and the ability to apply current research findings to dietetics practice.

The Department of Health Sciences offers three degrees: Master of Science in Education, Master of Science and Master of Physician Assistant Studies. In addition, an interdisciplinary program in health care administration is offered as part of the Master of Business Administration.

In the Master of Science and the Master of Science and Education programs, courses must be selected with the approval of the major and minor advisers in accordance with the purposes of the student. Students electing a major or minor in the health sciences department are expected to have adequate undergraduate preparation in the chosen area of graduate study and satisfactory Graduate Record Examination scores.

Students entering the graduate program who do not possess entry-level health education competencies will be required to obtain these competencies with course work and assignments determined to meet the need as prerequisites of the program. Some undergraduate courses may be taken concurrently with graduate work.

**Health Education**

This 30-credit hour master's program will enable graduates to demonstrate a core level of knowledge and skills in relevant areas of health education research and practice. This program is based on the American Association for Health Education and the Society for Public Health Education *Standards for the Preparation of Graduate-Level Health Educators*. Graduate-level standards are built upon entry-level roles, responsibilities and competencies that reflect undergraduate health education preparation.

Students wishing to complete this program who have not had undergraduate health education preparation must work with their advisor to plan a program of appropriate undergraduate courses to meet entry level competencies in health education. This plan must be approved by the graduate coordinator during the first semester.

The Masters in Health Education requires completion of five core courses (15 credits), elective courses chosen with approval of the department academic adviser and either a non-thesis, directed research, or thesis option.

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<td>HTH 558. Health Planning</td>
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<td>MATH 522. Statistics for Researchers</td>
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<td>HTH 552. Strategies for Health Change</td>
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<td>HTH 669. Modern Health Care Administration</td>
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**Non-Thesis Option: Master of Science in Education**

This option is designed for graduate students who are practicing health educators. Students wishing to teach Pre-K-12 health must obtain licensure in health and physical education. (See graduate programs in Kinesiology for information on teacher licensure). Students will complete 15 credit hours in core courses and 6 credit hour electives in health sciences with a 9 credit hour minor in secondary or higher education. Students applying to the Master of Science in Education program must be admitted to both programs and have
an adviser in education as well as in health sciences.

**Directed Research Option: Master of Science in Health Sciences**

Students pursuing this option will complete 15 credit hours in core courses, 9 credit hour electives in health sciences, and 6 credit hours of directed research. This research would be more applied and have a broader breath of investigation than the traditional thesis. Evaluation may be more qualitative than quantitative and projects may be structured to meet the current needs of the student’s professional goals.

**Thesis Option: Master of Science in Health Sciences**

Students completing this option will earn 15 credit hours in core courses, 9 credit hours in electives in health sciences and 6 hours of thesis. Students choosing this option must follow the thesis guidelines of the College of Graduate and Professional Programs and the thesis guidelines and deadlines of the Department of Health Sciences.

**Health Services Administration**

The Department of Health Sciences cooperates with the College of Business Master of Business Administration program to offer a health services administration track within the Master of Business Administration program. This program is intended to provide practicing health professionals with the business skills and health systems knowledge necessary for promotion or to take advantage of new opportunities.

This track includes the following four courses:

- HTH 659. Health Care Environment (three credits)
- HTH 660. Health Economics (three credits)
- HTH 661. Financial Management of Health Services Organizations (three credits)
- HTH 669. Health Care Administration (three credits)

Three of these courses are used to meet Master of Business Administration elective requirements. Students in the health services administration track take HTH 661, Financial Management of Health Services Organizations, instead of FIN 655, Advanced Topics in Financial Management.

Students who have not had at least two years of work experience in a health services organization will be required to complete a three-month internship. Application for admission must be made to the College of Business Master of Business Administration program. Applicants must meet Master of Business Administration prerequisites requirements. Please refer to the Business Administration section [for specific requirements for this concentration.](http://cob.jmu.edu/mba)

**Health Sciences**

This program is designed for a very limited number of students who have extensive health related experience and want to plan a specialized program of study. This 30-credit-hour master’s program permits students to plan programs consistent with their needs and interests. This requires adviser and departmental approval. The program requires HTH 552, Strategies for Health Change and HTH 655, Research Techniques.

**Dietetics Concentration**

*Dr. Janet Gloeckner, Graduate Concentration Coordinator*

*Phone: (540) 568-7084*

A Master of Science degree may be pursued with a major in health sciences and a concentration in dietetics. The program includes course work in advanced nutritional biochemistry, applied nutrition, and research methods. Students must plan, conduct, and publish a research project. Students who want to study in the area of nutrition but have a limited background will need to fulfill prerequisite requirements in nutrition, organic chemistry, biochemistry, and statistics prior to full admission to the program.

**Combined Master of Science/Dietetic Internship Program (MS/DI)**
This program includes graduate education as outlined above and supervised practice experience to provide the skills necessary for professional practice in dietetics. Students will acquire new knowledge through course work and research and will apply that advanced knowledge to dietetic practice in a supervised setting.

Students with a Bachelor of Science degree in nutrition or a related field who meet American Dietetic Association (ADA) Didactic Program in Dietetics (DPD) requirements are eligible for admission to the combined MS/DI program. Students with a BS in a related field may have appropriate background for graduate study in nutrition. However, it is necessary to complete all requirements of a DPD prior to application to the DI. The department has an CADE-accredited undergraduate program to facilitate completion of DPD requirements. Certain courses may be taken at the graduate level to meet these requirements.

The MS/DI at James Madison University is accredited by the Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association. Questions about accreditation can be directed to:

CADE
216 W. Jackson Blvd.
Chicago, IL 60606-6995
(312) 899-4876

The graduate program is designed so that students take a full credit load (9-12 hours) of classes during the first year on the JMU campus prior to the dietetic internship rotations. All M.S. degree requirements, including prerequisite courses and research, must be completed prior to the start of the internship rotations. Most of the graduate classes in dietetics are offered in the evening.

The internship involves six months of supervised practice in clinical nutrition, community nutrition, and food service management. Upon completion of the supervised practice competencies and all requirements for the M.S. degree, graduates will receive a signed Verification Statement and may apply for eligibility to take the Registration Examination for Dietitians.

**Application Procedure**

Students will apply to the Dietetic Internship and the Master of Science program in Health Sciences (concentration in Dietetics) at the same time. All required materials must be submitted by the deadline. Incomplete applications will not be considered.

To be considered for the combined MS/DI program, complete applications must be received by February 15th. Mailed applications for graduate admission must be sent to:

College of Graduate and Professional Programs
MSC 6702, James Madison University,
Harrisonburg, VA 22807

Application forms are available at http://www.jmu.edu/gradprograms and application may be made online. Sealed transcripts of all previous college and university work can be included with the mailed application (preferred) or sent directly to the College of Graduate and Professional Programs. A complete graduate application includes:

- JMU College of Graduate and Professional Programs application (can be completed online).
- An official transcript in sealed envelope from EVERY college or university attended.
- Official results of the Graduate Record Examination (GRE) sent directly from the testing agency.
- A $55.00 check made payable to James Madison University (may be paid by credit card if applying online).

The Dietetic Internship application packet must be postmarked by February 15th and sent to:

Dr. Janet Gloeckner, Department of Health Sciences
MSC 4301, James Madison University
Harrisonburg, VA 228070

Applications are also available at the department Web site.
A complete DI application packet must contain the following items:

- Completed dietetic internship application.
- Signed DPD Verification Statement or Intent to Complete form.
- A typewritten statement of educational objectives and professional goals (2 pages double spaced, maximum).
- Three (3) letters of recommendation which include the ADA standard recommendation form AND a separate statement of the applicant’s suitability for graduate study. Letters must be in a sealed envelope with the signature of the author across the back flap.
- An official transcript in sealed envelope from EVERY college or university attended.
- A photocopy of official GRE scores (official results of the GRE must be sent directly to the JMU College of Graduate and Professional Programs).
- A $30.00 check made payable to James Madison University.

All applicants must participate in computer matching through D&D Digital Systems. Applicants should obtain instructions and a mark/sense card to prioritize their internship preferences from their DPD Director or D&D Digital. This request should be made far enough in advance to allow turn around time for submitting by the February 15 postmark deadline. D&D Digital charges a fee for computer matching that is due with the applicant’s prioritized ranking. Address requests to:

D&D Digital Systems
304 Main Street, Suite 301
Ames, IA 50010-6148

Minimum requirements for admission to the M.S./Dietetic Internship program are a 2.8 overall GPA, a 3.0 GPA in major courses, plus a combined minimum score of 800 with a 3.5 in analytical writing on the GRE. Information about the GRE may be obtained from:

Educational Testing Service
Box 1025
Berkeley, CA 94701

or

Box 592
Princeton, NJ 08540

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>HTH 655/NUTR 660. Research Techniques/Research Methods in Dietetics 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 522. Statistics for Researchers 2</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 655. Integrated Nutrition 1</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 654. Current Topics in Foods 2</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following options:</td>
<td>6-7</td>
</tr>
</tbody>
</table>

Nonthesis option

- NUTR 681. Directed Research in Dietetics I (two credits)
- NUTR 682. Directed Research in Dietetics II (two credits)
- NUTR 695. Seminar/Research Interpretation in Dietetics (one credit, twice)

Thesis option:

- HTH 700. Thesis (six credits)
- NUTR 695. Seminar/Research Interpretation in Dietetics (one credit)

Choose one of the following options: 12

Internship option:

- NUTR 650. Nutrition Education/Counseling 3
- NUTR 651. Medical Dietetics Practicum
- NUTR 652. Nutrition Assessment 1
NUTR 656. Food Systems Management Practicum  
Noninternship option (choose four of the following):  
  NUTR 545. Exercise and Nutrition 2  
  NUTR 555. Theories and Practices of Weight Management 2  
  NUTR 650. Nutrition Education/Counseling 3,4  
  NUTR 652. Nutrition Assessment 1,4  
Elective (adviser approval required)  
Elective to be selected by all students in program (adviser approval required) 3  

33-34  

1 Fall only  
2 Spring only  
3 Summer only  
4 Registered dietitians may petition to waive taking NUTR 650 and/or NUTR 652 and select one or two additional elective courses as replacements.  

**Interdisciplinary Program in Nutrition and Physical Activity**  
This 33-credit-hour master’s program permits students to major in health sciences/dietetics or kinesiology with a concentration in nutrition and physical activity. Students must declare a major in either health sciences or kinesiology with a concentration in nutrition and physical activity. This graduate program has been planned for Registered Dietitians or persons with an undergraduate degree in dietetics, kinesiology, or a related area. This program is designed for the student who has an interest in nutrition and its role in physical activity.  

An undergraduate degree with a major in dietetics, kinesiology or a related field is required. Courses in nutrition, exercise physiology, anatomy and physiology are prerequisites for admission to the program. Students should also check the prerequisites listed in the catalog for each course required. Thirty-three hours are required for the degree program, including a thesis or directed research on a selected topic in nutrition and physical activity. The degree program can be completed in as few as two academic years, with a maximum of six academic years. This program does not lead to the RD status recognized by the American Dietetic Association; however, students are encouraged to obtain the RD status by completing the Didactic Program in Dietetics requirements and competing for entry into the dietetic internship (NUTR 651 and NUTR 656), an additional six credits. A list of DPD requirements is available from the undergraduate coordinator of the dietetics program.  

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>NUTR/KIN 555. Theories and Practices of Weight Management 2</td>
<td>3</td>
</tr>
<tr>
<td>KIN 644. Metabolic and Cardiorepiratory Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 645. Muscular, Hormonal and Environmental Aspects of Exercise 1</td>
<td>3</td>
</tr>
<tr>
<td>KIN 650. Exercise Testing, Prescription and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>HTH/KIN 655. Research Techniques 2</td>
<td>3</td>
</tr>
<tr>
<td>MATH 522. Statistics 2</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 545. Nutrition and Exercise 2</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 652. Nutrition Assessment 1</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor Program
Health Sciences
A student working toward the Master of Education degree may minor in health sciences. A minimum of 12 credit hours in health sciences is required.

Course Offerings
Health Sciences

**HTH 501. Workshop in Health and Nutrition.** 1-3 credits.
An intensive investigation of a major current health problem such as sex education, drug abuse or environmental health.

**HTH 510. Human Sexuality.** 3 credits.
Components of human sexuality as they relate to the physical, social and emotional health of children, adolescents and adults. Such topics as physical and sexual changes during adolescence, abortions and contraceptives are discussed.

**HTH 549. Contemporary Health Issues.** 3 credits.
An investigation of concerns in the area of health promotion, including cardiovascular health, fitness, the personal role of health education, drugs and drug abuse, and other selected topics.

**HTH 552. Strategies for Health Change.** 3 credits.
An in-depth analysis of health education strategies employed in altering individual and community health behavior.

**HTH 558. Health Planning.** 3 credits.
An intensive exploration of resources and techniques employed in planning and evaluating health programs designed to meet the specific health needs of communities and groups.

**HTH 645. Practicum in Health Sciences.** 1-3 credits.
Selected practicum experiences for students in the various health sciences graduate programs.

**HTH 655. Research Techniques.** 3 credits.
This course examines: the focus of research, literature review, research design, choices of method of analysis, data collection techniques and the various ways to conclude a research effort. The logic of statistical analysis is used to develop research designs. Prerequisite: One statistics course.

**HTH 657. Chronic Diseases.** 3 credits.
Survey of common chronic diseases of humanity with emphasis on prevention and early diagnosis. Topics include such diseases as cardiovascular, endocrine, ophthalmic, respiratory and neurological disorders.

**HTH 659. Health Care Environment.** 3 credits.
This is a survey course examining the U.S. health care system, federal and state health policy, and public and private providers. Comparisons of the U.S. system will be made with
other systems in the industrialized world.

**HTH 660. Health Economics.** 3 credits.
Course explores economic dimensions of the health care delivery system: demand, demand-related human behaviors, competitive markets, economic models for care delivery, regulation and medical insurance. Delivery models of other industrialized nations are considered, as is how the U.S. system may be improved. **Prerequisite:** Undergraduate microeconomics.

**HTH 661. Financial Management of Health Services Organizations.** 3 credits.
This course emphasizes financial management in a variety of health care organizations. Activities include the study of patient accounting, third party reimbursement and cost reporting. There will be extensive use of microcomputer spreadsheet methods. **Prerequisites:** Required: HTH 659; recommended: FIN 645.

**HTH 669. Modern Health Care Administration.** 3 credits.
Study of health organizations’ internal operations through examination of activities in various health agency settings.

**HTH 671. School Health Practice.** 3 credits.
Analysis of two areas of the school health program (health services and health instruction) with emphasis on planning, implementing and evaluating health services and instruction.

**HTH 680. Reading and Research.** 3 credits.
Directed reading in designated areas of specialized interest. Investigating, researching and reporting. Course may be repeated for credit, with permission of the department head, when content changes.

**HTH 685. Field Work in Health.** 3-6 credits.
Practical experience in applying health theory to problems encountered in a professional setting. Specific assignments will be determined by the needs of the student. (Amount of credit will be based on amount of experience acquired. No more than six hours can be counted toward a degree program.)

**HTH 695. Directed Research.** 3 credits.
This is for research designed to complete the Directed Research Option. The course must be taken twice. **Prerequisite:** Permission of Graduate Coordinator.

**HTH 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**HTH 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

**HTH 700. Thesis.** 6 credits.
This course is graded on a satisfactory/unsatisfactory (S/U) basis. **Prerequisite:** HTH 655 or equivalent.

**Dietetics**

**NUTR 545. Nutrition and Exercise.** 3 credits.
Addresses the relationship of nutrition and exercise and the effect of dietary intake. Techniques of nutritional assessment and counseling through dietary plans will be investigated. This course is designed especially for professionals who may be employed in physical fitness programs. **Prerequisite:** NUTR 280 or equivalent.

**NUTR/KIN 555. Theories and Practices of Weight Management.** 3 credits.
An examination of the physiological, psychological and environmental theories of obesity. Current trends in obesity research are examined. A case study and laboratories are utilized to provide students with practical experience in conducting a weight loss program. **Prerequisites:** BIO 270, BIO 290, NUTR 280 or permission of instructor.
NUTR 582. Nutrition and Metabolism. 3 credits.
A study of the nutrients, their roles in intermediary metabolism, the effects of genetic errors in metabolism, nutritional deficiencies and means of assessing nutritional status. Agencies and programs concerned with nutrition and health and current trends in nutrition research are emphasized. The development of an individual nutrition research project, collection and reporting of data is required. Prerequisite: NUTR 280, physiology, biochemistry and statistics.

NUTR 650. Nutrition Education and Counseling. 3 credits.
Review of philosophy and provisions of major nutrition education of current research in the field of dietetics. Techniques of planning, implementing and evaluating programs. Theories and techniques of nutrition counseling. Nutrition education and counseling experience will be provided in a variety of settings. Prerequisite: NUTR 384 or equivalent.

NUTR 651. Medical Dietetics Practicum. 3 credits.
The application of nutritional care to a variety of medical situations in a health-care setting. This is a six-month off-campus practicum in a clinical setting taken simultaneously with NUTR 656. Course will be graded on an S/U basis. Prerequisite: Admission into the dietetic internship.

NUTR 652. Nutrition Assessment. 3 credits.
Methods of assessing nutritional status of people in clinical and experimental settings. Prerequisite: NUTR 384 or equivalent.

NUTR 654. Current Topics in Foods. 3 credits.
In-depth study of a variety of current topics related to the United States and global food supply, food processing, food regulation, food marketing, and the relationship between foods and disease. Prerequisite: NUTR 446 or equivalent.

NUTR 655. Integrated Nutrition. 3 credits.
The biochemical and physiological processes involved in nourishing the body in health and in disease. Prerequisite: NUTR 482 or 582.

NUTR 656. Food Systems Management Practicum. 3 credits.
Food systems management in menu development, equipment and food procurement, cost control, food production and service, and personnel management. A six-month off-campus practicum in a clinical setting taken simultaneously with NUTR 651. Course will be graded on an S/U basis. Prerequisite: Admission into the dietetic internship.

NUTR 660. Research Methods in Dietetics. 3 credits. (Cross-listed with HTH 655.)
This course emphasizes skills in the initiation, conduct and interpretation of research, particularly that involving social science techniques applied to dietetics and health sciences. Emphasis is given to measurement issues, design, questionnaire development, survey techniques, field research, evaluation, quantitative (using SPSS) and qualitative analysis, and ethical issues. Prerequisite: Undergraduate or graduate-level statistics course.

NUTR 681. Directed Research in Dietetics I. 2 credits.
Advanced research in dietetics directed by a graduate advisory committee. Course will be graded on an S/U basis. Prerequisites: Unconditional admission status in the graduate program and HTH 655.

NUTR 682. Directed Research in Dietetics II. 2 credits.
Advanced research in dietetics research directed by a graduate advisory committee. Course will be graded on an S/U basis. Prerequisite: NUTR 681.

NUTR 695. Seminar and Research Interpretation in Dietetics. 1 credit.
Critical evaluation and interpretation of current research in the field of dietetics. Professional oral and graphic presentation of results obtained from research completed in NUTR 682 or HTH 700 required during the final semester in which the course is taken. May be repeated up to a total of two credits. Prerequisite: Undergraduate statistics.
**NUTR 697. Directed Research Continuance.** 1 credit.
Continued study, research and writing in the area of directed research project. Course may be repeated as needed, but does not count toward degree requirements. Course will be graded on an S/U basis.

**Physician Assistant Studies**

*Mr. James Hammond, P.A., Graduate Coordinator, Physician Assistant Studies*

Phone: (540) 568-8171  
Web site: [http://www.healthsci.jmu.edu/](http://www.healthsci.jmu.edu/)

**Mission**
The graduate programs in Health Sciences are committed to preparing students to become research-based critical thinkers in the health sciences arena. Specifically, these programs build upon the undergraduate health sciences programs by providing a more detailed knowledge base that is fortified by self-directed learning experiences and the development of practical research skills.

The Master of Physician Assistant Studies program prepares students for clinical positions as primary care physician assistants (PA). The course of study requires 24 consecutive months of work for students who have met the prerequisite requirements and been admitted to the program. Admission is limited and competitive. Students must be admitted to the College of Graduate and Professional Programs and to the PA master degree program via separate application processes.

Physician Assistants (PAs) are highly skilled medical professionals who have for over 35 years functioned as members of a team delivering quality healthcare. Working with physicians, PAs provide medical services traditionally performed by physicians. These services include taking medical histories, performing physical examinations, ordering and interpreting tests, diagnosing and treating medical conditions, educating and counseling patients, performing minor medical/surgical procedures, and, in most states prescribing medications. The PA’s duties are determined by physician supervision as defined by law.

PAs practice in the same settings as physicians, i.e., outpatient facilities, private and public clinics, managed care and other systems, and in rural and urban areas. The focus of the JMU concentration is primary care medicine.

**Accreditation**
The PA program is accredited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. Accreditation provides graduates eligibility to take the Physician Assistant National Certifying Examination (PANCE). Successful completion of the PANCE is required for graduates to be licensed and to practice.

**Admission Requirements**
To be considered for admission to the Master in Physician Assistant Studies a prospective student must

- Apply to and be accepted for admission to the Graduate College. See "Admission to the College of Graduate and Professional Programs."
- Submit scores from the Graduate Record Examination
- Have earned a bachelor degree from a regionally accredited college or university.
- Successfully complete the following specific undergraduate prerequisite course work at the “C”, 2.0 level or better prior to beginning the PA curriculum.

Within the last seven years:

- Human Physiology – one semester
- Human Anatomy – one semester
- Biochemistry – one semester
- Genetics – one semester
Within any number of years:
  Medical Terminology
A minimum of 1,000 hours of direct patient contact health care experience is required.

These hours may come from one experience or a combination of experiences and may be voluntary or paid work. Examples of health care professions that require direct patient contact include nurse, EMT or paramedic, corpsman, patient care technician, nurse’s aide, surgical assistant, clinic/medical assistant, respiratory technologist, radiology technologist, medical technologist, mental health worker, and clinical research assistant. Other professions and experiences not listed may also qualify as direct patient care.

Healthcare related professions that do not include hands-on patient contact are not considered toward meeting the health care experience requirement. These typically include lab technician, transporter, CPR or ACLS instructor, lifeguard, non-clinical research assistant, candy stripers, unit clerk, and others. Although desirable for other reasons, PA shadowing and student/intern experience do not count toward the required 1,000 hours of patient care experience. Please contact the PA program, if you have any questions regarding your healthcare experience.

Submit an application to the JMU PA program through the Centralized Application Service for Physician Assistants (CASPA). Information and application can be obtained online at www.caspaonline.org.

Application Deadlines
One cadre of students is admitted each year. Classes begin in May.

- For deadlines for application to the College of Graduate and Professional Programs, see "Admission to the College of Graduate and Professional Programs."
- For deadlines for application to the PA Program see either www.jmu.edu/healthsci or www.caspaonline.org. Applications to the program are due the preceding fall. Specific dates each year are available on the above-mentioned Web sites or by contacting the PA Program.

Application Evaluation Criteria
Candidates are evaluated through review of their written application. Superior candidates are invited to on campus interviews. The following characteristics, skills and accomplishments are assessed.

- Academic preparation (Overall GPA, Science GPA, Non-Science GPA, recent course work)
- Communication skills (Written application, personal essay, speaking and listening skills at interview)
- Career Plans / Concept of the PA Profession (Written application and interview)
- Health Care Experience (Written application and interview)
- Professionalism (Interview)
- Service to Society (Written application and interview)

Curriculum
All courses are required and must be taken in sequence. Students must be full-time and must take the curriculum in a consecutive twenty-four month period. Exceptions are rare and are granted only by the program director.

**Summer Session Year 1 (twelve weeks) Credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 513. Human Gross Anatomy with Clinical Applications</td>
<td>6</td>
</tr>
<tr>
<td>BIO 516. Pathophysiology I</td>
<td>4</td>
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<tr>
<td>PA 540. The Physician Assistant Profession</td>
<td>1</td>
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<tr>
<td>PA 510. Physical Diagnosis I</td>
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**Fall Semester Year 1**
BIO 517. Pathophysiology II 3
PA 630. Clinical Laboratory Medicine I 2
PA 511. Physical Diagnosis II 2
PA 532. Pharmacology for PAs I 3
PA 520. Clinical Medicine I 5
PA 551. Managing Medical Information I: Clinical Biostatistics 3

Spring Semester Year
PA 652. Managing Medical Information II: Clinical Prob. Solving. 3
PA 631 Clinical Laboratory Medicine II 2
PA 633 Pharmacology for PAs II 3
PA 622 Women’s Medicine 2 PA 623 Pediatric Medicine 2 PA 624 Behavioral Medicine 2 PA 621 Clinical Medicine II 5

Summer Session Year
PA 653. Managing Medical Information III: Research Design and Implementation
HTH 659 Health Care Environment 3
PA 671 Clinical Rotation I 2
PA 672 Clinical Rotation II 2
PA 673 Clinical Rotation III 2

Fall Semester Year
PA 625 Health Promotion & Disease Prevention 1
PA 643 Values in Primary Care 3
PA 674 Clinical Rotation IV 2
PA 675 Clinical Rotation V 2
PA 676 Clinical Rotation VI 2
PA 677 Clinical Rotation VII 2

Spring Semester Year
PA 642 Transition to Practice 1
PA 678 Clinical Rotation VIII 2
PA 679 Clinical Rotation IX 2
PA 670 Clinical Rotation X 2
PA 654 Managing Medical Information IV: Senior Project 2

Total Master of PA Studies Credits 82

Course Offerings
Physician Assistant

PA 510. Physical Diagnosis I. 3 credits.
This is the first in a two-course series that presents fundamental concepts in the physician assistant/patient relationship, skills needed to conduct complete medical histories and physical examinations of patients of all ages, and methodologies commonly used to communicate medical information. Prerequisites: Admission to Physician Assistant Program, or permission of Program Director.

PA 511. Physical Diagnosis II. 2 credits
This is the second in a two-course series that presents fundamental concepts in the
physician assistant/patient relationship, skills needed to conduct complete medical histories and physical examinations of patients of all ages, and methodologies commonly used to communicate medical information. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 520. Clinical Medicine I.** 5 credits.
This is the first of a two-course series that examines the etiology, presentation, diagnosis and treatment of diseases and disorders common to adults seen in primary care physician assistant practice. This series serves as preparation for the clinical rotations in internal medicine, family medicine, emergency medicine and surgery. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 532. Pharmacology for Physician Assistants I.** 3 credits.
This is the first of two courses that provide the base of information necessary for clinical prescribing of medications. It includes pharmacokinetics, pharmocodynamics and pharmacotherapeutics. Within each class of therapeutic drugs, the course examines drug actions, interactions, reactions, and contraindications. The course will also include principles of prescribing and patient compliance. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 540. The Physician Assistant Profession.** 1 credit.
This course explores the principles of the PA profession, its history and place in the spectrum of health care professions. Economic, legal and societal factors influencing the profession are also discussed. Prerequisites: Admission to Physician Assistant Program, or permission of Program Director.

**PA 551. Managing Medical Information I: Clinical Biostatistics.** 3 credits.
This is the first in a four-course series designed to provide the physician assistant student with skills to understand research design, analyze research information and apply it to clinical practice. Emphasis in this course will be placed on basic biostatistical concepts, literature searches and analysis. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 621. Clinical Medicine II.** 5 credits.
This is the second of a two-course series that examines the etiology, presentation, diagnosis and treatment of diseases and disorders common to adults seen in primary care physician assistant practice. This course focuses on the primary aspects of diseases and disorders seen in the fields of emergency medicine, dermatology and surgery. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 622. Women’s Medicine.** 2 credits.
This course provides an introductory knowledge base in women’s medicine. Through a series of presentations it prepares students for obstetric and gynecologic conditions encountered during clinical rotations. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 623. Pediatric Medicine.** 2 credits.
This course provides an introductory knowledge base in pediatric medicine. Through a series of presentations it prepares students for pediatric medical conditions encountered during clinical rotations. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 624. Behavioral Medicine.** 2 credits.
This course provides an introductory knowledge base in behavioral medicine. Through a series of presentations it prepares students for behavioral medicine conditions encountered during clinical rotations. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 625. Health Promotion and Disease Prevention.** 1 credit.
The course presents strategies that physician assistants employ in promoting health and well being among the people they serve. It also examines public health strategies focused on early discovery of disease, prevention of disease, and stopping the spread of disease. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 630. Clinical Laboratory Medicine I.** 2 credits.
This is the first of a two-course series that presents the clinical laboratory tests used to detect and monitor common diseases and disorders. It focuses on selecting and interpreting the appropriate tests for each body system as well as performing selected tests. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 631. Clinical Laboratory Medicine II.** 2 credits.
This is the second course in a two-course series that presents the clinical laboratory tests used to detect and monitor common diseases and disorders. It focuses on selecting and interpreting the appropriate tests for each body system as well as performing selected tests. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 633. Pharmacology for Physician Assistants II.** 3 credits.
This is the second of two courses that provide the base of information necessary for clinical prescribing of medications. It includes pharmacokinetics, pharmacodynamics and pharmacoanthenetics. Within each class of therapeutic drugs, the course examines drug actions, interactions, reactions, and contraindications. The course will also include principles of prescribing and patient compliance. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 642. Transition to Physician Assistant Practice.** 1 credit.
This course examines issues related to the shift from the role of a PA student to that of a practicing PA. Topics include medical liability and risk management, business aspects of clinical practice, credentialing processes, and career development. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 643. Values in Primary Care.** 3 credits.
This course provides an overview of professional ethics as they apply to primary care practice for physician assistants. The focus is on major principles and methodologies that guide clinicians in ethical decision-making as they encounter situations common to primary care practice. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 652. Managing Medical Information II: Clinical Problem Solving.** 3 credits.
This is the second in a four-course series designed to provide the physician assistant student with skills to understand research design, analyze research information and apply it to clinical practice. The emphasis in this course is placed on the use of evidence-based medicine in clinical decision-making. **Prerequisites:** Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 653. Managing Medical Information III: Research Design and Implementation.** 1 credit.
This is the third in a four-course series designed to provide the physician assistant student with skills to understand research design, analyze research information and apply it to clinical practice. In this course students will design an individual senior project that will be implemented and presented in PA 654. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 654. Managing Medical Information IV: Senior Project.** 2 credits.
This is the fourth in a four-course series designed to provide the physician assistant student with skills to understand research design, analyze research information and apply it to clinical practice. Utilizing a study question or research protocol generated in PA 653 students will collect and synthesize information culminating in a class presentation and paper suitable for publication. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 670. Clinical Rotation X.** 2 credits.
This is the tenth in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 671. Clinical Rotation I.** 2 credits.
This is the first in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 672. Clinical Rotation II.** 2 credits.
This is the second in a ten-course series that comprises the clinical rotation year. During the series students are assigned to clinical rotations in family medicine, internal medicine, obstetrics and gynecology, pediatrics, behavioral medicine, surgery, emergency medicine or an elective rotation. Students gain experience in clinical practice working with experienced, supervising clinicians. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 673. Clinical Rotation III.** 2 credits.
This is the third in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 674. Clinical Rotation IV.** 2 credits.
This is the fourth in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 675. Clinical Rotation V.** 2 credits.
This is the fifth in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and...
an elective. Students gain experience working with experienced, supervising clinicians. 

Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 676. Clinical Rotation VI.** 2 credits.
This is the sixth in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. 

Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 677. Clinical Rotation VII.** 2 credits.
This is the seventh in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. 

Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 678. Clinical Rotation VIII.** 2 credits.
This is the eighth in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. 

Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.

**PA 679. Clinical Rotation IX.** 2 credits.
This is the ninth in a ten-course series of clinical rotations. During the series students are assigned to two rotations in family medicine, two in internal medicine, and one each in obstetrics/gynecology, pediatrics, behavioral medicine, surgery, emergency medicine and an elective. Students gain experience working with experienced, supervising clinicians. 

Prerequisites: Admission to the Physician Assistant Program and successful completion of all previous courses in the curriculum, or permission of the Program Director.
History

Dr. Michael J. Galgano, Department Head

Dr. Jacqueline B. Walker, Graduate Coordinator

For information, call (540) 568-6132
Web site: http://www.jmu.edu/history

Professors

Associate Professors
S. Guerrier, R. Meixsel, J. Walker

Assistant Professors
K. Borg, P. Dillard, K. Hardwick, E. Janik, L. King, G. Lanier, S. Reich, M. Seth

The Department of History offers the Master of Arts degree with a major in history.

Mission

The Graduate Program in History at James Madison University offers concentrations in European, American, or Local/Regional/Public History. It permits students to deepen their understanding, acquire knowledge, and develop critical skills necessary for advanced research and writing in history. Through a blend of courses and internships, the program enhances levels of professional competence that demand mastery of the techniques of research, critical thinking, and careful oral and written communication. Graduates of the program are able to demonstrate an ability to understand and perform scholarly research with cross-disciplinary perspectives. We see this as essential since it provides important skills designed to meet the changing needs of our students in society. To ensure that our mission is kept in focus, we require graduates to demonstrate an advanced knowledge in their specific areas of study.

These often-interrelated goals are achieved through coherent, orderly programs of study encompassing investigation and/or supervised practical experience. As part of a comprehensive university supported by public funds, the James Madison Graduate Program in History is committed to serving the needs of the Commonwealth of Virginia and the region. The Department of History’s Graduate Program encourages students to develop strengths in critical and creative thinking, communication, and applied skills. A balanced combination of theoretical and practical studies prepares the successful graduate for advancement in the workplace, future educational opportunities, informed participation in today’s increasingly more complicated society, and leadership in community affairs.

The Graduate Program in History serves multiple audiences. Since historians today practice their discipline in a variety of careers, we have expanded the more traditional tracks in American and European to include a concentration in Local/Regional/Public History. The concentration exposes students to the broad range of skills and issues associated with public history while providing them with a solid advanced background in history. Students also augment their academic training through internships in a range of public history settings including museums, archives, government agencies, libraries, historic preservation organizations, businesses, contract history firms, cultural resource management firms, and historic sites.
The Department of History Graduate Program actively supports all university and college goals and objectives.

The program offers an opportunity for concentration in three fields of history.

- European history
- United States history
- Local/Regional/Public history

All applicants must submit two letters of recommendation, one of which is from a professor in the history major, and a brief essay (approximately 500 words) identifying your area of intended specialization and long-range career aspirations.

Admission requirements are completion of at least 24 undergraduate credit hours in history, or their equivalent, with approximately a "B" average or higher, and submission of satisfactory scores on the Graduate Record Examination General Test (GRE).

Minimum departmental requirements for the Master of Arts degree with a major in history are as follows.

- Thirty graduate credit hours in history.
  - Thesis Option: Students must complete a thesis for 3 credit hours.
  - Non-Thesis Option: Students must complete 30 credit hours with at least 6 credit hours of course work outside the field of concentration (3 credit hours must be in a non-western area).
- Completion of the second year of a college course in a modern foreign language with a grade of "C" or above, or successful completion of a reading examination approved by the history department in a modern foreign language.
- Successful completion of an oral comprehensive examination in one of the three fields of concentration.
- At least 6 credit hours of course work outside the field of concentration of which 3 credit hours must be in a non-western area.

Students seeking admission to the Master of Arts with teaching licensure must contact the School of Education.

The minor in history in the Master of Education degree requires 12 credit hours of graduate courses in history.

Prerequisites for enrolling in graduate courses in history are GHIST 225, U.S. History, or equivalent, for courses in U.S.; and General Education history, or equivalent, for courses in European, African or Asian history.

**Program Guide**

All Master of Arts students are required to complete the following courses.

**First Year, Fall Semester**

- HIST 671. Seminar in Historical Research Methods.
- HIST 672. Historiography

**First Year, Spring Semester**

- HIST 673. Graduate Research and Writing Seminar.

In addition to the semester-specific courses, students must complete one of the Non-Western history courses (Africa, Asia or the Middle East).

**Course Offerings**

**HIST 600. Seminar in U.S. History: Early Period.** 3 credits.

A topical approach to the study of early U.S. history. Topics might include Colonial America, the American Revolution, the Market Revolution, Civil War and Reconstruction, American Intellectual History or any pertinent topic falling within the
pre-1877 period. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

**HIST 601. Workshop in History.** 1-3 credits.
Intensive study of topics of current interest and demand. Primarily designed for history and social studies teachers. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

**HIST 602. Workshop in Colonial American Life.** 3 credits.
A comparative study of life in 18th century Virginia and Massachusetts. Colonial Massachusetts is studied through the use of printed materials, films and lectures. Published sources, lectures and a four-day study visit to Colonial Williamsburg are used for the study of Virginia. Supplemental fee required.

**HIST 603. Workshop in Civil War Virginia.** 3 credits.
This workshop examines the impact of the Civil War upon Virginia and her citizens. It explores the secession crisis, the revolution in firepower that forced changes in battlefield tactics and war aims and the development of “hard war.” A four-day battlefield tour will reinforce ideas discussed in the classroom. Supplemental fee required.

**HIST 605. Seminar in U.S. History: Recent Period.** 3 credits.
A topical approach to the study of recent U.S. history. Topics might include American Science and Technology, Industrialism, 20th-Century Diplomacy, Black Nationalist Thought, 20th-Century American Military History or any pertinent topic falling within the post-1865 period. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

**HIST 610. Seminar in European History: Early Period.** 3 credits.
A topical approach to the study of early European history. Topics might include Ancient History, Medieval Europe, Tudor-Stuart England, Renaissance and Reformation, the Era of the French Revolution or any pertinent topic falling within the pre-1815 period. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

**HIST 611. Colonial America.** 3 credits.
An interpretative survey of England’s mainland colonies from 1558-1776.

**HIST 613. The Anglo-American Constitutional Tradition.** 3 credits.
Surveys Anglo-American political and constitutional traditions. Emphasizes the evolution of 17th and 18th century British constitutionalism, its transferal to the British North American colonies, and the development of the first national and state constitutions in the United States.

**HIST 615. Seminar in European History: Recent Period.** 3 credits.
A topical approach to the study of recent European history. Topics might include Europe in the 19th century, Europe between the World Wars, Europe during the Cold War, Russia or any pertinent topic falling within the post-1789 period. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

**HIST 620. U.S. History, 1763-1800.** 3 credits.
An interpretive study of the political, economic, social and cultural history of the United States from the French and Indian War through the Federalist period.

**HIST 622. U.S. History, 1789-1848.** 3 credits.
An interpretive study of the political, economic, social, intellectual and cultural history of the United States from the ratification of the Constitution through the Mexican-
American War.

HIST 625. Civil War and Reconstruction. 3 credits.
A study of the background, development, personalities and aftermath of the Civil War. Special attention is given to the coming of the war and different explanations of its causes, and to the policies and significance of Reconstruction, with varying interpretations thereof.

HIST 628. American Workers in the Industrial Age, 1877-1948. 3 credits.
This seminar examines what contemporaries called the Labor Problem from the strikes of 1877 to the accord between GM and the UAW in 1948. It explores the impact of industrialization, race and gender, consumerism, the New Deal and two world wars on the lives of American workers and their unions.

HIST 630. The Gilded Age. 3 credits.
An interpretative study of U.S. history from the conclusion of the Civil War until the assassination of William McKinley, with special emphasis on industrialization, urbanization, western and overseas expansion, early reform movements and politics.

HIST 631. Reform, World War and Prosperity. 3 credits.
An interpretative study of U.S. history from the rise of Theodore Roosevelt through the 1920s. Emphasis is placed on the reform movements of the period and the problems and issues generated by the nation's emergence as a world power and an industrial, urban society.

HIST 632. Depression, War and Cold War. 3 credits.
An interpretative study of U.S. history from the onset of the Great Depression in 1929 through the inauguration of John F. Kennedy in 1961. Emphasis is given to the New Deal, World War II, and the early years of the Cold War.

HIST 633. Reform, Upheaval and Reaction. 3 credits.
An interpretive study of U.S. history from the election of John Kennedy in 1961 to the present. Emphasis is given to the Kennedy-Johnson administrations, Vietnam, the counterculture and student movement, Watergate and the Reagan years.

HIST 637. Practicum: Selected Topics in Local and Regional History. 3 credits.
Selected historical topics relating to the Shenandoah Valley and surrounding region are studied in depth. Students will undertake primary research and collaborate on final project. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

HIST 640. Graduate Internship in History. 3 credits.
Provides students with practical experience in using historical skills in a public or private agency. Periodic student reports and seminars are required. This course may be repeated for credit. Prerequisite: Permission of department head.

HIST 650. Seminar in World History. 3 credits.
A topical approach to the study of history in areas aside from Europe and the United States. Topics might include Latin America, Modern Japan, Modern China, Modern Africa, Islamic World or any pertinent topic falling within parameters of concentration. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor.

HIST 653. Patterns of World History. 3 credits.
This course introduces students to the literature, concepts, themes and methodology of world history, a sub-field of history that seeks to compare experiences across regional, area, cultural and temporal boundaries, to look at cross-cultural interactions and to examine large scale patterns that have shaped history on a global scale.

HIST 655. World Political and Social Thought to Early Modern Times. 3
A study of the most significant political and social ideas from around the world. Emphasis will be both on the classics and the popular ideas from Western Asia, China, Greece, India, Rome, Japan and the developing states of Europe from ancient times through the 18th century.

**HIST 660. Modern Japan.** 3 credits.
The development of Japan from around the mid-19th century to the present. Attention is given to the collapse of isolation, the end of the Shogunate, the creation of a modern state, the years of party government, the rise of militarism, the Pacific war, the occupation and the new Japan.

**HIST 661. Seminar in Marxist-Leninist Theory.** 3 credits.
A study of the most significant ideas concerning politics, society, economics and philosophy which have shaped Communism and Marxist varieties of socialism.

**HIST 662. The Rise and Fall of Nazi-Germany, 1918-1945.** 3 credits.
An advanced study of the period of Nazi domination in Germany covering the Weimar Republic, the rise of the NSDAP, the Third Reich and World War II. The nature of totalitarianism, the character of Adolf Hitler and the general Weltanschaaung of Germany under the Third Reich are emphasized.

**HIST 663. Tudor-Stuart England.** 3 credits.
A study of the economic, intellectual, political and religious development of the English people from 1485 to 1714, with special attention to the constitutional struggles of the 17th century.

**HIST 664. Renaissance and Reformation.** 3 credits.
A study of High Medieval civilization as an introduction to the history of Modern Europe. Attention is given to the Italian and Northern Renaissance, the fragmentation of Western Christendom, the intellectual impact of Luther and Calvin on Western thought, and the structure of Tudor despotism in England.

**HIST 666. The Family, 1400-1800.** 3 credits.
An examination of the bibliography, methods and substance of family history. Emphasis will be on sources, structure, patterns of change and continuity, and stages of family life to the Industrial Revolution.

**HIST 670. Modern Africa.** 3 credits.
A historical analysis of the major themes in modern African history since the colonial era.

**HIST 671. Seminar in Historical Research Methods.** 3 credits.
Systematic presentation of the theories and approaches to historical research, including detailed analysis of historiography past and present. Required of all first year graduate students.

**HIST 672. Historiography.** 3 credits.
An intensive reading colloquium focused on selected historiographical issues, topics, concepts, methodologies and interpretations of European history from the Renaissance to the end of the 20th century. Readings in American titles will cover issues and topics from the Colonial period to the end of the 20th century. Issues and readings will change with each offering. Required of all first year graduate students.

**HIST 673. Graduate Research and Writing Seminar.** 3 credits.
An intensive research and writing seminar focused on the process of conceptualizing, researching, writing and refining historical research papers grounded in primary sources. Emphasis will be on evaluation of sources, interpretation of evidence, refinement of presentation and development of professional standards of criticism. Required of all first year graduate students.
**HIST 675. Soviet Russia.** 3 credits.
A study of Soviet Russia from the 1917 Revolution to the present. Topics include the Revolution and Civil War, the cultural revolution of the 1920s, collectivization, the purges, World War II and the postwar emergence of the Soviet Union as a world power.

**HIST 677. Medieval Europe.** 3 credits.
Attention is focused on Europe in the Middle Ages, with a concentration on social and intellectual aspects and on the development of parliamentary institutions.

**HIST 678. Eastern Europe.** 3 credits.
A study of the lands between Germany and Russia, from the Baltic to the Balkans. Emphasis is on the Hapsburg Empire and its successor states, the origins of the World Wars, the post-World War II communist governments, and the cultural and intellectual contributions of the Eastern European peoples.

**HIST 680. Modern China.** 3 credits.
China since 1840, with special emphasis on China’s response to the West, the disintegration of imperial China, the abortive experiments in republicanism, the origin and nature of Chinese communism, China under Mao and post-Mao developments.

**HIST 681. Early Modern Europe: The New Worlds of Exploration and Science.** 3 credits.
A study of the major changes in world view brought on by exploration and science in the 15th, 16th and 17th centuries in Europe. Attention is given to the causes of each movement as well as the individuals and the technology involved.

**HIST 683. Baroque and Revolutionary Europe, 1648-1815.** 3 credits.
A study of the unfolding of European civilization from the Baroque through the Napoleonic era. Attention is given to the Old Regime and its institutions, the causes of popular revolts, the Enlightenment, the beginnings of industrialism and urbanism, and the impact of the French Revolution upon Europe.

**HIST 684. Nineteenth-Century European Civilization, 1815-1914.** 3 credits.
An interpretive study of European history from the Congress of Vienna to the outbreak of World War I. Particular attention is given to the intellectual climate of the period, with emphasis on liberalism, nationalism, socialism and nihilism.

**HIST 685. The Arab Middle East, 1945 to Present.** 3 credits.
A survey of the special problems which have beset the Arab Middle East since World War II. Special emphasis will be given to Palestinian Nationalism and to the PLO, to the origins of civil conflict in Lebanon, to Iraqi and Syrian Baathism, and to the revival of Islamic fundamentalism.

**HIST 686. Europe Since 1914.** 3 credits.
An interpretive study of European history from World War I to the Cold War, with special emphasis on the revolutions of 1917-1919, the rise of totalitarianism, the origins of World War II and the continuing crisis of values.

**HIST 687. World War II.** 3 credits.
An examination of the origin, conduct and immediate aftermath of World War II in Europe and in Asia. Attention is given to Japan’s Pacific war, Hitler’s war in Europe and the ultimate victory of the Allied “Grand Alliance.” The major military campaigns are discussed as are collaboration, resistance and the War crimes trials.

**HIST 690. Special Topics in History.** 3 credits.
Selected topics are studied in depth. Topic and professor offering the course will change with each offering. This course may be repeated when content is different. See e-campus for topic and professor. 
Prerequisite: Permission of department head.

**HIST 691. Editing Historical Documents.** 3 credits.
A seminar in the techniques of analyzing manuscript collections in order to create an
edition of historical documents. Study will address the theory and practice of historical documentary editions, including collecting, selecting, transcribing, annotating, proofing, illustrating, indexing and publishing.

HIST 692. American Material Culture. 3 credits.
A broad introduction to the multidisciplinary “field” of material culture studies through readings, written assignments, in-class exercises and field trips. The course introduces ways of looking at and learning from objects and examines how scholars from several disciplines have used material culture in their work.

HIST 693. Historic Preservation. 3 credits.
An introduction to the philosophy and technique of historic preservation. It examines the Secretary of the Interior’s guidelines for restoration, state and National Register forms and procedures, historic architecture, structural analysis, restoration techniques as well as the business aspects of historic preservation projects.

HIST 694. Introduction to Museum Work. 3 credits. (Cross-listed as ART/ARTH 594.)
A study of the philosophy and practice of museum work. Emphasis on museum administration, conservation, exhibition and education. Provides background for internships and employment in the field.

HIST 696. Introduction to Public History. 3 credits.
The course will provide an introduction to the varied and interdisciplinary “field” of Public History - such as community/local history, historic preservation, archives, historical archaeology, museum studies, business and policy history, documentary editing and publishing, and documentary films - through readings, class discussions, occasional guest speakers, and occasional field trips.

HIST 697. Genealogical Research and Family History. 3 credits.
Focus is on the methodology associated with genealogical research, the evaluation of sources, methods of documentation, the availability of on-line resources, and the analysis of evidence. The course will require that those enrolled utilize local and state repositories and work with local research topics as well as with personal data. Personal genealogical information should be secured at home before the start of the semester.

HIST 698. Comprehensive Continuance. 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

HIST 699. Thesis Continuance. 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

HIST 700. Thesis. 3 credits.
This course is graded on a satisfactory/unsatisfactory (S/U) basis.
Integrated Science and Technology

Dr. Ronald G. Kander, Department Head
Dr. Barbra Gabriel, Graduate Coordinator

For information call (540) 568-2796 or e-mail gabriebl@jmu.edu
Web site: http://www.isat.jmu.edu

Professors

Associate Professors

Assistant Professor
J. Noftsinger

Instructor
J. Wilson

Mission
The mission of the Integrated Science and Technology Masters Program is to provide diverse and experienced professionals with an educational experience that facilitates in-depth knowledge and skills across a variety of integrated scientific and technological disciplines utilizing a systems approach.

Major components of the program are:

- The curriculum and teaching methods are in constant touch with the realities of the world of work.
- The curriculum is aimed at developing a graduate with strong collaborative and communicative skills.
- The curriculum develops skills in information technology and knowledge management that are applicable to a broad range of professional careers.
- The curriculum is flexible and amenable to change in order to remain current with the nation's developing critical technologies and with the imperatives of a changing national economy.
- The graduate will be educated to think in terms of solving technologically based problems from a systems perspective, including non-technological elements such as politics, economics, and ethics.

The Integrated Science and Technology program offers a program of study that leads to the Master of Science degree in Integrated Science and Technology. The program offers a solid foundation in applied science and technology with a distinct theme in systems. Students acquire quantitative tools for applied systems analysis and design, and for the management of technological issues encountered in contemporary professional practice. The curriculum stresses the use of computers for modeling and simulation, for the management of information and technology, and for research methodology. The curriculum is unique in its incorporation of social, legal and political aspects of science and technology.

Students focus on selected areas of science and technology with practical, in-depth
exposure to the size and complexity of contemporary problems. Depth will be provided through thesis or project study in one of several strategic technology areas distilled from the national critical technologies. These areas include biotechnology, information technology, manufacturing, energy and the environment. Such a class of graduates is unique in having

- breadth of knowledge and skills across a variety of scientific and technological disciplines;
- formal training in collaborative and leadership methods, problem solving techniques from many disciplines, and use of the computer as a problem solving tool; and
- the ability to integrate scientific and technological factors with political, social, economic, and ethical considerations in problem solving.

By developing a systems approach to problem solving, the graduate will be skilled in identifying and capitalizing on the fact that most problems encountered in business or government are inherently systems problems. Characteristics of such systems involve complex interplay of technical, social, political, regulatory, and business issues; multiple, interdependent groups, units, or organizations working in coordination with sometimes conflicting needs; rapid flow of information between individuals and groups; multi-step processes for making products or decisions with ample opportunity for feedback and bottlenecks; and numerous local random events and disturbances that profoundly affect the performance of the overall system.

**Integrated Science and Technology**

The 30-credit hour curriculum consists of 15 credit hours of common core courses followed by 15 credit hours of elective courses tailored to the individual course of study. The core component reinforces the student’s foundation in science, explores methods of research and analysis in a multidisciplinary environment, and imparts sensitivity to the social context of applying science and technology.

As part of the curriculum, students will be required to complete a six-credit thesis or capstone project. This project/thesis will require students to conduct research, evaluate potential solutions, and implement the selected solution.

**Entrance, Continuation and Exit Requirements**

The program is targeted for a broad audience. The admission process will seek a diverse student body with grounding in basic science and experience in business, industry, government or education. An entrance expectation is that the applicant will have completed a minimum of 15 semester credit hours in the natural sciences and mathematics at the undergraduate level. Hence, admission to the program may be granted to students with a variety of undergraduate majors in areas such as the physical sciences, computer science, selected areas of education, engineering, operations research, and information and decision sciences. Admission decisions will be collectively based on the following considerations.

- Graduation from a regionally accredited college or university
- Undergraduate grade point average
- Test scores from Graduate Record Exam (GRE)
- Official transcripts from all colleges or universities attended
- Industrial, business, government, or educational experience as indicated by current vita

Applicants are requested to submit a cover letter to the Graduate Coordinator as a supplement to application. Letters of recommendation are strongly encouraged. Correspondence between the applicant and the ISAT Graduate Committee is strongly encouraged.

Enrolled students will be provided with the *ISAT Graduate Student Handbook*. This document provides background information about the university, the college, ISAT, and
the ISAT Masters Curriculum. It is intended to facilitate progress through the program by identifying the skills all entering students should have, and as a guideline for progress.

All full-time students must attend an orientation held the working day prior to the start of term. Part-time students are strongly encouraged to attend the orientation. The purpose of this workshop is to define the guidelines that will facilitate successful completion of the degree. ISAT faculty and Masters’ candidates will discuss strategies for success, group dynamics, and provide tutorials in selected skill areas.

Graduation requires successful completion of 30 graduate credit hours in a sequence approved by the student’s graduate adviser with a GPA of 3.0 or better, and with no more than six credit hours of C’s. Time limitations for completion of the program will follow College of Graduate and Professional Programs guidelines.

**Curriculum Components and Details**

The 30 credit-hour curriculum for the Master’s Degree in Integrated Science and Technology includes a 12-15 credit core program consisting of 4-5 courses in integrated science and technology; 12 graduate elective credits approved by the adviser; and 6 credits of capstone project or thesis research.

The minimum requirements for the program and program course descriptions follow.

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<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ISAT 510. Foundations in Integrated Science and Technology 1</td>
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<tr>
<td>ISAT 610. Social Context of Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>ISAT 620. Research Methods in a Multidisciplinary Environment</td>
<td>3</td>
</tr>
<tr>
<td>ISAT 630. Computer Modeling and Simulation</td>
<td>3</td>
</tr>
<tr>
<td>ISAT 640. Information and Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives</td>
<td>12</td>
</tr>
<tr>
<td>ISAT 690/700. Capstone Project/Theis</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>30-33</td>
</tr>
</tbody>
</table>

1The first core course, ISAT 510, is intended for students requiring additional preparation in science, its methods, and multi-disciplinary problem solving.

As part of the strategic area, the student will be required to complete a six-credit thesis or capstone project. This project/thesis will involve research, investigation and development undertaken by students individually and/or as part of project teams.

To complete the program in one year, students must accomplish two, 12-hour semesters which represents a course overload. A student is encouraged to complete two core courses and two electives per semester. Six hours of thesis, ISAT 700, will be completed in the summer following the second semester.

**Course Offerings**

**ISAT 501. Workshop in Technology.** 1-3 credits.

Intensive study of special topics in technology of relevant interest. May be repeated for credit when content is different.

**ISAT 510. Foundations in Integrated Science and Technology.** 3 credits.

This course introduces the student to the fundamental concepts of science and the methodologies required for using an integrated problem-solving approach in the
technical area. ISAT graduates are ineligible.

**ISAT 515. Energy Systems.** 3 credits.
This course will present an overview of energy generation and distribution technologies that are in use or under development. Selected technologies will be covered in detail including the underlying scientific principles. In addition, students will study tools and techniques used to measure, control, and analyze energy consumption.

**ISAT 525. Environmental Systems.** 3 credits.
This course covers the basics of environmental pollution, processes, and control technologies. Three major areas of environmental concern (air, water, and waste) are addressed. Environmental risk and decision making are discussed. Topics are presented in an integrated manner in the context of the regulatory programs. Participation in environmental projects such as impact assessment, site remediation, water quality management, air quality monitoring are required.

**ISAT 530. Manufacturing Systems.** 3 credits.
This course covers systematic and analytical treatment of manufacturing systems to identify opportunities for improving existing systems, to design more effective systems, and to improve decision-making processes in manufacturing. Topics include manufacturing systems; tools for automation and integration in manufacturing; automated process planning; technology change and strategies for implementing new technologies; and others.

**ISAT 540. Information and Technology Management Systems.** 3 credits.
This course focuses on the representation, manipulation, storage, and retrieval of data, information and knowledge from both a historical and contemporary perspective. Students will be introduced both to programming skills and also to introductory concepts in database design and development. The course will stress aspects of data quality, privacy, and security

**ISAT 550. Biotechnology Systems.** 3 credits.
This course is an intensive survey of the scientific foundations of biotechnology. Specific topics include the history, theory, and applications of recombinant DNA technology, genetic engineering, transgenic organisms, and the role of biotechnology in society.

**ISAT 551. Bioinformatics.** 3 credits.
The amount of DNA sequence data being collected today is increasing rapidly. The student will learn, through lectures and hands-on laboratory exercises, a compendium of algorithms that can search for sequence similarities, create alignments for finding consensus sequences, model three-dimensional structures and more. **Prerequisites:** ISAT 351, ISAT 454 and ISAT 340 (or their equivalents), or permission of the instructor (requires knowledge of Molecular Biology and database technology).

**ISAT 580. Readings and Research.** 1-3 credits.
This course will allow graduate and advanced undergraduate students to undertake intensive study of selected topics that are of special interest. May be repeated when content changes. **Prerequisite:** Permission of instructor.

**ISAT 610. Social Context of Science and Technology.** 3 credits.
Critical perspectives on the economic and political systems as they affect scientific research and technological activity in the U.S. and the world. Case studies of major public policy debates involving science and technology. Identifying institutional players and their value commitments, describing political relationships among players, and designing dynamic solutions to social context dilemmas.

**ISAT 620. Research Methods in a Multidisciplinary Environment.** 3 credits.
An introduction of applied systems analysis approach to problem solving in a multidisciplinary context. Applications taken from biotechnology, energy, environment, health, information management, and manufacturing. Topics include introduction to
systems analysis and its application to social systems, technological systems, and systems in nature; systems characterization and optimization; advanced project management.

**ISAT 630. Computer Modeling and Simulation.** 3 credits.
Use of simulation tools to understand and optimize commonly occurring systems in the concentration areas. Development of simulation models, validation of models, and use of models to aid decision making. Topics include: applicability and limitations of simulation models; the model-building process; discrete-event models; dynamic models; deterministic and stochastic models; system optimization and validation.

**ISAT 640. Information and Technology Management.** 3 credits.
This course focuses on the acquisition, representation, storage, retrieval, and distribution of data, information and knowledge from both a historical and contemporary perspective. It places special emphasis on IKM technology in science and technology and the information economy, the management of data, information, and knowledge as critical enterprise assets. Students will study computer systems as tools for information and knowledge management and examine ethical, legal, and social issues in the management of data, information, and knowledge, including intellectual property, privacy, and security.

**ISAT 650. Advanced Integrated Science and Technology.** 3 credits.
This course focuses on applied science and technology applications for K-12 teachers and industry trainers. Students will develop and assess sources of information on applied science and technology and develop inquiry-based activities to incorporate new issues in applied science and technology into existing curricula.

**ISAT 651. System Requirements Analysis.** 3 credits.
This course will introduce students to the theory and practice of system requirements analysis and definition. Students will explore issues surrounding stakeholder identification and interaction, needs assessment, prototyping, and technical requirements specification. Consideration will be given to various aspects of system requirements, including human factors analysis, traceability, testability, and validation.

**ISAT 652. Regulatory Issues.** 3 credits.
The course will introduce the policy process affecting regulation and deregulation of various industries. Study of the theory behind and the institutional forms of regulation will be supplemented by case studies of specific industries. The course will also look at international politics and trade as they affect regulatory regimes globally. Prerequisite: ISAT 610.

**ISAT 653. Quantitative Systems Analysis.** 3 credits.
Focuses on the life-cycle model of systems design and development. Includes concepts related to data modeling, economic evaluation, optimization methods, human factors, queuing theory, system test and evaluation, and design validation techniques. Object-oriented analysis and design considerations emphasized. Prerequisite: ISAT 630.

**ISAT 654. Advanced Technology Management.** 3 credits.
This course will introduce students to methods, tools, and techniques for effective management of technology development and application including management of technology within a company; R&D management; Test and Evaluation procedures and metrics; investment strategies; intellectual property issues; fostering entrepreneurialship; managing innovation; and technology transfer. The course will also address managing technology as a tool, e.g., equipment modernization. Prerequisite: ISAT 640.

**ISAT 655. Technology Assessment.** 3 credits.
This course will introduce students to the theory and methods of technology assessment and transfer. Students will apply techniques such as risk analysis, cost-benefit analysis, forecasting, trend impact analysis, and technology sequence analysis to assess the impacts of new technologies on society. In addition, students will study
the process of technology innovation, diffusion, and transfer in the context of both developed and developing nations. Prerequisite: ISAT 620.

**ISAT 656. Systems Design Methodology.** 3 credits.
This course introduces applied systems analysis in a multidisciplinary context. The course introduces methods for planning, implementing, and evaluating management information systems. Topics include data and process modeling, requirements definition, design synthesis, verification, analysis, and control tools. Projects cover applications in biotechnology, energy, environment, health, information management, and manufacturing. Prerequisite: ISAT 620 or permission of instructor.

**ISAT 657. Management Information Systems.** 3 credits.
This course examines the organizational and technological foundations of information systems in a production operations setting. Topics include selecting and implementing tools and systems, database management, information integration, production planning and execution systems, supply chain integration and management and managing system security. Prerequisite: ISAT 640 or permission of instructor.

**ISAT 658. International Contexts of Science and Technology.** 3 credits.
This course will make students aware of the global nature of scientific and technological decision-making and sensitive to the impact of culture on science and technology issues. Research and development system of the United States is placed in a global context. A comparative study of the R&D systems around the world is done. International technical issues, where solutions transcend political boundaries, are covered.

**ISAT 680. Reading and Research.** 1-3 credits.
Opportunity for supervised reading and research in areas of special interest to the student. Reading and research may be done only in the major field of study.

**ISAT 690. The Capstone Project.** 6 credits.
The required capstone project for all non-thesis graduate students. Emphasis will be in the student’s designated strategic area, but integrated with at least one other area. The project/thesis will report the results of a project, investigation, or development undertaken by the student individually or as part of a project team.

**ISAT 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as necessary.

**ISAT 699. The Capstone Project/Thesis Continuance.** 2 credits.
Students completing registration for the maximum number of hours of project credit are required to register for continuance each semester, including summer, until they have received their degree. Continuance credits carry no credit hour production and do not count toward graduate program requirements.

**ISAT 700. Thesis.** 6 credits.
A research thesis with an emphasis in the student’s designated strategic area, but integrated with at least one other area. The thesis will report the results of original research undertaken individually by the student.
Kinesiology and Recreation Studies

Dr. Michael Goldberger, School Director
Dr. M. Kent Todd, Graduate Coordinator

For information, call (540) 568-6145
Web site: http://www.jmu.edu/kinesiology

Professors
J. Flohr, M. Goldberger, J. Williams

Associate Professor
L. Ham, P. Kellers, M. Saunders, K. Todd

Assistant Professors
M. Slattery, C. Sidman, J. Singer

Mission
The School of Kinesiology and Recreation Studies is dedicated to the development of future leaders in professions that maximize the potential of individuals and society through exercise, sport and leisure activities. Graduate programs in the school include: exercise science, sport and recreation studies, and physical education.

Program goals are to help students:

- Identify and describe important issues relevant to exercise science, sport, recreation and physical education.
- Educate others about the relevance of exercise, sport and leisure to individuals and to society.
- Develop and administrate safe, effective and scientifically based physical activity, sport and leisure programs that address individual, community and societal needs.
- Enable students to evaluate the quality of information germane to the disciplines of physical activity, sport and leisure.
- Develop the skills needed to conduct quality research.
- Conceive a cognate area of study within the professional field in which they intend to work.

The School of Kinesiology and Recreation Studies offers a 33-credit hour Master of Science degree with concentrations in exercise physiology, nutrition and physical activity, fitness specialist, athletic administration and coaching, and sport and recreation management. Each concentration offers either a thesis or non-thesis option. The school also offers a five-year program leading to a Master of Arts in Teaching (M.A. T.) designed for initial licensure to teach physical and health education.

In all programs, courses must be selected with the approval of the major and minor advisers in accordance with the professional goals of the student. Students electing a major or minor in kinesiology and recreation studies are expected to have satisfactory Graduate Record Examination scores and adequate undergraduate preparation including at least one course in a cognate area of the discipline.

Some undergraduate courses may be taken concurrently with graduate work.

Master of Science Concentrations
Exercise Science: Exercise Physiology
This 33-credit hour Exercise Science program leads to a Master of Science degree with a major in kinesiology and a concentration in the area of exercise physiology. Students in this program receive background preparation necessary for doctoral work in exercise physiology as well as expertise in physiological testing, exercise prescription and research. Graduates of this program have been successful in pursuing advanced degrees in exercise physiology and/or have been placed as exercise physiologists in the fitness/wellness industry including cardiac rehabilitation settings. Program goals were developed in conjunction with the knowledge, skills and abilities identified by the American College of Sports Medicine as essential for successful professional preparation. All students are required to do directed research, however students may select either a thesis or non-thesis option.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 542. Exercise Programs for Special Populations</td>
<td>3</td>
</tr>
<tr>
<td>KIN 547. Principles and Strategies of Strength Development</td>
<td>3</td>
</tr>
<tr>
<td>KIN 644. Metabolic and Cardiorespiratory Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 645. Muscular, Hormonal and Environmental Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 650. Exercise Testing, Evaluation and Prescription</td>
<td>3</td>
</tr>
<tr>
<td>KIN 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MATH 522. Statistics for Research</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>3-6</td>
</tr>
<tr>
<td>KIN 697. Directed Research in Kinesiology</td>
<td></td>
</tr>
<tr>
<td>KIN 700. Thesis</td>
<td></td>
</tr>
<tr>
<td>Approved electives</td>
<td>6-9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

**Exercise Science: Fitness Specialist**

This 33 credit hour program leads to a Master of Science degree with a major in kinesiology and a concentration in fitness specialist. The program is designed to prepare students to work at all levels in the fitness/wellness industry, including program administration and exercise testing and prescription. Graduates of this program have been placed in settings such as corporate, commercial, hospital-based and community fitness/wellness programs. Program goals were developed in conjunction with the knowledge, skills and abilities identified by the American College of Sports Medicine as essential for successful professional preparation in the fitness/wellness area. All students are required to do directed research, however students may select either a thesis or non-thesis option. An internship is also required in this program.

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 542. Exercise Programs for Special Populations</td>
<td>3</td>
</tr>
<tr>
<td>KIN 547. Principles and Strategies of Strength Development</td>
<td>3</td>
</tr>
<tr>
<td>KIN 644. Metabolic and Cardiorespiratory Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 645. Muscular, Hormonal and Environmental Aspects of Exercise</td>
<td>3</td>
</tr>
</tbody>
</table>
Exercise Science: Nutrition and Physical Activity

This interdisciplinary program has been planned for persons with an undergraduate degree in kinesiology, dietetics, including registered dietitians, or an approved area, and is designed for individuals interested in nutrition in exercise performance settings. Courses in nutrition, exercise physiology, human anatomy and physiology are prerequisites for admission. Students enrolled in this 33-credit hour program must declare a major in either health sciences/dietetics or kinesiology with a concentration in nutrition and physical activity, and will be assigned an adviser in both departments.

A thesis or directed research on a selected topic in nutrition and exercise is required. Although this program does not lead to the RD status by the American Dietetic Association, students may obtain this status by completing additional requirements. A listing of these requirements is available from the undergraduate coordinator of the dietetics program (also see Dietetics).

### Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN/NUTR 555. Theories and Practices of Weight Management</td>
<td>3</td>
</tr>
<tr>
<td>KIN 644. Metabolic and Cardiorespiratory Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 645. Muscular, Hormonal and Environmental Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 650. Exercise Testing, Prescription and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>KIN/HTH 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>MATH 522. Statistics</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 545. Nutrition and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 652. Nutrition Assessment</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 582. Nutrition and Metabolism</td>
<td></td>
</tr>
<tr>
<td>NUTR 655. Integrated Nutrition</td>
<td></td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>6</td>
</tr>
<tr>
<td>KIN/HTH 700. Thesis</td>
<td></td>
</tr>
<tr>
<td>NUTR 681, 682, 695. Directed Research in Dietetics I-II and Seminar and Research in Dietetics</td>
<td></td>
</tr>
</tbody>
</table>

33

Sport Studies: Athletic Administration/Coaching

This 33-credit hour sport studies program is designed for students who wish to pursue a career in athletic administration and/or coaching. Students who complete the athletic administration/coaching requirements are prepared to work at all levels including secondary and collegiate athletics. Graduates of this program may find employment in
such positions as high school and college coaches, athletic directors and youth sports programs administration. An internship is required in this program.

**Minimum Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 570. Administration in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 678. Theories and Issues of Coaching</td>
<td>3</td>
</tr>
<tr>
<td>KIN 625. Social Issues in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 631. Philosophy of Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>KIN 675. Legal Aspects of Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 685. Internship in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>6 hours of approved electives or KIN 700 (Thesis)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Athletic Administration option:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 572. Facilities in Sport, Recreation &amp; Exercise Programs</td>
<td>3</td>
</tr>
<tr>
<td>Approved elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Coaching option:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 547. Principles and Strategies of Strength Development</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>KIN 510. Principles of Motor Learning</td>
<td></td>
</tr>
<tr>
<td>KIN 506. Advanced Biomechanics</td>
<td></td>
</tr>
<tr>
<td>KIN 622 Motivation and Achievement in Sport</td>
<td></td>
</tr>
</tbody>
</table>

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**Sport Studies: Sport and Recreation Management**

The 33-credit hour Sport Studies program is designed for students who wish to pursue a career in sport or recreation management. Students who complete the sport/recreation management requirements are prepared to work in administrative positions in sport, recreation and leisure studies. Graduates of the sport studies program may find employment in such positions as high school and college recreation, professional and amateur organizations, public and private recreation organizations, sporting goods manufacturers, youth sports programs, and event facility management. An internship is required in this program.

**Minimum Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 570. Administration in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 572. Facilities in Sport, Recreation &amp; Exercise Programs</td>
<td>3</td>
</tr>
<tr>
<td>KIN 625. Social Issues in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 631. Philosophy of Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>KIN 673. Fiscal Management of Sport, Recreation &amp; Exercise Programs</td>
<td>3</td>
</tr>
<tr>
<td>KIN 675. Legal Aspects of Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 685. Internship in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>9</td>
</tr>
<tr>
<td>Nine hours of approved electives</td>
<td></td>
</tr>
<tr>
<td>KIN 700. Thesis (6 credits) and one approved elective (3 credits)</td>
<td></td>
</tr>
</tbody>
</table>
General Kinesiology and Recreation Studies

This 33-credit hour program leads to a Master of Science degree with a major in kinesiology and a concentration in general kinesiology and recreation studies. The degree program is designed for students who wish to combine advanced study in kinesiology or recreation with an approved support area. All students are required to do directed research, however students may select either a thesis or non-thesis option. Both options require completion of 18-21 credit hours of core courses, 9 hours of approved support area and 3-6 elective hours.

Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 510. Principles of Motor Learning</td>
<td>3</td>
</tr>
<tr>
<td>KIN 631. Philosophy of Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>KIN 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td></td>
</tr>
<tr>
<td>KIN 547. Principles and Strategies of Strength Development</td>
<td>3</td>
</tr>
<tr>
<td>KIN 644. Metabolic and Cardiorespiratory Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KIN 645. Muscular, Hormonal and Environmental Aspects of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td></td>
</tr>
<tr>
<td>KIN 622. Motivation and Achievement in Sport</td>
<td>3</td>
</tr>
<tr>
<td>KIN 625. Social Issues in Sport Studies</td>
<td>3</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>3-6</td>
</tr>
<tr>
<td>KIN 697. Directed Research in Kinesiology</td>
<td></td>
</tr>
<tr>
<td>KIN 700. Thesis</td>
<td>9</td>
</tr>
<tr>
<td>Approved support area of study</td>
<td>9</td>
</tr>
<tr>
<td>Approved electives</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

Master of Arts in Teaching

The Master of Arts in Teaching (M.A.T.) leads to an initial Virginia licensure to teach physical and health education PK-12. This graduate program is offered as a fifth-year for students who have completed prerequisite courses and experiences at the undergraduate level. A listing of the undergraduate courses may be found in the current JMU Undergraduate Catalog. Post-baccalaureate degree students who are interested in the MAT program should consult with the PHETE coordinator, Dr. Jacqueline Williams, to determine their prerequisite status. Since the fifth-year M.A.T. program format is new at JMU, some courses in the licensure program will not be offered until the fall semester of 2004. Minor changes may be made in the offerings and requirements listed over the next few years.

To be fully admitted to the fifth-year MAT program, students must have completed the following requirements.

- Satisfy all requirements for admission to the teacher education program.
- Complete the undergraduate curriculum with a cumulative GPA of 2.5 or better. JMU graduates must have a 3.0 in their last 60 hours.
- Achieve a passing score on the PRAXIS exam.
- Satisfy all requirements for admission to the College of Graduate and Professional
Programs including
- successfully complete requirements for a baccalaureate degree from an accredited college/university.
- take the Graduate Record Examination and score at the 25th percentile or above.

**Minimum Requirements**

<table>
<thead>
<tr>
<th>Course Offerings</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 511. Technology in Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN 512. Instructional Methods in Middle and Secondary Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN 513. Professional Issues for Prospective Physical and Health Educators</td>
<td>3</td>
</tr>
<tr>
<td>KIN 610. Curriculum Design &amp; Development in Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN 611. Teaching Diverse Populations in Health and Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>KIN 612. Analysis of Teaching &amp; Learning</td>
<td>3</td>
</tr>
<tr>
<td>KIN 625. Social Issues in Sport</td>
<td>3</td>
</tr>
<tr>
<td>KIN 683. Secondary Internship in Health and Physical Education</td>
<td>4</td>
</tr>
<tr>
<td>KIN 683S. Seminar for Professional Practice</td>
<td>2</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>KIN 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>HTH 655. Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 630. Inquiry in Education</td>
<td>3</td>
</tr>
<tr>
<td>Approved elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

**Minor in Kinesiology**

A student working toward the Master of Education degree may minor in kinesiology. A minimum of 12 credit hours in kinesiology is required. All courses must be approved by the minor adviser.

**Course Offerings**

**KIN 501. Workshop in Kinesiology.** 1-3 credits.
An intensive study of one aspect of kinesiology that is of current concern to physical educators in the field.

**KIN 506. Applied Biomechanics.** 3 credits.
A study of biomechanical concepts and applications as they relate to sport and physical activity. Specific attention will be given to the application of biomechanical concepts and principles in the analysis of movement skills. *Prerequisites: KIN 306 or permission of instructor.*

**KIN 510. Principles of Motor Learning.** 3 credits.
Principles and theories of learning motor skills and their applications in teaching and coaching physical education activities.

**KIN 511. Technology in Health and Physical Education.** 3 credits.
Addresses technological issues related to education and explores a variety of educational technologies available to enhance the instruction of physical and health education. An action plan for the utilization of educational technologies will be
developed.

**KIN 512. Instructional Methods in Middle and Secondary Physical Education.** 3 credits.
A detailed study that builds upon the undergraduate instructional methods in physical education with developmentally appropriate teaching and management techniques for middle and secondary physical education. An in-depth review of the theoretical framework of the teaching styles and application of such in a practical setting are vital components.

**KIN 513. Professional Issues for Prospective Physical and Health Educators.** 3 credits.
An in-depth examination of current issues and research on teaching and teachers in physical and health education.

**KIN 542. Exercise Programming for Special Populations.** 3 credits.
An in-depth study of the role of exercise in disease prevention and rehabilitation. Emphasis will be placed on health risks that present physiological limitations which affect the principles of exercise testing and prescription. *Prerequisite: an undergraduate course in exercise physiology or permission of the instructor.*

**KIN 546. Exercise and the Older Adult.** 3 credits.
An in-depth study of the theories and principles of exercise testing, prescription and programming for the older adult. Emphasis will be given to the significance of physical activity on the health of the aging population.

**KIN 547. Principles and Strategies of Strength Development.** 3 credits.
A study of the physiological aspects of strength and flexibility development. Topics include muscle fiber and connective tissue characteristics, neural control, and training adaptations related to both general fitness and sport-specific training programs. *Prerequisite: an undergraduate course in exercise physiology or permission of the instructor.*

**KIN 555. Theories and Practices of Weight Management.** 3 credits.
An examination of the physiological, psychological and environmental theories of obesity. Current trends in obesity research are emphasized. Case studies and laboratories are utilized to provide students with practical experience in constructing a weight loss program.

**KIN 570. Administration in Sport Studies.** 3 credits.
Specific problems and new developments in the administration of sport and exercise programs, including business procedures, equipment, facilities, conduct of athletic events, school law and liability, staff and public relations.

**KIN 572. Facilities in Sport, Recreation and Exercise Programs.** 3 credits.
The planning, construction, maintenance and utilization of sport, exercise and recreation facilities.

**KIN 575. Gender Issues in Sport.** 3 credits.
A study of the institutional, political and societal perpetuation of gender identity and its relationship to sport participation.

**KIN 610. Curriculum Design and Development in Health and Physical Education.** 3 credits.
An advanced study that builds upon the undergraduate elementary curriculum course by focusing on the middle and secondary student, curriculum models, and the development of effective and futuristic physical education units and programs that meet the needs of the populations.

**KIN 611. Teaching Diverse Populations in Health and Physical Education.** 3 credits.
The diversity of student populations in schools relates to differences in ability, socioeconomic status, cultural background, race, religious beliefs, sexual orientation and gender. This is an in-depth study of appropriate teaching methods that celebrate diversity and inclusion. Experiences will serve to diminish fears and the perpetuation of stereotypes, and to allow opportunities to plan and implement activities in which all students are challenged and successful.

**KIN 612. Analysis of Teaching and Learning.** 3 credits.
An in-depth look at assessing and improving teaching. A systematic approach to improving teaching techniques and assessments of student learning will be discussed and implemented in a practical setting.

**KIN 622. Motivation and Achievement in Sport.** 3 credits.
The study of sport performance including achievement motivation, individual aggression, attribution theory and goal setting. Application of theoretical concepts to teaching and coaching for optimal performance.

**KIN 625. Social Issues in Sport Studies.** 3 credits.
Current research and literature in the sociology of sport. Emphasis is on sport in American culture; issues in international sport are considered.

**KIN 631. Philosophy of Sport Studies.** 3 credits.
A critical review of literature concerning the nature and significance of sport from a philosophic perspective, including current modes of inquiry. Implications for sport in education are also discussed.

**KIN 644. Metabolic and Cardiorespiratory Aspects of Exercise.** 3 credits.
An advanced course in exercise physiology that examines the acute responses and chronic adaptations of the metabolic, cardiovascular, and respiratory systems. *Prerequisite: an undergraduate course in exercise physiology or permission of the instructor.*

**KIN 645. Muscular, Hormonal, and Environmental Aspects of Exercise.** 3 credits.
An advanced course in exercise physiology that examines the acute responses and chronic adaptations of the neuromuscular system, and hormonal and environmental factors that influence the body’s response to exercise. *Prerequisite: an undergraduate course in exercise physiology or permission of the instructor.*

**KIN 646. Cardiovascular Dynamics.** 3 credits.
An in-depth analysis of cardiovascular functioning including sedentary and exercise lifestyles, rehabilitation, nutrition and stress; laboratory includes cardiovascular assessment techniques, stress testing and exercise prescriptions. *Prerequisite: an undergraduate course in exercise physiology or permission of the instructor.*

**KIN 649 A, B, C. Practicum in Fitness Programs.** 1 credit each.
A practicum designed to allow students in the adult fitness program to gain experience as an exercise leader, an exercise-testing technician, and in procedures used to prescribe exercise in healthy subjects and patients with chronic disease. *Prerequisite: permission of the instructor.*

An in-depth analysis of preventive and rehabilitative exercise program design, exercise testing, electrocardiography and exercise prescription. *Prerequisite: KIN 644 or permission of instructor.*

**KIN 655. Research Techniques.** 3 credits.
Skill in the initiation, conduct and interpretation of research. Laboratory procedures in physical education, recreation, exercise science, and athletics are included as well as historical, philosophical and descriptive methods. Special emphasis is given to laboratory, experimental, field and action research.
KIN 670. Program Development for Wellness Centers. 3 credits.
A study of the development, implementation and administration of wellness/fitness programs that emphasize the adult population.

Kin 673. Fiscal Management of Sport, Recreation and Exercise Programs. 3 credits.
An overview of fiscal resources and financial administration of sport and recreation programs and facilities. The course will focus on the financial administration of public agencies, private organizations and commercial enterprises. Management areas relating to financial principles and policies, sources of revenue, types of expenditures, budget preparation, and preparation of grant proposals will be discussed.

Kin 675. Legal Aspects of Sport Studies. 3 credits.
A study of legal issues related to the administration of sport and recreation facilities, programs, and services. An in-depth analysis of the legal foundations and responsibilities of sport and recreation agencies including tort and constitutional law, liability and risk management, contractual law, human resource management, and the legislative and judicial processes.

KIN 678. Theories and Issues of Coaching. 3 credits.
Both theoretical and practical aspects of coaching in secondary schools and higher education.

KIN 680. Reading and Research. 3 credits.
Directed reading in designated areas and specialized interests. Investigating, researching and reporting. Prerequisite: permission of the instructor.

KIN 681. Internship in Exercise Science. 3 credits.
Provides the student with an opportunity for practical experience in exercise testing and prescription, program administration, or other professional responsibilities within the wellness/fitness industry. Specific assignments will be determined by the needs of the student. Taken in final semester of program. Prerequisite: permission of the instructor.

KIN 683. Secondary Internship in Health and Physical Education. 4 credits.
An advanced supervised teaching experience at the middle or high school level in both health and physical education settings. Enables the preservice teacher an opportunity to apply effective teaching techniques and innovative forms of instruction and organization at the secondary level. Corequisite KIN 683S.

KIN 683S. Seminar for Professional Practice. 2 credits.
An opportunity for student teachers to reflect on their teaching skills, critically assess their experiences and to nurture life-long professional development. Connecting theory to practice. Corequisite: KIN 683, Secondary Internship in Health and Physical Education.

KIN 685. Internship in Sport Studies. 3-6 credits.
Practical experience in applying administrative theory to problems encountered in a professional setting. Specific assignments will be determined by the needs of the student. (Amount of credit will be determined by the amount of experience acquired; no more than six hours can be counted toward a degree program.) Prerequisite: permission of the instructor.

KIN 697. Directed Research in Kinesiology and Recreation Studies. 3 credits.
Advanced research in kinesiology and/or recreation under the direction of a graduate advisor. Course will be graded on an S/U basis. Prerequisite: KIN 655. Research Techniques and permission of the instructor.

KIN 698. Comprehensive Continuance. 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed. Prerequisite: permission of the instructor.
**KIN 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed. *Prerequisite: permission of the instructor.*

**KIN 700. Thesis.** 3-6 credits.
*Prerequisite: KIN 655 or equivalent and permission of the instructor.*
Music

Dr. Marilou Johnson, Interim Director

For information, call (540) 568-6197/6714
Web site: http://www.jmu.edu/music

Professors
P. Brady, I. Choi, S. Cross, J. Hilliard, J. Klusener, J. Little, R. McCashin, C. W. Rice, J. Rooney, E. Ruple

Associate Professors
B. Cockburn, J. Hiatt, S. Reid, G. Ritcher

Assistant Professors
B. Chandler, C. Donakowski, J. Haney, W. Huang, M. Kirkdorffer, A. Lankford, J. Minor, M.J. Speare, C. Stevens

Mission

The James Madison University School of Music is committed to the highest level of music training. It offers graduate degrees in conducting, music education, performance, and music theory/composition. Graduate work involves post-baccalaureate focused study to achieve mastery of a specific field of music. For each degree concentration, the graduate program seeks to provide a course of study and environment for excellence.

To fulfill this mission, the James Madison University School of Music strives to:

- introduce students to the most advanced knowledge in their specific field;
- provide the means for enhanced professional accomplishment and supervised practical experience;
- foster the means and ability to carry out scholarly research and creative projects;
- prepare students for continuing development and study in doctoral programs.

The School of Music is an active unit of approximately 375 undergraduates, 30 graduate students, and a faculty and staff of 50. More than 200 performances are given on campus each year by students, 25 student ensembles, faculty, faculty ensembles, guest artists and clinicians. The level of performance is highly professional and several ensembles and soloists enjoy regional and national prominence.

The school’s graduate students represent a wide variety of fine undergraduate institutions and a range of experiences that makes possible a valuable interchange among students and faculty. The faculty/student ratio also allows for a close relationship and provides the opportunity for individualized instruction in many areas.

The School of Music offers a Master of Music degree with concentration options in conducting, music education, performance and theory/composition. The program seeks to provide an opportunity for the highest degree of musical development and professional training for each student, appropriate for careers in teaching, performance and composition of music. Conducting majors will undertake a comprehensive study of the literature of their medium, develop advanced insights into the musical ideas and structure of the major works, and refine their conducting and rehearsal skills.

Performance majors will specialize in activities that develop the technical mastery and musical maturity essential to the art of making music involving their chosen instrument...
or voice. Student composers will immerse themselves in the techniques and aesthetics of musical creation and will become aware, through intensive examination, of the music and musical thought of all style periods, especially that of the present and immediate past. Music education students will examine the foundations and principles underlying the practices of their profession and will develop both scholarly and technical abilities essential to a continuing development as effective teachers and leaders.

All concentrations in the Master of Music degree program must complete a minimum requirement of 32 hours of graduate credit. In addition to opportunities to broaden and improve skills through music electives, music education majors have the option to pursue courses selected from programs in elementary, secondary or higher education. Graduate students who major in non-music programs may elect the graduate music minor, earning a minimum of 12 hours of graduate credit in courses approved by the music school’s coordinator of graduate studies.

A student entering a graduate degree program in music is expected to have completed an undergraduate degree with a major in music or its equivalent and have a grade point average of 3.0 or better in music studies. In addition to College of Graduate and Professional Programs requirements (including successful completion of the GRE General Exam), the School of Music administers its own diagnostic examinations in written theory, ear training and music literature prior to the student’s first semester. The school also requires successful completion of any deficiencies by the time 18 credit hours of study have been completed.

In addition to these general requirements, conducting majors must pass examinations in conducting, and those in choral conducting must pass tests in sightsinging, keyboard skills and language diction, while instrumental students must pass examinations in score reading, keyboard skills and orchestration. Performance majors must successfully pass an audition, while theory/composition majors must submit scores and/or tapes of original works showing satisfactory potential as composers or documented materials demonstrating adequate skills and capabilities in theory.

As per JMU College of Graduate and Professional Programs requirements, successful completion of the Master of Music degree includes an oral comprehensive examination to be arranged at a date convenient for the master’s candidate, adviser and comprehensive committee.

Students electing to minor in music are expected to have completed an undergraduate minor in music or must demonstrate acceptable competencies or skills appropriate to an undergraduate minor at JMU.

Post-baccalaureate, post-master’s and other qualified students may enroll in certain courses on a limited basis. For details concerning requirements and deadlines, contact the coordinator of graduate studies for the School of Music.

The School of Music is a full member of the National Association of Schools of Music.

**Assistantships**

Teaching and nonteaching graduate assistantships in music are awarded each year on a competitive basis. Specific assignments in applied music, ensembles, music education, theory and literature, accompanying, and administration are based on students’ qualifications and School of Music needs. In addition to an attractive stipend, all assistantships include tuition scholarship for nine graduate credit hours during each fall and spring semester. For more detailed information, procedures for application and deadlines, contact the coordinator of graduate studies for the School of Music.

**The Curriculum**

The courses in each Master of Music degree concentration are to be distributed among courses in the major area, cognate courses in music, approved electives and a significant major project. Concentration projects are:

- Conducting – a lecture recital
β Music education – a thesis, document or research project in MUED 691
β Performance – a recital or lecture recital
β Theory/composition – a composition project, or a thesis or document in theory

All entering students who apply for admission to the Master of Music degree program are required to complete a core curriculum comprised of 10-11 credits which will serve as a basis for designing their programs of study. The core curriculum is composed of the following: MUS 600, Introduction to Graduate Study in Music (three credits); specified literature courses (six credits for conducting students, three for all others – choice to be governed in part by placement examination); a theory course designated for the particular concentration (two-three credits); and MUAP, applied study or ensembles (two credits minimum).

All students are expected to complete the core curriculum at the earliest opportunity, in a sequence approved by their adviser.

Prior to the end of the first semester, or after completion of nine hours of credit in the Master of Music program, students will submit a program of study form to the graduate coordinator upon approval by their adviser.

At least one-third of the required credits in a program must be earned in the area of concentration. At least one-half (15-16 credits) of the required total credits must include courses from the 600 level and above. No more than six credits in workshops (501) may be used to meet minimum requirements for the degree.

## Concentrations

### Conducting

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 600. Introduction to Graduate Studies in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 601. Graduate Seminar in Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUS 605. Analytical Studies in Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>Music Literature</td>
<td>9</td>
</tr>
<tr>
<td>Choral track: 1</td>
<td></td>
</tr>
<tr>
<td>MUS 556 and 557. Choral Literature</td>
<td></td>
</tr>
<tr>
<td>Wind track: 2</td>
<td></td>
</tr>
<tr>
<td>MUS 564. Symphonic Literature</td>
<td></td>
</tr>
<tr>
<td>MUS 548. History and Literature of Wind Performance</td>
<td></td>
</tr>
<tr>
<td>Orchestral track: 2</td>
<td></td>
</tr>
<tr>
<td>MUS 562, 563, 578 or 579. Romantic, 20th-Century, Baroque or Classical Music</td>
<td></td>
</tr>
<tr>
<td>MUS 564. Symphonic Literature</td>
<td></td>
</tr>
<tr>
<td>MUAP 610. Applied Conducting</td>
<td>6</td>
</tr>
</tbody>
</table>

(three credits each term) A minimum of six credits are to be earned in one of the courses below; any of the other courses may be taken as electives:

- MUAP 610A. Choral Conducting
- MUAP 610B. Orchestral Conducting
- MUAP 610C. Wind Conducting
- MUAP 696. Lecture Recital
- Approved electives, 500-600 level

Approved electives, 500-600 level
1 Admission to the choral conducting concentration requires, in addition to the School of Music requirements in ear training, written theory and music history, successful completion of entrance examinations in conducting, keyboard skills, sight-singing, and French, Latin, German and Italian diction. Undergraduate or graduate credit in a course in vocal pedagogy must be presented for graduation.

2 Admission to the instrumental concentration requires, in addition to the School of Music requirements in ear training, written theory and music history, successful completion of entrance examinations in conducting, keyboard skills and orchestration.

3 Lab in ensemble will be required each semester of enrollment in applied conducting.

Music Education

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 562, 563, 578 or 579. Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 600. Introduction to Graduate Study in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 601. Graduate Seminar in Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUED 671. Research in Music Education</td>
<td>2</td>
</tr>
<tr>
<td>Choose one of the following:</td>
<td>5-6</td>
</tr>
<tr>
<td>MUED 680 (three credits) and Music education elective courses (two-three credits)</td>
<td></td>
</tr>
<tr>
<td>MUED 700. Thesis (six credits)</td>
<td></td>
</tr>
<tr>
<td>Music courses (MUS) Theory, Arranging, Counterpoint, Analytical, Studies in Music Literature or Music Theory Practices</td>
<td></td>
</tr>
<tr>
<td>Applied music study (MUAP) (may include two credit ensembles)</td>
<td>4</td>
</tr>
<tr>
<td>Approved electives 1</td>
<td>5-7</td>
</tr>
<tr>
<td><strong>32</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 A student may choose an option in elementary, secondary or higher education (eight credits) or may select approved courses in music, music education or applied music, and/or courses from the respective education minors.

Performance (1)

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 600. Introduction to Graduate Study in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 601. Graduate Seminar in Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUS 605. Analytical Studies in Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 562, 563, 578 or 579. Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUAP 500 level. Ensembles</td>
<td>2-4</td>
</tr>
<tr>
<td>MUAP 600 level. Applied major</td>
<td>6-9</td>
</tr>
<tr>
<td>MUAP 695 or 696. Recital or Lecture Recital</td>
<td>1-2</td>
</tr>
<tr>
<td>Music electives in theory, literature and pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>Approved electives, 500-600 level</td>
<td>3-6</td>
</tr>
</tbody>
</table>
1 Voice majors must exhibit competence in French, German and Italian diction. Eight credits each of two languages (equivalent to the 101-102 level at JMU) are expected. Voice majors are also required to have completed at least one course in vocal pedagogy for graduation; courses taken at the undergraduate level may meet this requirement.

2 Minimum of 11 credits in the applied major, ensemble and recital credits.

**Theory/Composition**

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 600. Introduction to Graduate Study in Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 601. Graduate Seminar in Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUS 605. Analytical Studies in Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUS 551, 552, 651 or 652. Music Composition1</td>
<td>4-6</td>
</tr>
<tr>
<td>MUS 562, 563, 578, 579. Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUAP courses. Applied Studies and/or Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>MUS 700. Thesis in Theory or MUS 697. Composition Project, or MUS 680.</td>
<td>3-6</td>
</tr>
<tr>
<td>Electives in music literature, performance, pedagogy and additional composition</td>
<td>6-9</td>
</tr>
</tbody>
</table>

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1 Composition majors are required to take the six-hour option.

2 Theory-composition majors are required to have completed two courses in counterpoint and one course in electronic music for graduation. Courses taken at the undergraduate level may satisfy this requirement.

**Music Minor**

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS courses. Music courses</td>
<td>3</td>
</tr>
<tr>
<td>MUED 600 level. Music Education Courses</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Music (MUS), Music Education (MUED) and Applied Music (MUAP) courses. Workshop courses, 501 and independent studies 680, 690 and 691 not to exceed a total of three credit hours applicable to the minor. Applied Music (MUAP) courses, lessons and/or ensembles, not to exceed three credits.</td>
<td>12</td>
</tr>
</tbody>
</table>

**Course Offerings**
MUS 520. Piano Technology. 1-2 credits.
The acoustical and mechanical design and history of the piano theory of tuning and temperaments; procedures and techniques of regulating and voicing pianos. Additional hour of credit for tuning lab.

MUS 540. Jazz Improvisation Laboratory II. 1 credit.
Presents intermediate to advanced improvisation skills in the jazz idiom alone for graduate music majors. Emphasis is on the theoretical analysis of chord progression as well as creative musical application. A research paper dealing with advanced musical improvisation concepts is required. Prerequisite: Permission of instructor.

MUS 541. Vocal Arranging. 2 credits.
Arranging for vocal ensembles. Included will be fundamental concepts of orchestration.

MUS 542. Instrumental Arranging. 2 credits.
Arranging for various instrumental ensembles, including fundamental concepts for orchestration.

MUS 543-544. Counterpoint. 2 credits each semester.
Modal and tonal counterpoint. Two, three and four voice forms, florid counterpoint. Elementary imitative techniques. Form analysis. Prerequisite: MUS 242 or equivalent.

MUS 548. History and Literature of Wind Performance. 3 credits.
A survey of the history of literature for wind and percussion ensembles from pre-Renaissance to the present. Emphasis on 20th-century literature including works of Husa, Holst, Vaughan Williams, Grainger, Hindemith and Schwantner.

MUS 551-552. Music Composition. 2-3 credits each semester.
Composition in 20th-century styles and techniques. Individualized instruction for theory-composition majors. Prerequisite: Permission of instructor. Three credit hours for theory-composition majors only.

MUS 556. Choral Literature I. 3 credits.
A survey of choral literature from the pre-Renaissance through the Classical period including a cappella and accompanied works. Attention will be given to parallel trends in keyboard and instrumental music where applicable.

MUS 557. Choral Literature II. 3 credits.
A survey of choral literature from the Romantic period through the present, including a cappella and accompanied works. Attention will be given to parallel trends in keyboard and instrumental music where applicable.

MUS 560. Piano Literature I. 2 credits.
A survey of Baroque and Classical literature for the piano encompassing solo, concerto and chamber ensemble repertoire, including an examination of literature for clavichord, harpsichord and pianoforte.

MUS 562. Music of the Romantic Period. 3 credits.

MUS 563. Twentieth-Century Music. 3 credits.
A survey of historical and compositional trends of 20th-century music. Includes concentration on Impressionism, “New Music” from Satie to Schoenberg, Bartok, Hindemith, and the music of contemporary American composers.

MUS 564. Symphonic Literature. 3 credits.
A historical survey of symphonic literature concentrating primarily on major composers and compositions from Baroque to present.
MUS 565. Opera History and Literature. 3 credits.
A survey study of the history of opera. Consideration of the chronological development of all forms of music theater. Emphasis on style characteristics through aural identification.

MUS 567. Solo Vocal Literature. 3 credits.
A survey of specific areas of vocal literature to include the early English air, classic Italian art songs, the German lied, the French art song, contemporary art song, opera and oratorio.

MUS 568. Organ Literature. 2 credits.
A survey of organ literature from 1600 to present. Emphasis will be placed on style characteristics of each historical era with some demonstration at the organ where appropriate.

MUS 569. Church Music. 2 credits.
A course for organists designed to develop the practical skills required of a church musician. Study and performance of hymns, solo and anthem accompaniments, liturgies of major religious denominations and selected church music for the church year. Prerequisite: Level five organ proficiency.

MUS 570. Piano Literature II. 2 credits.
A survey of Romantic, Impressionistic and 20th-century literature including solo, chamber ensemble and concerto repertoire, with emphasis on stylistic trends of the 20th century.

MUS 573. Projects in Private Piano Pedagogy. 2 credits.
Topics of special interest to the private piano teacher: overview of current methods, materials and repertoire for teaching beginning, intermediate and advanced students; teaching techniques and strategies; preparing students for college level piano study; business procedures for maintaining a private studio; electronic and computer aids in the piano studio.

MUS 576. Music Theory Practices. 3 credits.
Common-practice music theory with an introduction to 20th-century analysis. Current theory texts are examined.

MUS 577. Vocal Pedagogy. 2 credits.
Designed to acquaint the prospective voice teacher with the techniques of vocal pedagogy, both scientific and empirical. Involves study, practice, observation and completion of a report on resource materials available to the pedagogical researcher.

MUS 578. Music of the Baroque Period. 3 credits.
A survey of music history and literature from 1590-1750. Emphasis will be on the development of styles within a historical framework through study of works by composers from Gabrieli to Handel.

MUS 579. Music of the Classical Period. 3 credits.
A survey of music history and literature from 1750-1827. Emphasis will be on the development of styles within a historical framework.

MUS 598. Selected Topics in Music. 1-4 credits.
Courses in music which are of a topical nature. May be repeated.

MUS 600. Introduction to Graduate Study in Music. 3 credits.
Research as a discipline; current trends and types of research in music. Overview of bibliographical and other resources for music study. Research in bibliography and techniques culminating in a research paper in area of concentration.

MUS 601. Graduate Seminar in Music History. 3 credits.
A topical approach to the study of music history. Topics might include: Music since 1950, Music of Beethoven, Debussy Schoenberg and their followers, History of the
Concerto, or any pertinent musical topic. Topic and professor offering the course may change each semester. This course may be repeated when content is different. See e-campus for current topic and professor.

MUS 605. Analytical Studies in Music. 3 credits.
Analysis of representative works from selected periods. Consideration will be given to melody and rhythm, harmony, texture, and overall form. Prerequisite: MUS 576 or permission of instructor.

MUS 651-652. Music Composition. 2-3 credits each semester.
Advanced original composition utilizing various 20th-century styles and techniques. Prerequisite: Music 551-552. Three credit hours for theory-composition majors only.

MUS 680. Document in Music Theory. 3 credits.
Final research project for theory/composition majors specializing in theory, who choose three credits of course work and a smaller document rather than the thesis. Follows thesis procedures.

MUS 690. Special Studies in Music. 1 - 3 credits.
Opportunity for supervised independent study in areas of special interest to the student. May be repeated for credit.

MUS 697. Composition Final Project and Recital. 3 credits.
Project shall be a work for large ensemble. Instrumentation and scope to be determined in consultation with the composition instructor. In addition, students will present a recital of their original works, the majority of which must have been composed during the student’s graduate course of study in the School of Music.

MUS 698. Comprehensive Continuance. 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

MUS 699. Thesis Continuance. 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

MUS 700. Thesis. 6 credits.
This course is graded on a satisfactory/unsatisfactory (S/U) basis.

Applied Music
Applied music instruction is offered in conducting, piano, voice, organ, harpsichord or an orchestral instrument. Permission to register for applied music must be granted by the appropriate applied division. Students in a performance concentration are expected to continue major study each semester enrolled.

MUAP 500-level. Applied Music. 1-2 credits.
(Minor area and non-degree students.)
One or two 30-minute lessons per week. Two credits available only by permission of the graduate studies coordinator.

MUAP 510. Applied Conducting. 1-2 credits.
(Minor study and elective.)
Applied study, with limited ensemble assignment. May be required of conducting applicants not meeting all requirements for major study. Prerequisite: permission of instructor.

MUAP 510A. Choral Conducting.
See course description for MUAP 510.

MUAP 510B. Orchestral Conducting.
See course description for MUAP 510.
**MUAP 510C. Wind Conducting.**
See course description for MUAP 510.

**MUAP 600-level. Applied Music.** (Major area for Master of Music students.) 1 - 3 credits.

**MUAP 610. Applied Conducting.** (Major study.) 3 credits.
Limited to advanced conductors. Applied study, with assignment to one or more ensembles.

**MUAP 610A. Choral Conducting.**
See course description for MUAP 610. Entrance based on demonstration of advanced competence in conducting and meeting entrance requirements in sight-singing, keyboard skills, and French, Latin, Italian and German diction.

**MUAP 610B. Orchestral Conducting.**
See course description for MUAP 610. Entrance to major instrumental study based on demonstration of advanced competence in conducting and meeting the entrance requirements in keyboard score reading skills and orchestration.

**MUAP 610C. Wind Conducting.**
See course description for MUAP 610. Entrance to major instrumental study based on demonstration of advanced competence in conducting and meeting the entrance requirements in keyboard score reading skills and orchestration.

**MUAP 695. Graduate Recital.** 1 credit.
A public performance including advanced repertoire in a variety of styles. MUAP 695 or MUAP 696 is required of all students with a major in performance in the Master of Music degree program. Prerequisite: Permission of major applied division.

**MUAP 696. Graduate Lecture Recital.** 2 credits.
A public lecture/performance demonstrating knowledge of advance repertoire in a variety of styles. Recital must be accompanied by a formal document. MUAP 695 or MUAP 696 is required of all students with a major in performance in the Master of Music degree program. MUAP 696 is required of all majors in conducting. Prerequisite: Permission of major applied division.

**Music Ensembles**

**MUAP 500-level.** 1 credit.
Ensembles are required in performance tracks and recommended as electives in other programs. In consultation with the adviser, students may elect the following ensembles, most of which require an audition. May be repeated.

- MUAP 535. Chorus
- MUAP 537. Marching Band
- MUAP 540. Chorale
- MUAP 541. Madison Singers
- MUAP 543. Opera Theater (1-2 credits)
- MUAP 544. Chamber Orchestra
- MUAP 545. Symphony Orchestra
- MUAP 546. Wind Symphony
- MUAP 547. Jazz Ensemble
- MUAP 548. Jazz Band
- MUAP 550. String Ensemble
- MUAP 551. Woodwind Ensemble
- MUAP 552. Brass Ensemble
- MUAP 553. Guitar Ensemble
- MUAP 554. Percussion Ensemble
- MUAP 556. Flute Choir
- MUAP 557. Piano Accompanying and Ensemble
- MUAP 559. Keyboard Performance Practicum – Organ

**Music Education**
MUED 501. Workshops in Music Education. 1-3 credits.
Designed to provide a variety of workshop experiences; many workshops are particularly appropriate for teachers in elementary and secondary schools. The content of each will be determined by interest and demand.

MUED 570. Marching Band Procedures. 2 credits.
Skills and knowledge needed to organize, administer, plan and teach marching band shows including shows for various competitions, parades, football, basketball and festival events; techniques for developing both marching and playing style through a functional method of fundamental drills.

MUED 571. Jazz and Show Choir Procedures. 2 credits.
Skills and concepts needed to organize, administer, plan, teach and perform in jazz or show choirs will be taught. Techniques of commercial vocal style and choreography for the show choir will be covered.

MUED 598. Selected Topics in Music Education. 1 - 4 credits.
Courses in music education which are of a topical nature. May be repeated.

MUED 670. Principles and Practices in Music Education. 3 credits.
The foundations underlying music education programs and practices found in the history of music education, philosophy with special emphasis on aesthetics, sociology, social psychology and psychology. Practices in music education are examined from the perspective of these foundation studies.

MUED 671. Research in Music Education. 2 credits.
Understanding the principles and techniques of historical, descriptive, experimental and conceptual research. Planning original research. A thesis proposal is the final class requirement.

MUED 680. Document in Music Education. 3 credits.
Final research project for music education majors who choose three credits of course work and a smaller document, rather than the thesis. Follows thesis procedure.

MUED 690. Special Studies in Music Education. 1-3 credits.
Opportunity for supervised independent study in areas of special interest to the student. May be repeated for credit.

MUED 698. Comprehensive Continuance. 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

MUED 699. Thesis Continuance. 2 credits.
Continued study, research and writing in the area of thesis concentration. Course may be repeated as needed.

MUED 700. Thesis. 6 credits.
Psychology

For information, call (540) 568-6439
Web site: http://www.psyc.jmu.edu/

Dr. Sheena Rogers, Graduate Department Head, Graduate Director
Psychological Sciences Program

Dr. Lennis G. Echterling, Graduate Director
Community Counseling Program, School Counseling Program

Dr. James McConnel, Graduate Co-Director

Ms. Donna Harper, Graduate Co-Director
College Student Personnel Administration Program

Dr. Craig N. Shealy, Graduate Director
Combined Doctoral Program In Clinical, Counseling and School Psychology

Dr. Patricia J. Warner, Graduate Director
School Psychology Program

Dr. Steven Wise, Graduate Director
Doctoral Program In Assessment and Measurement

Professors

Associate Professors

Assistant Professors

Information on masters and educational specialist programs.

Information on the Assessment and Measurement Doctoral Program.

Information on the Combined Doctoral Program in Clinical, Counseling and School Psychology.

Listing of psychology courses.
Psychology: Master's and Educational Specialist Degrees

James Madison University offers seven graduate programs designed for individuals who want to pursue advanced training in psychology and counseling. These programs share the goals of academic enrichment, refinement of research skills, development of applied skills, and personal and professional growth.

Psychological Sciences
Psychological Sciences (M.A.) 36 credits

Counseling
Community Counseling (M.A./Ed.S.) 60 credits
School Counseling (M.Ed./Ed.S.) 60 credits

School Psychology
School Psychology (M.A. and Ed.S.) 78 credits

Assessment and Measurement
Assessment and Measurement (Psy.D.)

Student Personnel
College Student Personnel Administration (M.Ed.) 36 credits

Combined Doctoral Program
Clinical, Counseling, and School Psychology (Psy.D.)

Mission
The mission of the School of Psychology is to promote broad undergraduate education and specialized graduate training in the field of psychology. The school offers an undergraduate program, masters, educational specialist and doctoral degree programs.

Psychological Sciences Program
Dr. Sheena Rogers, Graduate Director

Mission
The mission of the M.A. program in Psychological Sciences is to prepare students for further study in doctoral-level programs and for immediate employment in research settings. Students in the program strengthen their background and skills in the psychological sciences through advanced courses and carefully mentored research experiences. An exceptionally strong research methodology and statistics sequence is a special feature of the program. Broad course work, choices of electives, independent study opportunities and research activities allow students to develop a special interest area within the psychological sciences. Alternatively, students may elect to take concentrations of selected courses, research experiences and a practicum focused on pre-clinical training; on assessment, measurement and statistics; or on developmental psychology.

All students serve as research apprentices before embarking on their own individual research projects and writing a thesis. Graduates of the program may apply to our doctoral programs in Assessment and Measurement and in Combined Clinical, Counseling and School Psychology.

Admission Requirements
Completion of a baccalaureate degree with a satisfactory grade point average
Undergraduate course work in psychology, including at least one statistics and one experimental methods course
Satisfactory scores on both the general and subject area GRE (official score reports required)
Three letters of recommendation from faculty members familiar with previous academic performance and potential for graduate work
Transcripts from all undergraduate and graduate programs attended
Completed application forms, including a statement detailing goals for graduate study and beyond, description of research interests and a statement of how the Psychological Sciences program will help achieve these goals.

Master of Arts Degree Requirements

<table>
<thead>
<tr>
<th>Minimum Requirements 1</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statistics and Measurement</strong></td>
<td></td>
</tr>
<tr>
<td>PSYC 605. Research and Inferential Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 606. Advanced Measurement Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 608. Multivariate Statistical Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Advanced Principles and Theories</strong></td>
<td>12</td>
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<tr>
<td>Area A (select two of the following):</td>
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<tr>
<td>PSYC 612. Advanced Personality Theory</td>
<td></td>
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<tr>
<td>PSYC 615. Advanced Industrial/Organizational Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 616. Advanced Social Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 618. Social and Emotional Development</td>
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<tr>
<td>PSYC 622. Advanced Abnormal Psychology</td>
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<tr>
<td>Area B (select two of the following):</td>
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<tr>
<td>PSYC 610. Advanced Learning Theories</td>
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<tr>
<td>PSYC 611. Advanced Comparative Psychology</td>
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</tr>
<tr>
<td>PSYC 613. Advanced Cognitive Psychology</td>
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</tr>
<tr>
<td>PSYC 617. Advanced History of American Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 619. Cognitive Development</td>
<td></td>
</tr>
<tr>
<td>PSYC 624. Advanced Physiological Psychology and Psychopharmacology</td>
<td></td>
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<tr>
<td><strong>Research Project/Thesis</strong></td>
<td>6</td>
</tr>
<tr>
<td>PSYC 700. Thesis</td>
<td></td>
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<tr>
<td><strong>Elective courses (adviser approval required)</strong></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

1 Before the school of psychology recommends students for graduation, they must have a successful review by the Master of Arts in Psychological Sciences Program Committee.

Successful completion of a comprehensive examination, the research round table series and two semesters of research apprenticeship are required prior to enrollment in the first semester of PSYC 700, Thesis. The round table and apprenticeship programs do not carry course credit but expose students to a range of research in psychology.

Through the round table and apprenticeship students are involved in a program of research early in their graduate training which will facilitate the development and completion of the thesis.

Only six credit hours of PSYC 700 may be used to satisfy the Master of Arts program requirements. After enrollment for six credit hours the student must continue to enroll
in PSYC 699, Thesis Continuance, until the thesis has been accepted by the student’s faculty committee and the College of Graduate and Professional Programs.

School Psychology Program
   Dr. Patricia J. Warner, Graduate Director

Mission
The school psychology program promotes the role of the school psychologist as a developer of an individual’s potential. The program prepares students to be interpersonally skilled, data-oriented problem solvers who are able to provide a broad array of psychological services to children. The school psychology program emphasizes an integrated theoretical orientation in understanding children and adolescents as part of a family, school, community and culture. Students acquire skills in psychological assessment, intervention, consultation, counseling and applied research.

The program is designed to prepare students for employment in a variety of settings including schools, mental health clinics, hospitals, and other clinical and educational settings. An emphasis is placed on an integrated model of training with a substantial focus on field and practicum experiences.

The first level of the program includes basic psychological foundations and leads to a Master of Arts degree (33 credit hours). Successful completion of the master’s degree, including passing a comprehensive examination, enables the student to apply for admission to the Educational Specialist level of the program. A second year of course work, in addition to a research project and a 10-month internship leads to the Educational Specialist degree (an additional 45 credit hours).

Admission Requirements
Minimum admission requirements for the Educational Specialist degree in school psychology include a 3.5 grade point average and satisfactory review by the School Psychology Program Committee. Students applying to the program with a related master’s degree from another institution will be required to provide three references as part of the application process and to participate in the interview process.

Students completing only the master’s degree are not eligible for licensure as a school psychologist. The Educational Specialist degree is the entry-level credential in school psychology and leads to eligibility for licensure as a school psychologist by the Virginia Department of Education. After additional supervised experience, students are eligible to sit for the licensure examination given by the state Board of Psychology for sub-doctoral licensure as school psychologists.

The concentration in school psychology is approved by the Virginia Department of Education and is accredited by the National Council for Accreditation of Teacher Education and the National Association of School Psychologists.

The minimum admission requirements for the school psychology program include:
   - completion of a baccalaureate degree with a satisfactory grade point average
   - 18 hours of undergraduate psychology
   - satisfactory scores on the general portion of the GRE
   - a personal interview with faculty and students
   - a personal statement
   - three letters of recommendation from professionals familiar with the applicant’s potential for graduate education
   - transcripts from all undergraduate and graduate programs attended.

Priority will be given to applications received by February 15 for fall admission. Interviews are scheduled in March, and applicants are notified of admission decisions shortly after the interview.

Master of Arts Degree
### JMU - Psychology - Master's degrees

#### Minimum Requirements 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 525</td>
<td>Role and Function of the School Psychologist</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 527</td>
<td>Psychological Foundations of Education</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 605</td>
<td>Research and Inferential Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 606</td>
<td>Advanced Measurement Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 618</td>
<td>Social and Emotional Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 626</td>
<td>Advanced Developmental Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 661</td>
<td>Counseling Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 674</td>
<td>Individual Intelligence Testing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 695</td>
<td>Practicum in School Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 749</td>
<td>Multicultural Perspectives of Intervention</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 777</td>
<td>Psychoeducational Assessment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

1 Before the school of psychology recommends students for graduation, they must have a successful review by the School Psychology Program Committee.

### Educational Specialist Degree

#### Minimum Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 609</td>
<td>Applied Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 750</td>
<td>Consultation and Intervention Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 751</td>
<td>Psychotherapy with Children and Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 755</td>
<td>Cognitive Behavioral Interventions</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 778</td>
<td>Advanced Practicum in School Psychology</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 779</td>
<td>Personality Assessment with Children and Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 790</td>
<td>Internship in School Psychology</td>
<td>9</td>
</tr>
<tr>
<td>PSYC 800</td>
<td>Educational Specialist Research Project ¹</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 880</td>
<td>Introduction to Child and Adolescent Neuropsychology</td>
<td>3</td>
</tr>
<tr>
<td>SPED 501</td>
<td>Special Education Interventions</td>
<td>3</td>
</tr>
<tr>
<td>READ 658</td>
<td>Principles, Practices and Applications of Reading Assessment</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

¹ Includes a 3-credit internship in school psychology.
Students must complete all program requirements to be recommended for certification or licensure. Certain courses may be waived or substituted with adviser approval.

1 Only six credit hours of PSYC 800 may be used to satisfy program requirements for the Educational Specialist degree. If the research project is not completed by the end of the internship year, then the student must continuously enroll (each semester including summers) in PSYC 799, Continuance. The student is required to enroll in PSYC 799 each semester until the project is completed. Continuance credits carry no credit hour production and do not count toward graduate program requirements.

Community Counseling Program

**Dr. Lennis G. Echterling, Graduate Director**

Mission

The mission of Counseling Psychology is to train students from a variety of geographic areas, primarily from the Virginia and mid-Atlantic area, to become successful professionals who:

1. Provide competent, caring, and ethical services to diverse populations;
2. Pursue a life-long process of personal and professional growth; and
3. Advance the profession through service, research, innovation, and training.

As members of the Community Counseling Program of James Madison University, we have formed our own special community of faculty, staff, and students. We vary in abilities, age, class, gender, ethnicity, race, religion, sexual orientation, and place of birth, but we share a common vision of achieving a vitally important mission – transforming students into successful community counselors.

Our community counseling alumni are dedicated to providing competent, caring, and ethical services to diverse clients in public agencies, community programs, and private practices. Putting our principles into practice, we strive to create a caring community in which we can thrive personally and grow professionally. While many of our graduates work in rural communities in Virginia’s Shenandoah Valley or among the mountains of West Virginia, many more have moved on to serve in other communities throughout the mid-Atlantic region, and across the nation. We invite our students to embark on a life-long journey of exploring new possibilities, refining their skills, and staying fresh throughout their careers. We encourage them to support one another in the formidable task of facilitating the change process in individuals, couples, families, groups, and communities as licensed professional counselors. Finally, we challenge our graduates to advance the community counseling profession through service, research, innovation, advocacy, and training.

The Educational Specialist degree program in community counseling includes the common core courses for the Master of Arts in psychology, other courses required for accreditation and licensure, and electives to meet individual needs and interests. The program requires the completion of a minimum of 60 credit hours.

The Master of Arts degree in psychology is awarded only after completion of all Educational Specialist degree requirements. This program provides the academic and applied training necessary for individuals seeking employment as counselors in community agencies, psychiatric facilities or private practice.

The Community Counseling Program is approved by the Council for the Accreditation of Counseling and Related Educational Programs, an affiliate of the American Counseling Association.

The JMU transcript endorses students as graduates of an accredited program and as being eligible to take the National Board for Certified Counselors examination leading to recognition as a National Certified Counselor. Students also take all courses required for licensure as professional counselors in the Commonwealth of Virginia.

A comprehensive examination including oral, written and applied components is required prior to internship.
Admission Requirements
Minimum admissions requirements for entry to the community counseling program include the following:

- completion of a baccalaureate degree with a satisfactory grade point average
- satisfactory scores on the general portion of the Graduate Record Examination
- a personal statement
- three completed reference forms from individuals familiar with the student’s potential for graduate education
- a minimum of 18 credit hours of undergraduate preparation in psychology or related behavioral sciences
- a personal interview and a screening session with the program committee

Educational Specialist Degree Requirements

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common Core</strong></td>
<td></td>
</tr>
<tr>
<td>Statistics and Measurements</td>
<td></td>
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<tr>
<td>PSYC 600. Measurement and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 607. Assessment Procedures in Counseling</td>
<td>3</td>
</tr>
<tr>
<td>Principles and Theories of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 614. Advanced Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 685. Psychopathology: Diagnosis and Intervention Planning</td>
<td>3</td>
</tr>
<tr>
<td>Research Project/Thesis</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following:
- PSYC 800. Educational Specialist Project 1
- PSYC 700. Thesis (Note: Thesis option requires an additional 3 credit hours.)

Other Required Courses
- PSYC 630. Community Counseling | 3
- PSYC 660. Counseling Theories | 3
- PSYC 661. Counseling Techniques | 3
- PSYC 663. Substance Abuse Counseling | 3
- PSYC 664. Counseling Process | 3
- PSYC 665. Group Counseling | 3
- PSYC 668. Couple and Family Systems | 3
- PSYC 669. Career Development | 3
- PSYC 695. Practicum in Counseling | 3
- PSYC 710. Counseling Strategies: Special Topics | 3
- PSYC 749. Multicultural Perspectives of Intervention | 3
- PSYC 760. Consultation and Supervision for Counseling | 3
- PSYC 790. Internship in Community Counseling | 6
- Elective courses (adviser approval required) | 3

60

1 Only three credit hours of PSYC 800 may be used to satisfy program requirements for the Educational Specialist degree. If the research project is not completed by the end of the internship year, then the student must continuously enroll (each semester including summers) in PSYC 799, Continuance until the project is completed.

School Counseling Program

Dr. Lennis G. Echterling, Graduate Director

Mission
The School Counseling Program of James Madison University is a learning community of faculty, staff, and students who vary in abilities, age, class, gender, ethnicity, race, religion, and sexual orientation. Coming together from a variety of geographic areas, we share a common vision of achieving a vitally important mission – training students to become successful school counselors.

Our alumni are dedicated to providing competent, caring, and ethical services to diverse students in public and private schools. Putting our principles of school counseling into practice, we strive to create an academic community in which our students can thrive personally and grow professionally. While many of our graduates play vital roles in schools along Virginia’s Shenandoah Valley or among the mountains of West Virginia, many more have moved on to serve in rural, suburban, and urban schools throughout the mid-Atlantic region, and across the nation. We invite our students to embark on a life-long journey of exploring new possibilities, refining their skills, and staying fresh throughout their careers. We encourage them to support one another in the formidable task of making a difference in students’ lives by meeting their emotional, social, educational, and career development needs as licensed or certified school counselors. Finally, we challenge our graduates to advance the school counseling profession through service, research, innovation, advocacy, and training.

The school counseling program prepares students to be school counselors in elementary, middle or secondary school settings. Program graduates enter the field with the knowledge and competencies essential to provide quality developmental school counseling services.

The Educational Specialist degree in school counseling is in compliance with the 2001 Virginia State Board of Education licensure regulations for school counselors. The school counseling program is accredited by the Council for the Accreditation of Counseling and Related Educational Programs, an affiliate of the American Counseling Association. The program requires the completion of a minimum of 60 credit hours.

The Master of Education degree is awarded only after completion of all Educational Specialist degree requirements. A comprehensive examination including oral, written and applied components is required prior to internship.

### Admission Requirements

Minimum admissions requirements for entry to the School Counseling Program include the following:

- completion of a baccalaureate degree with a satisfactory grade point average
- satisfactory scores on the general portion of the Graduate Record Examination
- a personal statement
- three completed reference forms from individuals familiar with the student’s potential for graduate education
- a minimum of 18 credit hours of undergraduate preparation in education or psychology
- a personal interview and a screening session with the program committee

### Educational Specialist Degree Requirements

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Core</td>
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<tr>
<td>Statistics and Measurements</td>
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<tr>
<td>PSYC 600. Measurement and Statistics</td>
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<td>PSYC 607. Assessment Procedures in Counseling</td>
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<tr>
<td>Principles and Theories of Psychology</td>
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<tr>
<td>PSYC 614. Advanced Developmental Psychology</td>
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</tbody>
</table>
Research Project/Thesis: 3

Choose one of the following:
- PSYC 800. Educational Specialist Research Project 1
- PSYC 700. Thesis (Note: Thesis option requires an additional 3 credit hours.)

**Other Required courses**
- PSYC 626. Advanced Developmental Psychopathology 3
- PSYC 640. School Counseling 3
- PSYC 643. Advanced School Counseling 3
- PSYC 660. Counseling Theories 3
- PSYC 661. Counseling Techniques 3
- PSYC 663. Substance Abuse Counseling 3
- PSYC 664. Counseling Process 3
- PSYC 665. Group Counseling 3
- PSYC 669. Career Development 3
- PSYC 695. Practicum in Counseling 3
- PSYC 710. Counseling Strategies: Special Topics 3
- PSYC 749. Multicultural Perspectives of Intervention 3
- PSYC 760. Consultation and Supervision for Counselors 3
- PSYC 790. Internship in School Counseling 6
- Elective courses (adviser approval required) 3

60

1 Only three credit hours of PSYC 800 may be used to satisfy program requirements for the Educational Specialist degree. If the research project is not completed by the end of the internship year, then the student must continuously enroll (each semester including summers) in PSYC 799, Continuance.

### College Student Personnel Administration Program

**Dr. James McConnel, Graduate Co-Director**  
**Ms. Donna Harper, Graduate Co-Director**

**Mission**

The mission of the College Student Personnel Administration program is to prepare students to be educated and enlightened professionals who will lead productive and meaningful careers, and to advance the profession of student personnel administration.

The Master of Education degree in college student personnel administration is designed to provide professional preparation for college, university and community college administrative positions. Preparation for college student personnel careers involves participation in learning experiences designed to provide an understanding of the college student, counseling theories, various collegiate subcultures and the nature of higher education as an institution in the United States. The program’s link with counseling psychology provides opportunities for personal growth and the development of interpersonal relationship skills.

**Admission Requirements**

Minimum admissions requirements for entry to the college student personnel administration program include the following:

- completion of a baccalaureate degree with a satisfactory grade point average
- satisfactory scores on the general portion of the Graduate Record Examination
- a personal statement and resume
- three completed reference forms from individuals familiar with the student’s potential for graduate education
- a minimum of 18 credit hours of undergraduate preparation in behavioral sciences
- a personal interview and a screening session with the program committee
Master of Education Degree Requirements

Minimum Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>AHRD 670. American Higher Education</td>
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</tr>
<tr>
<td>PSYC 600. Introduction to Measurement and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 645. Student Personnel Services</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 646. American College Student</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 649. Professional Issues in Student Personnel</td>
<td>3</td>
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<tr>
<td>PSYC 650. Organization and Administration of Student Services</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 651. Supervision and Consultation Processes in Student Personnel</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 660. Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 661. Counseling Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 665. Group Counseling</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 695. Field Practicum in Student Personnel Administration</td>
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</tr>
<tr>
<td>Select one of the following:</td>
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<tr>
<td>PSYC 669. Career Development</td>
<td></td>
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<tr>
<td>PSYC 680. Independent Study</td>
<td></td>
</tr>
<tr>
<td>PSYC 749. Multicultural Perspectives of Intervention</td>
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</tr>
</tbody>
</table>

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College Student Personnel Certificate Program

The certificate program accepts students who have earned a master’s degree in a discipline other than higher education/student personnel services. Students admitted to the program are required to complete four courses. Upon completion of four higher education/student personnel courses (chosen in concert with an adviser) a student will receive a certificate of completion.

Students must complete four courses (12 credit hours) from the list of existing courses:

- PSYC 645. Student Personnel Services
- PSYC 646. American College Student
- PSYC 649. Professional Issues in Student Personnel
- PSYC 650. Organization and Administration of Student Services
- PSYC 651. Supervision and Consultation in Student Personnel
- PSYC 661. Counseling Techniques
- AHRD 670. American Higher Education
Assessment and Measurement Doctoral Program

Dr. Steven Wise, Graduate Director
For information, call (540) 568-6439
Web site: http://www.psyc.jmu.edu/

Mission
The Doctor of Psychology degree program is designed to meet the expanding accountability, quality assurance and outcome assessment needs of the 21st century. Graduates are prepared for employment as assessment, evaluation and measurement specialists in education, health care, business, government and other related settings. The program emphasizes real-world applications, and experiential research projects are integrated throughout the program.

Course work in the doctoral program covers a broad range of topical areas including the history of assessment and public policy, student development and learning, general measurement and statistics, performance assessment and generalizability theory, structural equation modeling, item response theory, instrument design, artificial intelligence, cognitive psychology, professional communication, and conflict management and resolution. Further, students have the opportunity to gain expertise with computer software for information retrieval from extensive relational databases, test development and item analysis/banking, Web development and testing, and statistical analyses.

Opportunities for involvement in computer-based testing will also be provided. Doctoral students are involved in ongoing applied institutional assessment projects at the Center for Assessment and Research Studies, and extensive training and experience is derived through practice and internship experiences in a variety of educational, human service and business contexts.

Students entering the doctoral program should demonstrate intermediate statistics and measurement competencies and have completed an empirically based research/evaluation project. Enrollment is limited, and class size is small. To facilitate professional growth and development, students receive continuous feedback throughout the program. As in the clinical, school and counseling program, students enrolled in the assessment and measurement concentration are required to take PSYC 606 and PSYC 608 in addition to completing practicum, internship and dissertation requirements.

Admissions Requirements
- Completion of an advanced degree (M.A./M.S. or Ed.S.) in psychology, education, statistics or a related field
- General GRE scores (verbal, quantiative and analytic)
- Statement of interest in the program and professional goals
- Three letters of recommendation from professionals familiar with the applicant’s academic work and relevant professional experiences
- Transcripts from all undergraduate and graduate programs attended
- A current professional vita or resume
- Representative samples of professional work in evaluation
- Personal interview
- Previous graduate and postgraduate professional experience in assessment-
related activities is recommended

**Curriculum**
The program outlined below is divided into foundation areas and specific required courses and research experiences. Students will complete course work and demonstrate competency in the foundation and required areas.

In addition, students completing the doctoral dissertation will be required to pay an additional fee for the electronic presentation of their research.

**Foundations in Psychology Courses**
Measurement Theory
Multivariate Statistics
Cognitive Psychology/Psychological Foundations in Education
Social Psychology
Life Span/College Student Development

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>PSYC 770. Assessment and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 812. Assessment Methods and Instrument Design</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 814. Performance Assessment and Generalizibility Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 825. Doctoral Seminar (one credit for six semesters)</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 830. Structural Equation Modeling</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 832. Item Response Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 834. Computers and Testing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 855. Assessment Consultation and Practice Electives</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 772. Professional Communication in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Required Research Experiences</td>
<td>57</td>
</tr>
<tr>
<td>PSYC 878. Doctoral Assessment Practicum</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 891. Doctoral Assessment Internship</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 900. Doctoral Dissertation</td>
<td>9</td>
</tr>
</tbody>
</table>
Combined Doctoral Program

Dr. Craig N. Shealy, Graduate Director
For information, call (540) 568-6439
Web site: http://www.psyc.jmu.edu/

Mission

The mission of the JMU Combined Doctoral Program in Clinical, Counseling, and School Psychology is to provide a broad preparation in psychology, integrating practice and science in order to expand, strengthen and deepen the training of advanced mental health professionals. The specific focus of the program is the development of those competencies that will prepare graduates to serve as leaders and advocates in the delivery of mental health services. These services are directed primarily to the development of human potential in children and families. An important element in the mission of the Combined Doctoral Program at JMU is to train doctoral students to be responsive to the needs of children and families within the context of a diverse society.

The rationale for the JMU Combined Doctoral Program is based on the conviction that the mental health needs of children and families are underserved, particularly in rural areas. These needs are best met by an integrated curriculum composed of selected principles from the specialty areas of child-clinical, counseling, and school psychology (Culbertson, 1993; Minke & Brown, 1996). This preparation addresses the skills and abilities needed by psychologists to meet the mental health needs of children and families, keeping in mind the various ecological contexts in which such psychologists will interact. The rationale for the program is supported by needs expressed in extensive surveys of mental health professionals conducted in 1985 and 1992 in preparation for the Combined Doctoral Program. Both surveys indicated substantial need and the desire to have a Combined Doctoral Program that focused on the mental health needs of children and families.

The combined doctoral program in clinical, counseling, and school psychology is an innovative, applied psychology program that leads to the awarding of the Doctorate of Psychology degree and eligibility for licensure as a clinical psychologist. The doctoral program is specifically designed for students possessing advanced graduate degrees and professional experience in applied mental health fields such as child-clinical, school, or counseling psychology.

The doctoral program functions on a calendar-year schedule. Students begin in the fall semester and continue throughout the year, including summer semesters. Depending upon their background, students complete the course work portion of the program in either two or three years. Students must also complete a year-long internship and a doctoral dissertation. Internships must be approved by the American Psychological Association or meet the standards set forth by APA.

A limited number of full-time students are admitted each year. All students receive a full-time teaching or graduate assistantship that includes tuition.

Admission Requirements

Admission to the combined doctoral program requires that applicants:

1. have completed an advanced degree (M.A./M.S. or Ed.S.) in clinical, school, or counseling psychology, or related field;
provide general GRE scores (verbal, quantitative and analytic) and advanced Psychology GRE scores (previous GRE scores may be accepted);
submit a typed statement of professional goals;
submit three letters of recommendation from professionals familiar with their academic work and any relevant professional experiences;
submit transcripts from all undergraduate and graduate programs attended;
submit representative work samples of current skills (e.g., test reports, counseling summaries, etc.).

Five to seven full-time students are admitted each year. Priority will be given to application materials received by February 1 in anticipation of fall admission. Group and individual interviews with both faculty and current students to assess abilities, characteristics and readiness for the program are scheduled in February and March. All applicants are notified of admission decisions no later than March 15. Students offered admission are expected to reply no later than April 1.

The Combined Doctoral Program exhibits strong commitment to diversity in the following ways:

- a required course specific to multicultural issues
- multicultural/gender issues covered in course work throughout the curriculum
- practical experiences with clients from a variety of cultures and backgrounds

**Curriculum**

An individualized doctoral plan of study is developed for each student consisting of courses in required psychological foundations as well as courses and field experiences in the doctoral core curriculum. Academic progress is monitored throughout the program and feedback is provided to each student periodically.

Previous graduate course work may be accepted to meet required psychological foundations courses. A minimum of 59 credit hours of doctoral core courses, however, must be taken at JMU.

All students must complete a 12-month internship and a scholarly dissertation. Internships must be approved by the American Psychological Association or meet the standards set forth by APA.

In addition, students completing the doctoral dissertation will be required to pay an additional fee (approximately $55.00) for the electronic presentation of their research.

**Required Psychological Foundations**

Students must complete graduate course work and demonstrate competency in the following foundation areas.

**Psychological Measurement**
- Psychoeducational Assessment
- Personality Assessment with Children and Adolescents
- Individual Intelligence/Cognitive Assessment

**Psychological Interventions**
- Individual and Group Counseling Techniques
- Couple and Family Counseling
- Consultation Theory and Application
- Psychotherapy with Children and Adolescents
- Cognitive Behavioral Interventions

**Biological Aspects of Behavior**
- Physiological Psychology and Psychopharmacology
- Introduction to Child and Adolescent Neuropsychology

**Cognitive and Affective Aspects of Behavior**
- Learning and Cognition
- Personality Theories
### Social Aspects of Behavior
- Ethnic Diversity and Sociocultural Issues
- Life Span Development
- Developmental Psychopathology

### Research Methodology and Data Analysis
- Inferential Statistics/Research Methodology
- Applied Research Methods

### History and Systems of Psychology
- History of Psychology

## Doctoral Core Curriculum

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PSYC 668. Couple and Family Systems</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 695. Practicum in College Teaching</td>
<td>3</td>
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<tr>
<td>PSYC 825. Doctoral Seminar in Professional Psychology</td>
<td>8</td>
</tr>
<tr>
<td>PSYC 826. Advanced Seminar in Developmental Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 852. Advanced Consultation and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 864. Advanced Individual Psychotherapy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 877. Advanced Seminar in Child and Family Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 878. Doctoral Practicum in Child and Family Psychological Services</td>
<td>15</td>
</tr>
<tr>
<td>PSYC 881. Issues and Techniques in Research and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 890. Doctoral Internship in Child and Family Psychological Services (12 months)</td>
<td>6</td>
</tr>
<tr>
<td>PSYC 900. Doctoral Dissertation</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59</strong></td>
</tr>
</tbody>
</table>
Psychology Courses

**PSYC 501. Workshop in Psychology.** 1-3 credits.
Designed to provide a study of a particular topic of interest in psychology. *Prerequisite: Permission of department head.*

**PSYC 515. Basic Counseling Skills.** 3 credits.
A basic counseling skills course designed for human services and mental health professionals without graduate training in counseling and for students from related disciplines who wish to acquire counseling skills.

**PSYC 525. Role and Function of the School Psychologist.** 3 credits.
Provides an understanding of educational and mental health settings as well as legal and ethical issues and responsibilities with which a school psychologist must deal.

**PSYC 527. Psychological Foundations of Education.** 3 credits.
Psychological theories and research applied to classroom and school settings.

**PSYC 530. The Psychology of Child Abuse and Neglect.** 3 credits.
Review of current psychological literature on child abuse and neglect including identification, etiology, treatment, prevention and legal aspects. Family violence issues are also discussed.

**PSYC 600. Introduction to Measurement and Statistics.** 3 credits.
An introduction to measurement and statistical tools used in conducting research. Specific topics include: reliability and validity; research methods and statistical analysis; quantitative and qualitative methods; needs assessment and program evaluation; use of technology; and legal and ethical issues of research.

**PSYC 604. School Counseling.** 3 credits.
An introduction to the history, theory, philosophy, principles, organization, and personnel practices of school counseling. Specific topics include; developing and evaluating programs; intervening with individuals, groups, parents and schools; dealing with diverse students; and addressing legal, ethical, and professional identity issues.

**PSYC 605. Research and Inferential Statistics.** 3 credits.
Provides an understanding of types of research, inferential statistics, research report development, research methodology and implementation, program evaluation, and ethical and legal considerations. *Prerequisite: Permission of the instructor.*

**PSYC 606. Advanced Measurement Theory.** 3 credits.
Advanced measurement applications of classical test score theory, generalizability measurement theory, scale construction concepts, test bias, standard setting techniques and item response theory. *Prerequisite: PSYC 605.*

**PSYC 607. Assessment Procedures in Counseling.** 3 credits.
A study of individual and group approaches to assessment and evaluation. Activities include administering, scoring, and interpreting tests of ability, interest, personality, and achievement for both children and adults. Students also assess case studies, perform a self-analysis, and review selected assessment procedures. Computer-assisted assessment and ethical issues are addressed. *Prerequisite: PSYC 600 or permission of instructor.*

**PSYC 608. Multivariate Statistical Methods in Psychology.** 3 credits.
Continuation of PSYC 605, with emphasis on multivariate analysis, advanced research design and implementation of computerized statistical analysis. *Prerequisite: PSYC 605.*

**PSYC 609. Applied Research Methods.** 3 credits.
Provides an understanding of applied research methods, including Qualitative Research, Quasi-Experimental designs, and program evaluation: *Prerequisite: PSYC 605, Research and Inferential Statistics.*

**PSYC 610. Advanced Learning Theories.** 3 credits.
A study of historical and current learning theories. Included is a consideration of research contributions which bear upon the theories.

**PSYC 611. Advanced Comparative Psychology.** 3 credits.
Introduces graduate students to basic concepts, methods and theories in the study of animal behavior. Topics covered include the evolution of behavior, communication, sensory processes, reproductive behavior, parental behavior, sociality, aggression, territoriality and feeding behavior.

**PSYC 612. Advanced Personality Theories.** 3 credits.
Major theories of personality, including historical and philosophical assumptions underlying them, with a consideration of research stimulated by these theories.

**PSYC 613. Advanced Cognitive Psychology.** 3 credits.
Examines a wide range of human cognitive processes including pattern recognition, attention, memory, language and decision making. The course emphasizes research methods, empirical findings and applications in selected areas.

**PSYC 614. Advanced Developmental Psychology.** 3 credits.
An overview of the theories, research, and applications relevant to the development of behavior and mental processes throughout the life span.

**PSYC 615. Advanced Industrial/Organizational Psychology.** 3 credits.
An overview of the theory, topics and issues in the field of industrial/organizational psychology. Consideration of the psychology of human resource decisions, work motivation, job satisfaction, leadership, organizational theory and engineering psychology.

**PSYC 616. Advanced Social Psychology.** 3 credits.
An advanced study of the research and theory of the way an individual’s social behavior is influenced by the behavior and attitudes of other individuals.

**PSYC 617. History of Psychology.** 3 credits.
The history of psychology as depicted through the development of American psychology. Consideration of the history of schools of psychology as well as the historical development of areas such as clinical, physiological, developmental, industrial, cognitive and social psychology.

**PSYC 618. Social and Emotional Development.** 3 credits.
An examination of how developmental psychologists collect and interpret data; how theory guides research and practice. Topics include: early determinants of behavior; identity development; prosocial and antisocial behavior; family, peers, and schools. Exemplars, such as attachment, are used to show how research, theory, culture, and clinical practice shape a topical area. *Prerequisite: Permission of the instructor.*

**PSYC 619. Cognitive Development.** 3 credits.
This course examines the characteristics of and processes through which thinking changes with development. Important research paradigms and theoretical perspectives, as well as various practical implications of related research will be explored. Topics include perception, memory, language, reasoning, individual differences, academic skills, and selected applied topics.
**PSYC 622. Advanced Abnormal Psychology.** 3 credits.
A critical review of the issues, research and etiological aspects of the mental disorders, as well as the general concepts used in the area of psychopathology. Topics include models of pathology and wellness, mind and body problems, and interprofessional relationships.

**PSYC 624. Advanced Physiological Psychology and Psychopharmacology.** 3 credits.
An analysis of brain/behavior relationships with an emphasis on neurological and biochemical mechanisms. Neuropsychological theory and psychopharmacology will be emphasized.

**PSYC 626. Advanced Developmental Psychopathology.** 3 credits.
An overview of child and adolescent behavior disorders and psychopathology with an emphasis on diagnostic and treatment issues.

**PSYC 630. Community Counseling.** 3 credits.
An introduction to the history, profession, and practice of community counseling. Specific topics include: intervening with individuals, groups, families and communities; developing and evaluating programs; consulting with other professional helpers; promoting personal and systemic well-being; dealing with diverse clients; and addressing legal, ethical, and professional identity issues.

**PSYC 643. Advanced School Counseling.** 3 credits.
A study of the role of the counselor in elementary, middle, and secondary schools with an emphasis on the function of counseling, consultation and coordination. Techniques and materials used with children, teachers and parents will also be examined. 
*Prerequisite: PSYC 640 or permission of instructor.*

**PSYC 645. Student Personnel Services.** 3 credits.
A detailed study of student services offered in colleges and universities. Legal, ethical and professional identity issues are also examined.

**PSYC 646. The American College Student.** 3 credits.
An examination of developmental theory and review of the literature and research related to the American college student.

**PSYC 649. Professional Issues in Student Personnel.** 3 credits.
A study of occupational and professional issues related to student services divisions in the American college and university.

**PSYC 650. Organization and Administration of Student Services.** 3 credits.
A study of organizational and management theory/practice in higher education. Upon completion of the course, students will have an understanding of the college/university as an organization and the role that student service programs play in the mission of the institution. 
*Prerequisite: PSYC 645.*

**PSYC 651. Supervision and Consultation Processes in Student Personnel.** 3 credits.
This course will focus on the processes of supervision and consultation as they apply to student personnel management. Opportunities will be provided to make practical application of management knowledge and organization theories to personnel issues. 
*Prerequisite: PSYC 650.*

**PSYC 660. Counseling Theories.** 3 credits.
A study of the philosophy and principles of various schools of counseling, and the techniques employed in the counseling process by practitioners in each of these schools.

**PSYC 661. Counseling Techniques.** 3 credits.
An opportunity to learn fundamental counseling skills that form the foundations of successful counseling practice. Students develop these skills through experimental
learning activities, directed reading assignments, discussions and lectures, practice in small groups, and participation in critiques of videotaped microcounseling sessions. **Prerequisite:** Permission of instructor.

**PSYC 663. Substance Abuse Counseling.** 3 credits.
A study of substance abuse to include related personal, social and physiological factors, and methods of rehabilitation and counseling for the chemically dependent. **Prerequisite:** PSYC 515 or equivalent.

**PSYC 664. Counseling Process.** 3 credits.
An experiential study of the relationship between counselor and client. Explores the phases of relationship form initiation to termination, including predictable crises and issues which normally arise. Analysis of resistance, transference and counter-transference, dependency, and termination issues will be discussed. Attention will also be given to gender and diversity issues. **Prerequisites:** PSYC 660, PSYC 661 or permission of instructor.

**PSYC 665. Group Counseling.** 3 credits.
A study of the theories, techniques, dynamics, process and practice of group counseling. Students become members of a laboratory group and also conduct research into issues of group counseling. Each student pairs with a partner, creates an intervention plan, and facilitates the group process. **Prerequisites:** PSYC 660 and 661 or permission of instructor.

**PSYC 822. Assessment in Early Childhood Special Education.** 3 credits. (Cross-listed as SPED 622.)
This course provides the student with exposure to screening assessment and diagnostic procedures utilized in the identification of handicapped students ages 0-5. A case study approach to diagnostics is emphasized. Family assessment is also an integral part of the course. **Prerequisite:** Permission of the instructor and SPED 621 or equivalent.

**PSYC 825. Doctoral Seminar in Professional Psychology.** 1 - 3 credits.
This course covers issues and content designed to foster the development of the student’s identity as a doctoral-level professional psychologist. Course is graded on S/U basis.

**PSYC 826. Advanced Seminar in Developmental Psychopathology.** 3 credits.
This course reviews at the doctoral level current research and theory regarding childhood disorders, their origins, their consequences for life span development, and the factors that mitigate against them. Specific topics include theories of development and psychopathology; taxonomy and diagnosis; longitudinal studies of continuity and change; development of depression, aggression, and anxiety; and resilience.

**PSYC 830. Structural Equation Modeling.** 3 credits.
Exploratory and confirmatory factor analysis, path analysis and relevant aspects of measurement theory are introduced. In this context, several mathematical and technical issues about model fitting are presented: the statistical requirements for a model, estimators and estimation, model evaluation, model modification, software use, and pertinent troubleshooting strategies. **Prerequisites:** PSYC 606 and 608.

**PSYC 832. Item Response Theory.** 3 credits.
This examines the use of Item Response Theory models for test construction and ability estimation. Models for tests with dichotomous and polytomous items will be covered. Other topics for discussion include advantages and disadvantages of IRT relative to Classical Test Theory, the detection of differential item functioning (or item bias), and the role of IRT in Computer Adaptive Testing. **Prerequisite:** PSYC 606.

**PSYC 834. Computers and Testing.** 3 credits.
This course focuses on the computer as a medium for the administration and scoring of achievement tests. Strengths and limitations of current computerized testing methods
are addressed, as well as future issues and challenges. Topics to be discussed include linear and adaptive tests, problem simulations, performance assessment, and expert systems. **Prerequisites:** PSYC 606, and 832.

**PSYC 840. Qualitative Research Design and Analysis.** 3 credits.
This course is designed to give students an introduction to the philosophical, conceptual, and practical basis of qualitative research. Provides an introduction to all phases of qualitative research design, developing research questions, doing data collection and analysis and writing a qualitative research proposal. **Prerequisite:** Permission of instructor.

**PSYC 852. Advanced Consultation and Supervision.** 3 credits.
An advanced course in models of consultation; supervision, and leadership/management. **Prerequisite:** Permission of instructor.

**PSYC 855. Assessment Consultation and Practice.** 3 credits.
This course provides guided opportunities for supervised application of sets of assessment skills and competencies with the development of professional self as an assessment practitioner. Students join with center faculty members to engage in ongoing assessment projects concerning at-risk students, alumni surveys, academic undergraduate and graduate degree programs, general education, academic program reviews, and distance education programs. Ethics will be emphasized, spanning the continua of assessment practice from establishing consultation relationships, assessment design, data collection, analysis, maintenance and archiving of data, and report writing to presentation of findings. **Prerequisite:** Permission of instructor.

**PSYC 864. Advanced Individual Psychotherapy.** 3 credits.
This class is a laboratory experience which explores the phases of the therapeutic relationship between therapist and client. The framework for conceptualizing psychotherapy will be the integration of the interpersonal approach with a multi-model, systems orientation. Topics such as diversity, resistance, transference, and countertransference will be discussed.

**PSYC 877. Advanced Seminar In Child and Family Assessment.** 3 credits.
This doctoral-level course reviews advanced methods for the assessment of children and families, and focuses on the development of a case formulation that integrates test findings and informs intervention efforts.

**PSYC 878. Doctoral Practicum.** 1-6 credits.
Provides a variety of supervised field experiences for advanced, applied psychology doctoral students. Students may enroll for several types of practicum experiences (e.g., clinic, school, HDC). Course is graded on an S/U basis. **Prerequisite:** Permission of instructor.

**PSYC 879. Assessment Practicum.** 3 credits.
This course provides guided opportunities for supervised application of sets of assessment skills and competencies with the development of professional self as an assessment practitioner. Students join with center faculty members to engage in ongoing assessment projects concerning at-risk students, alumni surveys, academic undergraduate and graduate degree programs, general education, academic program reviews, and distance education programs. Ethics will be emphasized, spanning the continua of assessment practice from establishing consultation relationships, assessment design, data collection and analysis, maintenance and archiving of data, and report writing to presentation of findings. Course will be graded on an S/U basis.

**PSYC 880. Introduction to Child and Adolescent Neuropsychology.** 3 credits.
This course will include a review of central nervous system (CNS) anatomy and physiology as it pertains to brain/behavior relationships and neuropsychological assessment. Emphasis is on providing a foundation for more intensive further evaluation and remediation within the school setting of children and adolescents.
surviving traumatic brain injury. Prerequisite: Permission of the instructor.

**PSYC 881. Issues and Techniques in Research and Evaluation.** 1 - 3 credits. Opportunity for applied research and/or program evaluation in areas of special interest. Students will participate as full members of a research team and assist with the design of a study. This course will serve as a basis for preparing students to develop the proposal for their doctoral research project. Course is graded on an S/U basis. Prerequisites: PSYC 605 and PSYC 608 or equivalent, or permission of the instructor.

**PSYC 889. Advanced Personality Assessment.** 3 credits. Critical review of theory, practice and research with regard to personality assessment techniques. Emphasis will be placed on teaching the Rorschach and MMPI, and using these and other assessment procedures to answer specific diagnostic questions (e.g., depression, psychosis, personality disorders, etc.). Prerequisite: PSYC 779, or equivalent.

**PSYC 890. Doctoral Internship.** 6 credits. Supervised internship in a school and/or community agency approved by the Program Coordinator. Designed to meet APA internship guidelines. Course is graded on an S/U basis. Prerequisite: Completion of all course work and permission of program committee.

**PSYC 891. Doctoral Assessment Internship.** 3 credits (can be taken for a second semester) Supervised assessment internship in a higher education, kindergarten through 12th-grade, business or health care setting that has been approved by the program coordinator. Typically involves the design and implementation of assessment strategies to meet the needs of the institution or agency. Course will be graded on an S/U basis. Prerequisites: Completion of all doctoral program course work, PSYC 878 and permission of the program committee.

**PSYC 895. Doctoral Practicum in College Teaching.** 1-3 credits. This practicum course provides instruction, modeling, and supervision in teaching college or professional level learners. Students will teach undergraduate courses in psychology and/or make professional presentations, receiving feedback and supervision from the instructor. Prerequisites: Master’s degree and permission of instructor.

**PSYC 899. Dissertation Continuance.** 2 credits. Continued study, research and writing in the area of dissertation concentration. (This course does not count toward fulfilling the required hours for the degree; it may be repeated as needed. Students who have registered for six hours of dissertation credit but have not finished the dissertation must be enrolled in this course each semester, including summer, until they complete the dissertation.)

**PSYC 900. Doctoral Dissertation.** 6-12 credits. Provides advanced research required of all doctoral candidates. Course is graded on an S/U basis. Prerequisites: completion of all course work and permission of program coordinator.

**PSYC 668. Couple and Family Systems.** 3 credits. A study of the dynamics of couple and family living, focusing on social change, social stratification, mate selection, marriage, divorce, child rearing, sexuality and individual behavior, and its effect on the family structure. Prerequisite: Permission of instructor.

**PSYC 669. Career Development.** 3 credits. The impact of career choice throughout the life span is explored. Vocational theories and a variety of approaches to career decision-making will be introduced. Several career-related assessment instruments will be used to help students develop skills in administration and interpretation.

**PSYC 674. Individual Intelligence Testing.** 3 credits.
Students develop proficiency with administration, interpretation and reporting of individual intelligence tests (the WISC III, WAIS, WPPSI and Binet) and instruments used in nondiscriminatory multicultural assessment. Prerequisite: Permission of instructor.

**PSYC 680. Independent Study.** 1-3 credits.
An opportunity for independent study or research in an area of special interest. Prerequisite: A written plan must be submitted and approved by a faculty supervisor, the student’s program coordinator and the department head prior to registration.

**PSYC 685. Psychopathology: Diagnosis and Intervention Planning.** 3 credits.
Training and practice in the following: making reliable and valid diagnoses of mental disorders; appropriately addressing the ethical and cultural issues involved; performing collaborative diagnostic interviews; participating in effective case conferences; and planning interventions to achieve therapeutic goals. Prerequisite: PSYC 600, PSYC 661 or permission of instructor.

**PSYC 690. Proseminar.** 3 credits.
This course introduces the beginning graduate student to areas such as developmental psychology, personality, abnormal and social psychology.

**PSYC 695. Practicum.** 1-6 credits.
Provides a variety of supervised field, laboratory or school experiences. Course will be graded on an S/U basis. Prerequisite: Permission of instructor.

**PSYC 698. Comprehensive Continuance.** 1 credit.
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**PSYC 699. Thesis Continuance.** 2 credits.
Continued study, research and writing in the area of thesis concentration. (This course does not count towards fulfilling the required hours for the degree; it may be repeated as needed. Students who have registered for six hours of thesis credit but have not finished the thesis must be enrolled in this course each semester until they complete the thesis.)

**PSYC 700. Thesis.** 6 credits.
This course is graded on a satisfactory/unsatisfactory (S/U) basis.

**PSYC 710. Counseling Strategies: Special Topics.** 1 credit.
Training and practice in the use of a specific counseling method. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

**PSYC 710A. Counseling Strategies. Crisis Intervention.** 1 credit.
Training and practice in crisis intervention with individuals, groups, and communities. Specific techniques include suicide prevention, telephone intervention, psychiatric emergency work, outreach strategies, traumatic stress debriefing, and disaster intervention. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

**PSYC 710B. Counseling Strategies: Brief Counseling.** 1 credit.
An introduction to time-limited counseling. Solution-Focused, Narrative, and Constructivist approaches to counseling are discussed. Students practice the micro-skills involved in goal-directed, efficient counseling strategies. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

**PSYC 710C. Counseling Strategies: Theory and Techniques of Play Therapy.** 1 credit.
Overview of the principles of play therapy. Training and practice in basic play therapy techniques. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

**PSYC 710D. Counseling Strategies: Relaxation and Hypnotic Techniques.** 1 credit.
Training and practice in the use of relaxation and hypnotic techniques to reduce anxiety, manage pain, envision goals, enhance personal efficacy, and facilitate behavioral change. Specific topics include mind/body interaction, indications and counter-indications, and ethical issues. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

**PSYC 748. Gender Issues in Counseling.** 3 credits.
An exploration of gender issues as they relate to counseling theories and techniques. The social construction of gender roles, as well as the gendered nature of society, are discussed. Implications for working with women, men, gay/lesbian/bisexual, and transgendered individuals are addressed. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

**PSYC 749. Multicultural Perspectives of Intervention.** 3 credits.
Offers a cognitive and experiential study of sociological and psychological variables, such as race, gender, and socioeconomic status, that influence the professional helping relationship. Culturally relevant models of counseling theory and practice are presented. Prerequisite: Permission of instructor.

**PSYC 750. Consultation and Intervention Techniques.** 3 credits.
Provides the knowledge and skills necessary to engage in consultation and systems level intervention within educational and mental health settings.

**PSYC 751. Psychotherapy with Children and Adolescents.** 3 credits.
Theoretical and cognitive bases for understanding frequently used therapeutic strategies and techniques. Specific sections will focus on general practices and procedures in psychotherapy, and on therapeutic strategies for children, adolescents and families.

**PSYC 752. Theory and Practice of Play Therapy.** 3 credits.
An introduction to the historical and contemporary context of play therapy including an overview of play therapy theories and methods. Examination of cultural influences, ethical issues, and outcome research in play therapy. Prerequisite: PSYC 660, PSYC 661 or permission of instructor.

An overview of the theoretical and applied aspects of operant behavior modification and cognitive behavior therapy. The course focuses on applications with children, adolescents, and their families in a variety of setting with particular emphasis on cognitive restructuring techniques and brief therapy models.

**PSYC 760. Consultation and Supervision for Counselors.** 3 credits.
Provides students with the knowledge and skills necessary to engage in consultation, negotiation/mediation, and systems-level intervention in mental health and education settings. The course includes an introduction to concepts, processes, and styles of supervision. It offers students the opportunity to gain experience in providing supervision to other counselors in training. Prerequisite: PSYC 660, PSYC 661, PSYC 664 or permission of instructor.

**PSYC 768. Couple and Family Counseling.** 3 credits.
A study of the various approaches to couple and family counseling, focusing on theory, techniques and research that relate to the counseling process. Prerequisites: PSYC 668 and 661, or permission of instructor.

**PSYC 770. Assessment and Public Policy.** 3 credits.
Delineates and compares the history and role of assessment, accountability, and quality assurance to the governance, funding, and purposes of higher education; describes an implementation process of assessment for educational programs and services. Prerequisite: PSYC 600.
PSYC 772. Professional Communication in Psychology. 3 credits.
Focuses on the nature of human communication behavior and theory and addresses how these theories apply to professional communication in psychology. Topics to be discussed include: public address, small group communication, organizational communication, conflict management, negotiation and interpersonal communication. **Prerequisite: Permission of instructor.**

PSYC 777. Psychoeducational Assessment Techniques. 3 credits.
An advanced laboratory course for students in school psychology. Covers evaluation of skills and abilities which relate to psycholinguistics, learning disabilities, psychomotor function, and achievement disorders and instruments used in nondiscriminatory multicultural assessment. Enrollment is limited to allow individual instruction and supervision. **Prerequisites: PSYC 674 or permission of instructor.**

PSYC 778. Advanced Practicum. 1-6 credits.
Provides a variety of supervised field experiences in schools and other settings. The student may re-enroll in this course for different types of practicum experiences. Course is graded on an S/U basis. **Prerequisites: Permission of instructor.**

PSYC 779. Personality Assessment with Children and Adolescents. 3 credits.
Advanced students achieve basic understanding and competency in the administration and interpretation of personality assessment procedures most frequently used in school psychology including instruments used in nondiscriminatory multicultural assessment. Enrollment is limited to allow individualized instruction and supervision. **Prerequisites: PSYC 606, 674, 777 or permission of instructor.**

PSYC 790. Internship. 3 or 6 credits.
Provides a student with a supervised field experience. Students should contact their program coordinator for specifics concerning the internship experience. Course will be graded on an S/U basis. **Prerequisite: Permission of program coordinator.**

PSYC 799. Educational Specialist Research Project Continuance. 2 credits.
Continued study, research and writing in the area of Educational Specialist research project. Course may be repeated as needed but does not count toward fulfilling the required hours for the degree. (Students who have registered for the maximum hours of PSYC 800, Educational Specialist Research Project, but have not finished the project must be enrolled in this course each semester until they complete the research project.)

PSYC 800. Educational Specialist Research Project. 1-3 credits.
Opportunity for advanced applied research in an area of special interest to a school psychology or community counseling student in an Educational Specialist program. Specific course requirements are listed in the separate research project guidelines for school psychology and community counseling students. Course is graded on an S/U basis. Successful completion of the research project fulfills the comprehensive examination requirement for the School of Psychology Educational Specialist Degree. **Prerequisite: Permission of program coordinator.**

PSYC 812. Assessment Methods and Instrument Design. 3 credits.
This course covers reliability and validity issues associated with instrument and methodology design. Delineation of goals and objectives, assessment purposes, test and task specification, item/task development, pilot, review, and maintenance procedures will be applied. Consideration of multifaceted validity and validation issues will be stressed throughout the process. **Prerequisites: PSYC 605, 606 and 608.**

PSYC 814. Performance Assessment and Generalizability Theory. 3 credits.
Development, implementation and maintenance of performance assessment procedures will be covered. Introduces generalizability theory and its applications to performance assessment development and estimation of reliability. Specification and estimation of systematic error variation and methods for controlling error and creating efficient assessment strategies will be applied to performance assessment for absolute and
Public Administration

Dr. Glenn P. Hastedt, Department Head
Dr. B. Douglas Skelley, Graduate Coordinator

For information, call (540) 568-6149
Web site: http://www.jmu.edu/polisci/mpa

Professors
A. Eksterowicz, R. Roberts, D. Skelley

Assistant Professors
P. Bridgmon, E. Williams

Mission
Through research, skill development, and advanced study of public organizations, politics, and the law, the Master of Public Administration program strives to enhance the effectiveness of public employees and aspiring public employees for work in government, nonprofit, and private, government-contracting organizations.

Goals
Through offering the Master of Public Administration, the recognized professional degree in public administration, the program strives to:

- enhance the administrative knowledge and skills of those already employed as professionals in government, nonprofit organizations and firms that deal extensively with government.
- prepare “pre-service” students, especially those with undergraduate degrees that have public sector applicability, with its internship component.

Admission
The Graduate Record Examination or the Graduate Management Admission Test is required of all applicants for the Master of Public Administration program as well as strong undergraduate grades. Applicants should consult with the M.P.A. coordinator concerning admission standards.

Master of Public Administration
The Master of Public Administration degree requires 36 credit hours of course work and 6 credits of internship. The internship is not required of “in-service” students, those presently employed or recently employed in a substantive position in the public sector. Applicants with strong undergraduate preparation that complements or duplicates elements of the program may be exempted from certain courses or have some of the required credits waived. In no case, however, may a student take less than 30 credit hours of academic course work, exclusive of the internship. After careful review of the student’s record, the program coordinator will determine if courses or credits will be waived.

The curriculum consists of a common component and a concentration. The common curriculum enables students to function effectively in the public and non-profit sectors. Students will learn concepts of organization, public management, human resource administration, program and policy evaluation, budgeting, and relevant law. There are three defined concentrations: health administration, public sector communication and criminal justice. In addition, students, in consultation with the coordinator, may design
an individualized concentration.

The individualized concentration may draw upon courses in other graduate programs at JMU and graduate courses offered by other accredited institutions, including online courses. Students should be aware, however, that the College of Graduate and Professional Programs policy allows no more than nine credit hours of transferred course work to count toward a student’s graduate degree. Any transfer courses require the approval of the public administration coordinator.

In addition to a concentration students who do not have a significant professional work background in administration/management are expected to complete a supervised internship with a public or nonprofit agency. The internship will support the student’s concentration. Successful performance on a comprehensive examination is required of all candidates for the M.P.A. degree. Information concerning the comprehensive examination can be obtained from the coordinator of the M.P.A. program.

A student admitted to the program must seek advice from the program coordinator before registering for classes. The coordinator will also assist the student in planning the degree program, taking into account the nature of the student’s undergraduate preparation and professional experience, if any.

Students in the Master of Education program may minor in political science by completing 12 hours of political science or public administration courses.

Master of Public Administration Degree Requirements

<table>
<thead>
<tr>
<th>Core Curriculum</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>POSC 505. Seminar in American Government</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 515. Legal Environment of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 605. Research Design for Policy Evaluation</td>
<td>3</td>
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<tr>
<td>PUAD 606. Program Evaluation in Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 620 Seminar in the Politics of the Administrative Process</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 625. Seminar in Public Management Issues</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 641. Public Budgeting</td>
<td>3</td>
</tr>
<tr>
<td>MBA 650. Managing Human Resources</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 696. Internship in Public Administration</td>
<td>6</td>
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<td><strong>30</strong></td>
</tr>
</tbody>
</table>

Concentrations (choose one)

Health Care Administration Concentration

- HTH 659. Health Care Environment                                             | 3            |
- HTH 660. Health Economics                                                    | 3            |
- HTH 661. Financial Administration of Health Service Organizations          | 3            |
- HTH 669. Modern Health Care Administration                                  | 3            |
|                                                                                | **12**       |

Public Sector Communication Concentration

Choose one of two:                                                            | 3            |
TSC 510. Seminar in Technical and Scientific Communication
TSC 520. Technical and Scientific Communication for Nonnative Speakers of English
TSC 530. Research Methods in Technical and Scientific Professional Communication
TSC 540. Technical and Scientific Editing 3
Choose one of three: 3
TSC 625. Government Writing
TSC 640. Proposal and Grant Writing
TSC 650. Electronic and Online Publication

Criminal Justice Concentration
PUAD 510. Administration in Criminal Justice 3
Choose two of four: 6
PSYC 515. Basic Counseling Skills
AHRD 590. Educational Technologies Used In Adult Education/Human Resource Development
AHRD 610. Instructional Design and Development in Adult Education/HRD
MBA 640. Management Information Systems
PUAD/SOCI 582. Seminar in Criminal Justice 3

Individualized Concentration
Four graduate courses selected in consultation with the M.P.A. coordinator 12

Total Credits 42

Five-Year Degree Program
The five-year plan offers a program for the JMU undergraduate that, if the student performs satisfactorily, leads to the M.P.A. in five years - four undergraduate years and one graduate year of study. The five-year M.P.A. requires 30 graduate credits in academic course work. A student interested in the five-year M.P.A. should meet with the M.P.A. coordinator early in the sophomore year and complete a Five-Year Degree Application. At this time, the student and the M.P.A. coordinator will adopt a plan of study for the next three years. The plan will include a schedule of public administration courses and the choice of a concentration. The concentration should be tailored to support the student’s career goals. The plan is tentative and may be modified by the student with the permission of the M.P.A. coordinator. The student should meet with the M.P.A. coordinator periodically to review the plan and modify as appropriate.

Students entering the five-year M.P.A. program are not required to major in public
administration as undergraduates: they may major in any field. However, they are required to complete the public administration courses listed below while undergraduates and will be required to complete 6-9 hours of reserve graduate credit (see "Reserve Graduate Credit) while still undergraduates. Students wishing to continue in the program must earn a 3.0 (B) grade point average or better in those courses.

In addition, the student must take one or more courses in the student’s chosen area of concentration, earning a 3.0 grade point average or better. The student should do sufficient work in the area of concentration to qualify for graduate courses in that chosen area. Graduate work done in the area of concentration may include 500 level courses subject to the constraint that at least half of the student’s total course load should be numbered 600 or higher.

The student must formally apply for acceptance into the graduate M.P.A. program during the spring of his or her junior year. A five-year program student must begin the program in the fall semester. The student must submit a transcript of all courses taken at James Madison University and other colleges and universities. The student must also submit Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) scores for review. The student may also submit recommendations from two James Madison University faculty members. The M.P.A. admissions committee will not act on an application until the committee receives a completed application. The completed application includes grades of B or above for all undergraduate courses required for acceptance into the five-year program.

Acceptance into the five-year program is conditional. The student must receive acceptable GRE or GMAT scores and earn a B or higher on the three reserve graduate courses taken during the student’s fourth year of undergraduate study.

**Five-Year Recommended Schedule**

<table>
<thead>
<tr>
<th>Undergraduate Curriculum</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman or Sophomore Year</strong></td>
<td></td>
</tr>
<tr>
<td>GPOSC 225. U.S. Government</td>
<td>4</td>
</tr>
<tr>
<td>PUAD 265. Public Administration</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore Year</strong></td>
<td></td>
</tr>
<tr>
<td>POSC 295. Research Methods</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sophomore or Junior Year</strong></td>
<td></td>
</tr>
<tr>
<td>POSC 302. State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 381. Public Budgeting</td>
<td>3</td>
</tr>
<tr>
<td><strong>Junior Year</strong></td>
<td></td>
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<tr>
<td>MGT 365. Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Junior or Senior Year</strong></td>
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<tr>
<td>POSC 405. Seminar in American Government</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 415. Legal Environment of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td><strong>Concentration</strong></td>
<td></td>
</tr>
<tr>
<td>The student should do sufficient work in the area of concentration to qualify for graduate courses in that chosen area (See individual concentration listings for specific credit information).</td>
<td></td>
</tr>
</tbody>
</table>

26

3 or more
Total Undergraduate Credits

Reserve Graduate Courses
Undergraduate students nearing completion of their undergraduate degrees may take up to nine hours of graduate course work for reserve graduate credit during their senior year after being fully accepted to the College of Graduate and Professional Programs in the usual manner.

The student will need to complete three graduate courses for reserve credit in the senior year. The reserve graduate credits do not count toward the undergraduate degree or toward any undergraduate major or minor: they are held in reserve for the graduate M.P.A. Thus the student must meet all requirements for the undergraduate degree without counting these courses.

Written permission to take reserve graduate courses must be obtained from the M.P.A. coordinator and the dean of the College of Graduate and Professional Programs prior to enrollment. The student should apply for permission during the junior year. The student should complete the following three courses.

Fourth Year Reserve Graduate Credit

Fall of Senior Year
PUAD 620. Seminar in the Politics of the Administrative Process 3

Spring of Senior Year
PUAD 641. Public Budgeting 3
PUAD 625. Seminar in Public Management Issues 3
Total Reserve Graduate Credits 9

Fifth Year Graduate Credit

Fall of Fifth Year
PUAD 605. Research Design for Policy Evaluation 3
MBA 650. Managing Human Resources 3
Two graduate courses in the student’s concentration 6

Spring of Fifth Year
PUAD 606. Program Evaluation in Public Administration 3
Two graduate courses in the student’s concentration 6
Take M.P.A. comprehensive examination
Total Graduate Credits 30

Internship

Summer of Fifth Year
PUAD 696. Internship in Public Administration 6
Total Graduate Credit 36

Financial Assistance
A limited number of graduate assistantships are available on a competitive basis for the fifth year. However, students with assistantships are limited in the number of credits taken per semester and ordinarily will not be able to complete the program in five years.

All relevant regulations in the undergraduate and graduate catalogs are applicable.

**Further Information**

Please contact:

- **Dr. Douglas Skelley, M.P.A. Coordinator**
  skellebd@jmu.edu
- **Dr. Glenn Hastedt, Chair, Political Science Department**
  hastedgp@jmu.edu
- **Political Science Department, MSC 1101**
  James Madison University
  Harrisonburg, VA 28807
  (540) 568-6149 or (540) 568-3737
  [http://www.jmu.edu/polisci/mpa/outline.htm](http://www.jmu.edu/polisci/mpa/outline.htm)

**Course Offerings**

**PUAD 510. Administration of Justice.** 3 credits.
Study of the major concepts of management in criminal justice and public safety agencies emphasizing functional and structural approaches with a view toward ongoing systematic reform and modernization. (Credits may not be earned in both PUAD 410 and PUAD 510.)

**PUAD 515. Legal Environment of Public Administration.** 3 credits.
Study of the constraints imposed on public administrators by law and judicial oversight. The course will address federal and state constitutions, judicial review, organizational and personal legal accountability, personnel law, and procurement law.

**PUAD/SOCI 582. Seminar in Criminal Justice.** 3 credits.
A research-oriented seminar which provides a comprehensive view of the discipline of criminal justice and various approaches to research. The student will complete a major research project.

**PUAD 583. Emerging Issues in Public Administration.** 3 credits.
A detailed study of an emerging issue in public administration. The course will examine an area of new or emerging interest in the profession of public administration. The course may be repeated for credit with a change in subject matter. **Prerequisite:** Permission of instructor.

**PUAD 605. Research Design for Policy Evaluation.** 3 credits.
Application of social science methodology to program and policy evaluation. Research design and data collection, as well as planning techniques, are covered.

**PUAD 606. Program Evaluation in Public Administration.** 3 credits.
Application of systematic analysis to program and policy evaluation. Students will complete a computer-assisted research project. **Prerequisite:** PUAD 605 or permission of instructor.

**PUAD 620. Seminar in the Politics of the Administrative Process.** 3 credits.
A study of public administration as part of the political process. Includes administration and politics, organizational structure and behavior, and patterns of management and decision making. Serves as the introductory course to the **Master of Public Administration** program.

**PUAD 625. Seminar in Public Management Issues.** 3 credits.
A study of contemporary issues and problems facing the public manager. Contemporary management systems, techniques and devices will be discussed and case studies will be extensively used.

**PUAD 641. Public Budgeting.** 3 credits.  
Public budgeting practices and skills with an emphasis on the federal budget process. Topics include politics of the budget process, budget types and analytic techniques for budgeting.

**PUAD 680. Reading and Research.** 3 credits.  
Under faculty supervision, independent study of a specialized area of public administration. *Prerequisite: Permission of instructor.*

**PUAD 683. Special Topics in Public Administration.** 3 credits.  
A detailed study of a selected area in public administration. May be repeated with a change in subject matter. *Prerequisite: Permission of instructor.*

**PUAD 696. Internship in Public Administration.** 3 - 6 credits.  
Supervised professional administrative experience with a public or nonprofit agency. Credit for 200 or 400 hours of work is three or six credits. Assigned readings, reports and a research paper are required. *Prerequisite: Permission of instructor.*

**PUAD 698. Comprehensive Continuance.** 1 credit.  
Continued preparation in anticipation of the comprehensive examination. Course may be repeated as needed.

**Political Science**

**POSC 505. Seminar in American Government.** 3 credits.  
A study of the American political system from the administrative perspective. Includes readings and research on democratic values, the bureaucracy’s relationship to Congress, the bureaucracy’s relationship to the presidency, federal government organization, federalism and the policy outputs of the national government.

**POSC 561/HIST 561. Seminar in Marxist-Leninist Theory.** 3 credits.  
A study of the most significant ideas concerning politics, society, economics and philosophy which have shaped Communism and Marxist varieties of socialism.

**POSC 680. Reading and Research.** 3 credits.  
This course offers the individual student the opportunity for reading and research under faculty supervision in the areas of public and nonprofit administration that are of special interest to the student.
Technical and Scientific Communication

Dr. Alice I. Philbin, Director and Graduate Coordinator

For information, call (540) 568-8018
Web site: http://www.jmu.edu/techscicom/

Professors
M. Hawthorne, A. Philbin

Associate Professor
E. Pass

Assistant Professor
K. St. Amant

Institute Fellows
E. Gumnior, C. Réthoré, W. Voige

Mission
The Institute of Technical and Scientific Communication offers programs that combine training and education to prepare students for information management.

The central mission of the TSC programs is to enable graduates to grow as professionals and, ultimately, to contribute to the developing field of technical and scientific communication.

Through a blend of course offerings and internship programs, the Master of Arts and Master of Science programs in technical and scientific communication seek to provide students with communication skills and training that will enable them to build productive careers in industry or academia. They also introduce students to the most current communication technologies used to produce documents of professional quality not only during their studies at James Madison University but also throughout their careers. Finally, students learn the kinds of communication, analytical and reasoning skills that will allow them to become leaders in their fields.

The specific goals of the Master of Arts and Master of Science degrees are to help students to

- define what effective communication means in technical and scientific environments.
- enhance their understanding of how and why communication works.
- learn how to identify and eliminate barriers to effective communication.
- improve the efficiency and effectiveness of their communication management.
- develop research skills.
- create for themselves a cognate area of study within the scientific or technical field in which they intend to work as professional technical communicators.

To achieve these goals, the programs combine work in theory, writing, text design, and analysis of communication systems and contexts to help students to acquire the knowledge and skills needed to begin careers in technical or scientific communication. The programs emphasize scholarly, humanistic and social scientific perspectives on the function and application of technical and scientific communication.

Consequently, the programs provide students with not only the knowledge and skills required for careers in industry, business or government but also the research skills
and communication theory that will prepare them for doctoral study in communication and rhetoric. The long-range goal of the Master of Arts and Master of Science degrees, then, is to enable program graduates to grow as professionals and, ultimately, to contribute to the developing field of technical and scientific communication.

While studies in both programs provide students with a sound foundation in writing, editing and document production, the Master of Arts degree typically attracts students with undergraduate work centered in the humanities. Although these students often supplement their TSC degree plan with courses in the sciences, they are primarily interested in gaining extensive knowledge and practice in writing and editing skills that are not tied to a single technical or scientific field but, rather, are applicable to multiple technical or scientific areas.

Conversely, the Master of Science degree plan of study typically proves attractive to students who want to complement their undergraduate degrees in the sciences with advanced training in communication within their fields. Such complementary training in technical and scientific communication enables Master of Science graduates not only to perform more effectively as technicians or scientists but also to move laterally into writing, editing or production positions or vertically into management positions.

Degree candidates must successfully complete a minimum of 36 credit hours of graduate course work, which includes a minimum of two semesters of course work completed at JMU. Students work with department advisers to design a program that fits their unique educational needs and career aspirations. Depending on their backgrounds and options they might choose to pursue while in the degree program, students may decide to take course work beyond the required 36 hours to obtain additional knowledge or skills in specialized areas. For example, students may choose to take extra course work to enhance their skills in communication technologies or to deepen their academic training in the technical or scientific content areas in which they intend to work as professional writers or editors.

Admission Requirements

In addition to satisfying all admission requirements of the JMU College of Graduate and Professional Programs, applicants must submit to the director of the TSC institute an application dossier that includes the following documents.

- A background and goals statement that explains how the Master of Arts or Master of Science program relates to the applicant’s prior experience and how it fits into his or her long-range professional goals.
- Three letters of recommendation from people who can comment on the applicant’s academic preparation and professional experience.
- 20 to 30 pages of writing samples from academia or the professions.

Nonnative speakers of English must take the Test of English as a Foreign Language and receive a score of at least 550. Applicants may use the letters of recommendation and writing samples to support an application for financial aid.

Admission may begin in either the fall or spring semester. To receive full consideration for admission into the programs as well as for financial aid, students should submit their application packages to the College of Graduate and Professional Programs by May 31 for fall semester and August 31 for spring semester.

Application forms for admission and assistantships are available online from the College of Graduate and Professional Programs at [http://www.jmu.edu/gradprograms/forms.htm](http://www.jmu.edu/gradprograms/forms.htm).

Language Requirement

The Master of Arts and Master of Science programs require that the candidate demonstrate graduate-level proficiency in foreign language, statistics or computer programming in one of following ways.

- Completing the second year of a college course in a modern foreign language with a grade of “C” or above, or completion of the foreign language placement exam
administered by the Department of Foreign Languages and literatures with a placement into the junior level of the language.

β Completing an approved graduate statistics or computer programming course (or equivalent) with a grade of “B” or better.

β Receiving a waiver from the department of its foreign language examination or the required statistics or computing course work based on the student’s extensive language background in one of those areas.

A student should state in his or her plan of study the means by which he or she has already satisfied or plans to satisfy the language requirement. A degree candidate must complete the language requirement before taking the comprehensive exams.

Degree Requirements

Students in the Master of Arts or Master of Science program must successfully complete three core courses (nine credit hours), a technical communication internship (three credit hours) and six credit hours of thesis hours.

Students seeking a Master of Arts degree must also complete 18 credit hours of TSC elective courses.

Students seeking a Master of Science degree must also complete 9 credit hours in an approved technical or scientific cognate discipline and 9 credit hours of TSC elective courses.

At least half of the student’s elective credit hours must come from course work at the 600 level. Up to six of those hours may be TSC 700, Thesis. Students may take courses at the 700 level to satisfy the remainder of their electives requirement. Students who have obtained substantial work-world experience in designing, writing or producing documentation in technical or scientific fields may request credit for and waiver of course work, the internship or thesis.

Cognate Disciplines

To be competitive in many of today’s scientific or technical disciplines, technical communicators must possess substantial knowledge of the scientific or technical field in which they are working. Through the TSC Master of Science program, students have the opportunity to gain that scientific or technical background while refining their skills as technical communicators.

Master of Science candidates must successfully complete at least 9 credit hours of course work at the graduate level in an approved technical or scientific cognate discipline: biology, chemistry, communication sciences and disorders, computer science, dietetics, geography, geology, health sciences, integrated science and technology, kinesiology, mathematics, medical technology, nursing, physics, or psychology. Master of Arts candidates are also encouraged to gain competence in a technical or scientific area before entering the professions. The advanced proficiency gained by the student in the selected cognate area will complement the student’s education in TSC course work.

For approval to begin study in a chosen cognate discipline, Master of Science students should already possess a Bachelor of Science or comparable work-world experience in the proposed technical or scientific field and seek approval to enroll in cognate course work from the cognate discipline department and the director of the TSC Institute. Students who want to take course work in a cognate discipline that does not currently offer graduate studies may do so through independent studies with graduate faculty in the chosen field, distance learning with graduate programs at other accredited colleges or universities or graduate courses available through the College of Integrated Science and Technology. Independent studies with faculty in a cognate discipline department must be approved by the head of that department and by the TSC director. When transferring credit from other universities or receiving studies through distance learning, students should remember that the College of Graduate and Professional Programs allows up to nine credit hours of transferred course work to count toward a
student’s graduate degree at JMU.

**Thesis**
Degree candidates have two options for satisfying the thesis requirement for the Master of Arts or Master of Science degree.

- Complete a traditional research-based master’s thesis on a technical communication topic.
- Complete a practicum that results in a work-world document (e.g., an online or bound computer tutorial, a user manual or a procedures manual).

Apart from directing the candidate in his or her planning, writing and producing the thesis, the thesis committee is responsible for ensuring that the candidate fully understands the departmental and university requirements of theses before he or she can become eligible for graduation.

**Master of Arts Degree Requirements**

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<tr>
<th>Course Requirements</th>
<th>Credit Hours</th>
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<td>TSC 510. Seminar in Technical and Scientific Communication</td>
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<td>TSC 520. Technical and Scientific Communication for Nonnative Speakers of English</td>
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<tr>
<td>TSC 530. Research Methods in Technical and Scientific Communication</td>
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<tr>
<td>Thesis or Practicum</td>
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<tr>
<td>TSC 700. Thesis</td>
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<tr>
<td>Choose at least six of the following:</td>
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<tr>
<td>TSC 545. Ethical and Legal Issues in Technical and Scientific Communication</td>
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<tr>
<td>Cognate discipline courses</td>
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<td>Choose at least three of the following:</td>
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<tr>
<td>TSC 690. Special Issues in Technical and Scientific Communication</td>
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1 Master of Science candidates must choose a cognate discipline from the following: biology, chemistry, communication sciences and disorders, computer science, dietetics, geography, geology, health sciences, integrated science and technology, kinesiology, mathematics, medical
Admission to Candidacy
Before enrolling in second-semester courses, students must submit to their graduate advisers a plan of study that identifies the focus of their study and the specific courses that they intend to complete toward that focus of study. When applying for admission to candidacy, Master of Arts and Master of Science students must have

- completed all formal course work toward the degree, as required by the program and guided by the student’s plan of study.
- formed a thesis (or practicum) committee.
- received the thesis committee’s formal approval of the thesis proposal.
- satisfied the language requirement.
- passed the comprehensive examination.
- passed the oral defense of the thesis.

After having received candidacy approval, the student may complete his or her thesis and then submit it to his or her thesis committee.

Course Offerings

**TSC 510. Seminar in Technical and Scientific Communication.** 3 credits.
A foundations course. The study of the theories and history of technical and scientific communication and its major figures and issues. Introduces students to foundational texts in the field.

**TSC 520. Technical and Scientific Communication for Nonnative Speakers of English.** 3 credits.
Study of theory, history and research in the field as well as extensive practice in designing, writing, revising and producing documents central to technical communication, including technical summaries, definitions, mechanism descriptions, process or procedure descriptions, proposals, reports and manuals. Emphasizes common problems confronted by technical communicators who are not native speakers of English, including organization, style, paragraphing, grammar, usage, punctuation and idiomatic language.

Advanced study of research methodology used in technical and scientific communication, covering techniques for collecting information or data through primary and secondary research. Emphasizes extended bibliographic research through projects that employ conventional bound texts as well as electronic texts, including CD-ROM and the Internet.

**TSC 540. Technical and Scientific Editing.** 3 credits.
Advanced study of and practice in the central editorial duties of managing a document through the editorial process, including establishing the need, purpose and scope of a document; developing levels of edit; copyediting; substantive editing; determining document design; editing graphic aids; collaborating with authors; and proofreading. **Prerequisite:** TSC 530 or permission of instructor.

**TSC 545. Ethical and Legal Issues in Technical and Scientific Communication.** 3 credits.
Advanced study of the ethical and legal issues confronted by technical communicators in a range of fields. Examines the role of ethics in the field, the nexus of ethics and the law, ethical theories and critical thinking in moral reasoning, falsification of information or data in written or graphic form, ownership of information, confidentiality, copyright and trademark laws, conflicts of interest, and causes of unethical behavior. **Prerequisite:** TSC 530 or permission of instructor.

**TSC 550. Organizational Communication.** 3 credits.
Advanced study of the structure of communication in organizations by exploring formal and informal communication systems in government, industry and business. Examines the role of communication in the social construction of organizations with hierarchical and nontraditional structures. Prerequisite: TSC 530 or permission of instructor.

**TSC 555. Managerial Communication.** 3 credits.
Advanced study of how managers communicate in organizations by examining the various forms, contexts and functions of managerial written and verbal communication. Emphasizes the role of communication in management and the rhetorical guidelines followed by effective managers to design, write, revise and produce clear, concise and persuasive documents. Prerequisite: TSC 530 or permission of instructor.

**TSC 560. Scientific Rhetoric.** 3 credits.
Study of how writers and editors in technical and scientific communication structure language in communicating scientific knowledge and in presenting and defending a position. Examines theoretical approaches to the uses of language in science and technology within specialized disciplines, industrial organizations, and social and cultural settings as well as critical approaches to the works of figures such as Isaac Newton, Charles Darwin, James D. Watson, Francis Crick and Stephen Jay Gould. Prerequisite: TSC 530 or permission of instructor.

**TSC 570. Rhetorical Theory: Classical through Renaissance.** 3 credits.
Study of classical rhetoric with an emphasis on the use of language as a means of winning the assent sympathy or cooperation of an audience. Examines the rhetorical theories of figures such as Gorgias, Isocrates, Plato, Aristotle, Cicero, Quintilian and Saint Augustine. Prerequisite: TSC 530 or permission of instructor.

**TSC 580. Rhetorical Theory: Enlightenment through Contemporary.** 3 credits.
Study of modern rhetoric with an emphasis on the use of language as a means of generating knowledge and of understanding, establishing and maintaining human communities. The course examines the rhetorical theories of figures such as Francis Bacon, George Campbell, Richard Whately, Kenneth Burke, C. Perelman, L. Olbrechts-Tyteca and Michel Foucault. Prerequisite: TSC 530 or permission of instructor.

**TSC 590. Intercultural Technical and Scientific Communication.** 3 credits.
Study of technical and scientific communication in a variety of cultural and international settings and contexts. Emphasizes strategies for understanding and developing analytical skills needed to collaborate with or communicate to people with varied racial, ethnic or cultural backgrounds in both domestic and international settings. Prerequisite: TSC 530 or permission of instructor.

**TSC 610. Publication Management.** 3 credits.
Advanced study of the management and editorial policy of academic and professional publications. Examines such managerial and editorial responsibilities as defining editorial policy, choosing a management hierarchy, defining management roles, reviewing and editing submissions for publication, and collaborating with authors. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 615. Document Design.** 3 credits.
Advanced study of the document production process, including such design and production processes as creating publication designs, determining publication format and layout for a range of documents (e.g., brochures, newsletters, journals, and books), manipulating text and graphics using desktop publishing software, proofreading galley and page proofs, and submitting final drafts through electronic prepress to printer. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 620. Science Writing.** 3 credits.
Advanced writing course that examines the writing, editing and producing of scientific documents including manuals, research reports, conference papers and journal articles. Emphasizes the process of submitting manuscripts for publication to professional and academic journals. Prerequisites: TSC 530 and TSC 540 or permission of instructor.
academic science journals, magazines and newspapers and also reviews methods for creating finished, publishable articles about new research, theories, projects, trends and personalities in science and technology. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 625. Government Writing.** 3 credits.
Advanced study of writing genres from a variety of fields within government. Examines the purposes, audiences and formats unique to government publications. Directs students in writing original and editing existing government documents. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 630. Legal Writing.** 3 credits.
Advanced study of central components of legal writing such as legal analysis, representation of facts and evidence, reasoning, logic, and argumentation. Addresses such key rhetorical elements of legal documents as clarity and conciseness of style, level of diction, jargon, passive voice and errors in person. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 635. Medical Writing.** 3 credits.
Advanced study of the theory and practice of writing in medical/health-related fields. Examines the kinds of documentation written about medical practices for nontechnical audiences (patients and their families). Emphasizes communication between medical professionals and patients. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 640. Proposal and Grant Writing.** 3 credits.
Advanced study of the planning and writing of proposals and grants with emphasis on research proposals and grants seeking funding from industry and government. Covers key proposal components including the executive summary, purpose and scope, problem definition, need, methodology, project feasibility, facility requirements, personnel qualifications, cost, and proposal presentation. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 645. Documentation of Computer Technologies.** 3 credits.
Advanced study of theory and practice in designing, writing and producing computer documentation for end users. Emphasizes documentation design and production, online documentation, usability testing, and writing of user’s guide for computer hardware and software. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 650. Electronic and Online Publication.** 3 credits.
Advanced study of electronic and online publications, including World Wide Web pages, electronic newsletters and magazines, and online help. Emphasizes principles in designing, writing and producing publications using such current authoring tools as the hypertext mark-up language, HTML. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 655. Electronic Graphic Design.** 3 credits.
Advanced study of the theoretical and practical use of computer graphics as a form of visual communication in scientific or technical documents. Examines topics such as visual perception, design theory, formatted text and graphics, color and design concepts, animation, and video. Emphasizes the development of technical skills in manipulating electronically generated text and graphics. Prerequisites: TSC 530 and TSC 540 or permission of instructor.

**TSC 670. Teaching Technical and Scientific Communication.** 3 credits.
Preparation of TSC teaching assistants in rhetorical theory and teaching methodologies. Emphasizes pedagogical strategies central to teaching effective written and oral communication in the field and provides practice in course development and assessment under the guidance of a faculty mentor in actual course situations. Required of all teaching assistants before their first semester teaching. Prerequisites:
TSC 680. Readings in Technical and Scientific Communication. 3 credits.
Faculty-supervised reading, research and writing on advanced technical and scientific communication projects not covered in regularly scheduled courses. Prerequisites: TSC 530, TSC 540, permission of instructor, and completion of 18 or more credit hours in the major. May be repeated with different content and permission of director.

TSC 690. Special Issues in Technical and Scientific Communication. 3 credits.
Advanced writing and research in a variety of technical communication genres, including government writing, medical writing, legal writing, and proposal and grant writing. Examines special and timely issues currently being explored in technical and scientific communication not addressed in sufficient depth in regularly scheduled TSC courses. Prerequisites: TSC 530 and TSC 540. May be repeated with different course content and permission of director.

TSC 695. Internship in Technical and Scientific Communication. 3 credits.
Work-world experience within business, industry, government or academia in technical and scientific communication. Designed to allow students to incorporate field experience with TSC course work and to observe communication processes and apply effective written, interpersonal and public communication skills. Prerequisites: TSC 530, TSC 540 and permission of internship coordinator. May not be repeated.

TSC 699. Thesis Continuance. 2 credits.
Individual reading, research and writing associated with completion of major’s practicum portfolio. Directed by the chair of the student’s thesis committee and required for graduation. Prerequisites: TSC 530, TSC 540 and permission of thesis committee director. May not be repeated.

TSC 700. Thesis. 6 credits.
Individual reading, research and writing associated with completion of major’s practicum or thesis. Supervised by the director of the student’s thesis committee. Student must complete six hours of thesis research to graduate. Prerequisites: TSC 530, TSC 540 and permission of thesis committee director. Credit hours may be taken over one or two semesters.
Graduate Catalog Nonmajor Courses

The following departments do not offer graduate major programs. However, they do offer graduate courses which are designed to broaden a student's knowledge and are appropriate for use as electives for those pursuing the Master of Education degree in a specific discipline. Interested students should consult directly with the department or school involved.

Center for Geographic Information Science
  Dr. Steven Frysinger, Director
  GEOG 501. Topics in Geography. 1-3 credits.
  A course providing study of specific topics in geography or workshop experiences relating to recent developments in the teaching of geography. May be repeated for credit as course content changes.

Center for Economic Education
  Dr. William C. Wood, Director
  ECON 501. Workshop in Economics. 3 credits
  Provides detailed study of economics topics. Designed primarily for elementary and secondary teachers. Prerequisite: Permission of instructor. May be repeated for credit when content is different. (Normally offered in summer session. See e-campus.)

Mathematics
  Dr. David C. Carothers, Department Head
  MATH 501. Workshop in Mathematics. 1-3 credits.
  Topics in modern elementary mathematics which are of interest primarily to intermediate and secondary mathematics teachers. May not be used to satisfy minor requirements in mathematics. May be repeated for credit when course content changes.
  MATH 522. Statistics for Researchers. 3 credits.
  Introduction to statistics and statistical methods, including descriptive techniques, normal distribution, tests of hypotheses, confidence intervals, regression and analysis of variance. Does not satisfy requirements for the minor in mathematics of the Master of Education degree.
  MATH 585. Selected Topics I. 3 credits.
  Study of selected topics not otherwise covered in the regular offerings of the department. May be repeated for credit when course content changes.
  MATH 685. Selected Topics II. 3 credits.
  An in-depth study of selected topics not otherwise covered in the regular offerings of the department. May be repeated for credit when course content changes.

Communication Studies
  Dr. Eva M. McMahan, Director
  SCOM 680. Reading and Research. 3 credits.
  Opportunity for directed reading and research in areas of professional interest and goals. Must be done in a declared field of study. Investigation research and reporting. Prerequisite: Permission of director.

Physics
  Dr. C. Steven Whisnant, Head
  PHYS 501. Workshop in Physics. 1-3 credits.
Concentrated study in particular areas of physics.

**PHYS 510. Topics in Theoretical Physics.** 3 credits.
Study at an advanced level of a specific area of theoretical physics (such as advanced mechanics, electrodynamics, quantum mechanics or mathematical physics). Topics will be selected according to student needs and interests, and staff availability. May be repeated for up to nine credits.

**PHYS 515. Topics in Experimental Physics.** 3 credits.
Study at an advanced level of a specific area of experimental physics (such as optics, electronics or nuclear physics). Topics will be selected according to student needs and interests and staff availability. May be repeated for up to nine credits.

**Science**

**SCI 501. Workshop in the Teaching of Science.** 3 credits.
A course providing workshop experiences relating to recent developments in the teaching of science in the schools. Course title will vary with discipline. Course may be repeated when content changes and may only be used by departments which do not have graduate-level science offerings. This course may not be used as transfer credit.

**Sociology and Anthropology**

*Dr. Mary Lou Wylie, Department Head*

**ANTH 500. Anthropological Research.** 3 credits.
This course studies techniques and procedures of anthropological field research and data interpretation. Each student participates in research in progress under direct professional supervision.

**ANTH 544. Graduate Work in Field Archaeology.** 3-8 credits.
This course is directed at providing graduate level students with the opportunity to apply advanced procedures of archaeology in a field situation. Efforts will be on the development and implementation of archaeological research designs. Historic and prehistoric interests are accommodated.

**ANTH 550. Archaeological Site Science.** 4 credits.
This course is a survey of the factors affecting the preservation of archaeological sites and artifacts before, during and after excavation. Field and laboratory situations will offer students immediate practical experience.

**SOCl 680. Reading and Research.** 3 credits.
Opportunity is offered for reading and research in the areas of sociology which are of special interest to the student. Prerequisite: Approval of department head.

**Theatre**

*William J. Buck, Director*

**THEA 501. Teachers’ Workshop in Theatre.** 3 credits. (Summer.)
An intensive study of the teaching and practice of theatre, specifically in intermediate and secondary schools. Opportunities for practical work within summer productions offered in the school.

**THEA 540. Seminar in Theatre.** 3 credits.
Studies of topics in academic and professional theatre. Emphasis on research methods unique to theatre studies. Consideration of topics in both theoretical and practical aspects of theatre.

**THEA 585. American Theatre History.** 3 credits.
Study and analysis of the American theatre experience as presented in the dramatic literature of the country. Emphasis on basic American themes. Consideration of playwrights and performers significant to the development of American theatre.

**THEA 588. Experimental Theatre.** 3 credits.
Study of avant-garde theatre. Emphasis on motivating and guiding advanced students to a higher degree of aesthetic appreciation. Consideration of the relationship of experimental
Graduate Council

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Dean of the College of Graduate and Professional Programs

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M. Kent Todd, Ph.D. School of Kinesiology and Recreation Studies

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Dean, College of Arts and Letters
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Mohamed S. Aboutabl, Assistant Professor of Computer Science.
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D.S. in Computer Science, George Washington University.

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B.A., Northeastern Illinois University; M.A., Ph.D., The Ohio State University.

Virginia Andreoli Mathie, Professor of Psychology.
B. Math., B.A., University of Waterloo; M.A., Ph.D., University of North Carolina.

Kevin Apple, Assistant Professor of Psychology.
B.A., M.S., Ph.D., Ohio University.

J. Christopher Arndt, Professor of History.
B.A., Gettysburg College; M.A., Auburn University; Ph.D., Florida State University.

Kathleen G. Arthur, Professor of Art.
B.A., Skidmore College; M.A., Ph.D., New York University.

Sharon K. Babcock, Associate Professor of Biology.
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Kenneth D. Bahn, Professor of Marketing.
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Pamela D. Bailey, Assistant Professor of Health Sciences.
B.S., M.S., Duke University School of Medicine.

Marianne I. Baker, Assistant Professor of Reading Education.
B.A., Lynchburg College; M.Ed., Ph.D., University of Virginia.

Suzanne C. Baker, Associate Professor of Psychology.
A.B., Davidson College, M.S., Ph.D., University of Georgia

Dabney A. Bankert, Associate Professor of English.
B.S., Ph.D., University of Illinois at Urbana-Champaign.

Nicholas W. Bankson, Professor of Communication Sciences and Disorders.
B.A., University of Kansas; M.A., Ph.D., University of Kansas Medical Center.

Charles P. Baril, Professor of Accounting.
A.B., M.B.A., The College of William and Mary; Ph.D., University of Florida, C.P.A.

James D. Barnes, Professor of Integrated Science and Technology.
Ph.D., University of Virginia.

**Kenneth E. Barron**, Assistant Professor of Psychology.
B.A., Bucknell University; Ph.D., University of Wisconsin-Madison.

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