Health Sciences

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Master of Occupational Therapy Program

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Overview
The Department of Health Sciences is home to three graduate programs: M.S. in health sciences with a concentration in either dietetics or nutrition and physical activity; M.O.T. in occupational therapy; and M.P.A.S. in physician assistant studies. The department also offers a health services administration track in the M.B.A. program.

Admission Requirements
Admission requirements for programs in the Department of Health Sciences vary by program. Refer to the specific program for admission criteria and deadlines.

Mission
The graduate programs in health sciences are dedicated to preparing students to become evidence-based critical thinkers in the health sciences. 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, clinical and/or 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.

In the Master of Science programs, courses must be selected with the approval of the major adviser in accordance with the program requirements. Students electing a major 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 dietetics or nutrition and physical activity concentrations of the health sciences graduate program who do not possess the required prerequisites must obtain them before beginning the program.

Master of Science Concentrations
Health Sciences: Dietetics Concentration
Dr. Patricia Brevard, Graduate Concentration Coordinator
Phone: (540) 568-6362

A master of science degree in health sciences may be pursued with a concentration in dietetics. The program includes course work in advanced nutrition, topics in foods, professional issues in dietetics, management in dietetics settings, research methods, nutrition and disease, nutrigenomics, and geriatric nutrition. In addition to course work, students must plan, conduct and publish a research project. The prerequisite for admission to this program is the Registered Dietitian credential.
Dietetics Concentration Degree Requirements

Minimum Requirements Credit Hours
MATH 522. Statistics for Researchers 3
NUTR 655. Integrated Nutrition 3
NUTR 654. Current Topics in Foods 3
NUTR 660. Research Techniques/Research Methods in Dietetics 3

Choose one of the following options: 6-7
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 Research (six credits)
NUTR 695. Seminar/Research Interpretation in Dietetics (one credit)

Choose 12 hours from the following elective courses: 12
NUTR 545. Exercise and Nutrition
NUTR 555. Theories and Practices of Weight Management
NUTR 650. Nutrition Education/Counseling
NUTR 671. Nutrition in Disease Development, Progression and Prevention
NUTR 672. Professional Practice Issues in Dietetics
NUTR 673. Advanced Management in Dietetics
NUTR 674. Optimal Nutritional Health for Older Adults
NUTR 675. Nutrigenomics

Health Sciences: Interdisciplinary Program in Nutrition and Physical Activity

This 33 credit hour master’s program permits students to major in health sciences 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 and applying for a dietetic internship. A list of DPD requirements is available at [http://www.healthsci.jmu.edu/dietetics/undergraduate.htm](http://www.healthsci.jmu.edu/dietetics/undergraduate.htm) and a list of all dietetic internships in the United States is available at [www.eatright.org](http://www.eatright.org).

Interdisciplinary Program in Nutrition and Physical Activity Concentration Degree Requirements

Minimum Requirements Credit Hours
NUTR/KIN 555. Theories and Practices of Weight Management 3
KIN 644. Metabolic and Cardiorespiratory Aspects of Exercise 3
KIN 645. Muscular, Hormonal and Environmental Aspects of Exercise 3
KIN 650. Exercise Testing, Prescription and Evaluation 3
NUTR 660/KIN 655. Research Technique 3
NUTR 545. Nutrition and Exercise 3
MATH 522. Statistics 3
NUTR 545. Nutrition and Exercise 3
NUTR 652. Nutrition Assessment 3
NUTR 582. Nutrition and Metabolism 3

Choose one of the following: 6
HTH/KIN 700. Thesis
NUTR 681, 682, 695. Directed Research in Dietetics I-II and Seminar and Research in Dietetics

Master of Business Administration: Health Services Administration Concentration

The Department of Health Sciences cooperates with the College of Business Master of Business Administration program to offer a health services administration concentration 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 (3 credits)
HTH 660. Health Economics (3 credits)
HTH 661. Financial Management of Health Services Organizations (3 credits)
HTH 669. Health Care Administration (3 credits)

Three of these courses are used to meet Master of Business Administration elective requirements. Students in the health services administration concentration 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 the Master of Business Administration prerequisite requirements. Refer to the Master of Business Administration Web site ([http://jmu.edu/cob/mba](http://jmu.edu/cob/mba)) for specific requirements for this concentration.
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. Health Behavior: Theory, Research and Practice. 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 Research. 6 credits.
This course is graded on a satisfactory/unsatisfactory/incomplete (S/U/I) 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. Prerequisites: 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: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

NUTR 652. Nutrition Assessment. 3 credits.
Methods of assessing nutritional status of people in clinical and experimental settings. Prerequisite: NUTR 394 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: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

NUTR 655. Integrated Nutrition. 3 credits.
The biochemical and physiological processes involved in nourishing the body in health and in disease. Prerequisite: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

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: Admittance into the dietetic internship.

NUTR 660. Research Methods in Dietetics. 3 credits.
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 671. Nutrition in Disease Development, Progression, and Prevention. 3 credits.
Pathophysiology of disease will be investigated in this course, emphasizing the role of inflammation in development of major chronic diseases. The impact of nutrients on inflammation and in specific disease states and various nutrients and food components that can be used as preventive measures or treatment modalities will be emphasized. Prerequisite: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

NUTR 672. Professional Practice Issues in Dietetics. 3 credits.
This course emphasizes development of skills needed by Registered Dieticians in leadership positions in the profession, professional associations, administrative dietetics employment positions, and other volunteer or employment professional settings. Topics include communication strategies, developing a strategic approach to professional skills and competencies, grant writing, leadership, public policy, and legislative issues. Prerequisite: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

NUTR 673. Advanced Management in Dietetics. 3 credits.
Management and leadership principles will be investigated with emphasis on skills needed in food service, dietetics or nutrition-related services. Current research used in policy making will be reviewed. Focus areas include project, financial, human resource, and outcomes management; quality assurance; marketing strategies; employment law; regulation of food and healthcare; entrepreneurship; and adult education and training. Prerequisite: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

NUTR 674. Optimal Nutritional Health For Older Adults. 3 credits.
Students will investigate physiological changes associated with normal aging, the impact of those changes on nutrition status, and the impact of nutrition on the longevity and quality of life. Evidence-based treatment modalities to minimize the effects of physical, social, economic and mobility changes on nutritional health will be developed. Prerequisite: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

NUTR 675. Nutrigenomics. 3 credits.
The role of food choice and physical activity on gene expression and the impact on health and wellness of individuals will be explored. Also, the role of genetics and nutrition therapy in the prevention and development of chronic diseases will be examined. Prerequisite: Admission to M.S. in health sciences program with dietetics concentration, which includes RD status, or permission of the instructor.

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 NUTR 660.

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.
Occupational Therapy

Dr. Jeff Loveland, O.T.D., M.S., O.T.R./L, Graduate Coordinator

Phone: (540) 568-2399/8170
Web site: http://www.healthsci.jmu.edu/occupationaltherapy/

Admission Requirements
The Masters of Occupational Therapy (M.O.T.) is a professional master’s degree designed for entry-level generalist preparation of the occupational therapist. The design of the program is a 2.5 year model with two routes of entry:

- JMU undergraduate students can apply during their third year of undergraduate work. Undergraduate students must have completed all prerequisites and 85 hours of undergraduate credit in order to start the program after their third year. These students must apply to The Graduate School during their senior year.
- If accepted, an additional 1.5 years of course work will be required.
- Students possessing a bachelor’s degree may apply to The Graduate School and the Health Sciences M.O.T. graduate program as graduate students. These students will be required to complete 79 credits in 2.5 years of course work.

Application Deadlines
One cohort of students is admitted each year. Classes begin in June.

For deadlines for application to The Graduate School, see “Admission to The Graduate School.” For deadlines for application to the OT program see the program’s Web site.

Applications submitted by the due date are reviewed first and given earliest consideration for admission into the program. Applications received after the deadline will be considered as enrollment permits.

- Undergraduates must apply for admission to the occupational studies program during their junior year and The Graduate School during their senior year.
- Students possessing a bachelor’s degree must apply to The Graduate School prior to their admission to the M.O.T. program.

Undergraduate applicants should contact the occupational therapy program office for an application packet at (540) 568-2399. Students possessing an undergraduate degree will apply to the MOT program online through the JMU Graduate School.

Mission
The mission of the occupational therapy program is to provide a well-rounded educational experience to students that will prepare them to effectively practice in a variety of service areas within today’s health and human service arena. Each graduate will:

- possess a thorough understanding of occupation.
- be able to articulate and demonstrate the theoretical and practical application of occupational therapy.
- be comfortable and competent working with individuals in a variety of practice settings.
- be committed to continuous professional growth and the evolution and validation of the profession as human needs change.
- be able to systematically locate and evaluate available evidence-based literature to formulate assessment and intervention decisions to guide professional practice.

Faculty participating in the program will contribute through service and education to professional circles and the local community; and will maintain high standards of professional knowledge while offering quality education to students.

Occupational therapists work with individuals whose ability to participate in the occupations of life is disrupted or unable to develop due to injury, disease, developmental difficulties or environmental factors. Occupational therapy is a health and human service profession whose name is reflective of the time that it was formally founded (1917) when the term occupation collectively referred to activities people engage in throughout their day. Based on the centuries-old belief that there is health in doing, active client-centered participation is both the focus of the professional and its main avenue of intervention. Occupational therapists work in hospitals (inpatient and outpatient programs), rehabilitation centers, early intervention programs, schools, mental health programs, home health care agencies, industrial medicine/rehabilitation programs, skilled nursing facilities, private practices, correctional facilities, shelters, community-based programs, or at colleges or universities as faculty. For employment characteristics for occupational therapists, a listing of where JMU OT graduates work, average salary by graduating class, graduate performance on the NBCOT Exam and employer satisfaction of JMU graduates see http://www.jmu.edu/healthsci/occupational_therapy/employment.html.

Accreditation
The occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Bethesda, MD 20824-1220. AOTA’s phone number is (301) 652-AOTA (Web site is http://www.aota.org). Graduation from an ACOTE accredited program is a requirement for eligibility to take the National Board for Certification in Occupational Therapy (NBCOT) exam. NBCOT (http://www.nbcot.org) can be contacted at 120 South Summit Avenue, Suite 100, Gaithersburg, MD 20877-4150 or (301) 990-7979. Successful completion of this examination forms the basis for the regulation of practice. A prior felony conviction may affect a graduate’s ability to take the NBCOT certification examination and/or attain state licensure.

The licensing authority for occupational therapists in the Commonwealth of Virginia is the Department of Health Professions of the Virginia Board of Medicine, Perimeter Center, 9960 Mayland Drive, Suite 300, Richmond, VA 23233-1463. Telephone: (804) 367-4600. Refer to the AOTA Web site for licensing information for other states.
Admission Requirements

Admission is limited and competitive. Students applying to the program with a baccalaureate degree will enter the program as graduate students. Successful completion of 79 graduate credits will result in earning the M.O.T. degree.

Students admitted as seniors will complete 35 undergraduate credits. After acceptance into The Graduate School and graduate level occupational therapy program, they will complete 44 graduate credits for the M.O.T. degree. Admission into the occupational therapy program as an undergraduate does not ensure admission to The Graduate School or the graduate level occupational therapy program.

Admission Requirements for Undergraduates

To be considered for admission to the M.O.T. program, prospective students must:

- be admitted to JMU as an undergraduate student majoring in health studies. NOTE: Refer to the JMU Undergraduate Catalog for specific course work to fulfill degree requirements.
- submit Graduate Record Examination (GRE) scores in verbal, quantitative and writing. Undergraduate applicants should take the GRE in the fall semester (prior to December 1) of their junior year before applying to the M.O.T. program.
- apply and be admitted to The Graduate School during the senior year.
- complete at least 85 hours of undergraduate course work by the time of enrollment.
- have a minimum cumulative grade point average of 2.8 or better (3.0 recommended) and meet all prerequisite course requirements with a grade of “C” (2.0) in the following courses:
  - BIO 270. Human Physiology
  - BIO 290. Human Anatomy
  - GANTH 195. Cultural Anthropology
  - HTH 441. Rehabilitative Biomechanics or comparable physics or kinesiology course
  - MATH 220. Elementary Statistics
  - PSYC 160. Life Span Human Development
  - PSYC 250. Intro to Abnormal Psychology
  - CHEM 120. Concepts of Chemistry
  - NUTR 280. Nutrition for Wellness
  - HTH 151. Foundations of Health Sciences
  - GTH 100. Personal Wellness or GTH 100. Lifetime Fitness and Wellness
  - HTH 230. Community Health
  - HTH 300. Medical Terminology
  - HTH 320. Health Statistics or second math course
  - HTH 330. Introduction to Chronic Diseases
  - HTH 354. US Health Care Systems
  - HTH 408. Research Methods
  - HTH 450. Epidemiology
  - HTH 451. Health Behavior Change

NOTE: These are JMU courses and numbers. Students not attending JMU as undergraduates may request that courses with similar content be substituted for the specific courses listed. Transcripts and syllabi of the courses should be supplied for the review of content.

The admissions committee of the occupational therapy program will determine if the courses meet the prerequisite requirements.
- submit documentation of a minimum 40 hours of observation of occupational therapy services (form in application packet).
- submit three reference forms: one from an employer or non-relative and one or more from an instructor (form in application packet).
- submit an autobiographical statement of 1,500 words or less.
- Meet all ISST requirements and requirements in computer competency as required by the university and stated in the general education requirements in the JMU Undergraduate Catalog.
- Provide evidence of at least one instructional experience in the arts or media (high school or community college course, private instruction, Community Arts certificate, etc.).

Admission as a Graduate Student

To be considered for admission to the M.O.T. program, prospective students must:

- submit Graduate Record Examination (GRE) scores in verbal, quantitative and writing.
- be admitted to the JMU Graduate School. Students with an earned undergraduate degree will apply to the M.O.T. program online through the JMU Graduate School.
- have a minimum cumulative grade point average of 2.8 or better (3.0 recommended) and meet all prerequisite course requirements with a grade of “C” (2.0) in the following courses: NOTE: These are JMU courses and numbers. Students not attending JMU as undergraduates may request that courses with similar content be substituted for the specific courses listed. Transcripts and syllabi of the courses should be supplied for the review of content. The admissions committee of the occupational therapy program will determine if the courses meet the prerequisite requirements.
  - BIO 270. Human Physiology
  - BIO 290. Human Anatomy
  - GANTH 195. Cultural Anthropology
  - HTH 441. Rehabilitative Biomechanics or comparable physics or kinesiology course
  - MATH 220. Elementary Statistics
  - PSYC 160. Life Span Human Development
  - PSYC 250. Intro to Abnormal Psychology
  - CHEM 120. Concepts of Chemistry
  - NUTR 280. Nutrition for Wellness
  - HTH 151. Foundations of Health Sciences
  - GTH 100. Personal Wellness or GTH 100. Lifetime Fitness and Wellness
  - HTH 230. Community Health
  - HTH 300. Medical Terminology
  - HTH 408. Research Methods

- Submit documentation of competency in computer technology and information seeking skills
- Submit documentation of a minimum forty hours of observation of occupational therapy services (form in application packet).
- Submit three reference forms: one from an employer or non-relative and one or more from an instructor (form in application packet).
- Submit an autobiographical statement of 1,500 words or less.
- Provide evidence of at least one instructional experience in the arts or media (high school or community college course, private instruction, Community Arts certificate, etc.)
Application Evaluation Criteria
Candidates are evaluated through review of their written application. The following characteristics, skills, and accomplishments are assessed.
- Academic preparation (overall GPA, prerequisite GPA)
- Autobiographical statement
- Written communication skills
- Volunteer/health and human services experience (Volunteer Form)
- References (Reference Form)
- Thoroughness and timeliness of application submission (date and status of application material when received)

Curriculum
All of the following courses are required and must be taken in the sequence specified. Students must be enrolled full-time. Exceptions to this requirement are rare and are only granted by the program coordinator. Students must perform satisfactorily from an academic standpoint in a manner that is consistent with JMU Graduate School and Occupational Therapy Program policies.

Occupational Therapy Degree Requirements

Summer: Year One (6 weeks)  Credit Hours
HTH 409/OT 510. Therapeutic Interaction 3
HTH 431/OT 530. Human Occupational and the Foundations 3
HTH 445/OT 540. The Occupational Therapy Process 3

Fall: Year One  Credit Hours
HTH 424/OT 520. Occupational Development 3
through the Lifespan
BIO 414/514. Functional Anatomy for Occupational Therapists 4
BIO 440/540. Functional Neuroscience 3
HTH 461/OT 561. Therapeutic Media in Occupational Therapy 2

Spring: Year One  Credit Hours
HTH 435/OT 555. Level I Fieldwork One 1
HTH 460/OT 560. Sensorimotor Foundations of Occupation 3
HTH 478/OT 580. Occupational Dysfunction: Cause and Impact 3
HTH 479/OT 590. Foundations of Research in Occupational Therapy 3
HTH 485/OT 585. Psychosocial Perspectives in Occupational Therapy Practice 3
HTH 491/OT 591. Occupational Therapy Tutorial Group I 1

Fall: Year Two  Credit Hours
OT 600. Assistive Technology in Occupational Therapy Practice 3
OT 610. Occupational Therapy Intervention in Pediatrics 3
OT 620. School Based Practice 2
OT 630. Evidence Based Practice 3
OT 645. Level I Fieldwork Two 1
OT 691. Occupational Therapy Tutorial Group II 1

Spring: Year Two  Credit Hours
OT 640. Occupational Therapy Intervention Throughout Adulthood 4
OT 651. Community and Health Practice in Occupational Therapy 4
OT 655. Level I Fieldwork Three 1
OT 692. Occupational Therapy Tutorial Group III 1

Summer: Year Two  Credit Hours
OT 663. Policy Analysis and Systems of Service Provision 3
OT 665. Level II Fieldwork One (12 week placement) 6

Fall: Year Three  Credit Hours
OT 675. Level II Fieldwork Two (12 week placement) 6
OT 680. Independent Study 3

Note: Level II fieldwork must be completed within 24 months of completion of didactic course work.

Students would receive a master's of occupational therapy degree at December commencement once they conclude all academic and clinical course work.

Course Offerings

Occupational Therapy

OT 510. Therapeutic Interaction. 3 credits.
This course focuses on the therapeutic process, small group dynamics, professional interactions, cultural sensitivity, and client-practitioner relationships. Topics include professional socialization, communication skills, and exploration of self within the context of personal and professional attitudes, values, and beliefs. Prerequisite: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or by permission of the program coordinator.

OT 520. Occupational Development Through the Lifespan. 3 credits.
Occupational development from infancy to old age comprises the content. The specific interactions of the human and the environment in fostering physical, social, emotional, cognitive, moral, and psychological growth are covered. The acquisition of values, roles, habits, temporal adaptations and interests during each stage of life are explored. Prerequisite: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or by permission of the program coordinator.
OT 530. Human Occupation and the Foundations of the Profession. 3 credits.
Occupation as a fundamental human behavior is explored. The conceptual basis of occupational engagement including time, tool use, environmental press, activity analysis, grading, approaches to change and other foundation concepts are linked to occupational science. How these coalesce into a professional focus and a profession completes the content. Prerequisite: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or by permission of the program coordinator.

OT 538. Administrative Functions for OTs. 3 credits.
This course provides an introduction to the management functions, tasks, roles and responsibilities as they are carried out in health and human service organizations. Discussion of emerging issues impacting health care practitioners is provided. Supervisory issues specific to the occupational therapist will be explored. Prerequisite: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or by permission of the program coordinator.

OT 540. The Occupational Therapy Process. 3 credits.
The occupational therapy process is taught. Types, purposes and methods of assessment are taught as the initial and defining stop in the therapeutic process. Problem setting, client centered goal development, intervention and appropriate termination of services are covered. Documentation of the process is also included. Prerequisite: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or by permission of the program coordinator.

OT 555. Level I Fieldwork One. 1 credit.
This course provides an opportunity for the student to gain clinical experience serving clients with psychosocial conditions in the areas of education, health or human services. This clinical experience is designed to enrich didactic course work through directed observation and participation in selected aspects of the occupational therapy process. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 560. Sensorimotor Foundations of Occupation. 3 credits.
The foundations of sensory processing and motor response allow the human to engage in purposeful and meaningful occupations. The important components of movement and behavior occupations. Normal and abnormal sensorimotor processing is presented with particular emphasis on how dysfunctions in these areas impact occupational engagement. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 561. Therapeutic Media in Occupational Therapy. 2 credits.
The use of therapeutic media has had a profound influence on the practice of occupational therapy. This course will analyze the historical, theoretical and contemporary use of therapeutic media and how it is utilized in intervention across client populations of all ages. Methods of adaptation and compensatory strategy effectively utilized to complete tasks will be examined. Contextual issues regarding media use pertaining to physical, cultural, personal and social factors will be discussed. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 580. Occupational Dysfunction-Cause and Impact. 3 credits.
Reasons for occupational dysfunction in the areas of development, trauma, disease, degenerative and environmental conditions are examined in relation to their specific pathology and their effect on human occupational performance. Treatment approaches, assessment and intervention strategies specific to each condition will be developed. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 585. Psychosocial Perspectives in Occupational Therapy Practice. 3 credits.
This course will provide an overview of psychosocial conditions that impact client function in the areas of occupation, performance skills and performance patterns. Occupational therapy assessment and intervention from an individual and group treatment standpoint will be examined as it contributes to the interdisciplinary process. A historical overview of occupational therapy in behavioral health service provision will be covered that will review traditional and contemporary treatment and provider settings. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program director.

OT 590. Foundations of Research in Occupational Therapy. 3 credits.
The core research course introduces the student to the reasons, types and processes of research. Exposure to critical review of published research, specific emphasis on evidence based practice and the use of research in clinical decision-making is emphasized. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum or permission of the program coordinator.

OT 591. Occupational Therapy Tutorial Group I. 1 credit.
Tutorial I is a small group case-based discussion seminar, facilitated by a clinical tutor who is an occupational therapist. Students research and discuss clinical cases related to content that is integrated from all courses that semester in the occupational studies concentration. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum or permission of the program coordinator.

OT 600. Assistive Technology in Occupational Therapy Practice. 3 credits.
The focus of this course is to provide an overview of the selection and use of assistive technology in rehabilitation to improve client function. High and low technology devices will be examined that apply to clients across the life span. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum or permission of the program director.

OT 610. Occupational Therapy Intervention in Pediatrics. 3 credits.
Designed to provide an overview of occupational therapy in pediatrics, this course emphasizes the child and their family in context of environment and culture. The effect of disability on occupational development and performance frames the clinical reasoning used in decision making. Assessment, intervention planning and implementation, including intervention techniques, from a variety of theoretical perspective will be explored. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.
OT 620. School Based Practice. 2 credits.  
An overview of occupational services provided under the individuals with Disabilities Education Act frames the content of this course. Understanding the school as an institution with a mission and culture, working in teams and supporting educational objectives and achievement is stressed. The early intervention programs as designed under IDEA are included. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the program or permission of the program coordinator.

OT 630. Evidence Based Practice. 3 credits.  
Evidence based practice is considered to be the foundation and standard regarding clinical performance in the health and medical fields. This course introduces the student to the methodology of evidence-based research and its applicability to occupational therapy. The content of this course builds on knowledge gained in the introductory research course (OT 590). Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum or permission of the program coordinator.

OT 640. Occupational Therapy Intervention Throughout Adulthood. 4 credits.  
This course will explore the role of the occupational therapist in providing services to clients in early, middle and later adulthood. Functional performance relating to areas of occupation, performance skills, performance patterns, contexts, activity demands and client factors will be analyzed. Theoretical approaches and evidence based intervention strategies will be examined. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program director.

OT 645. Level I Fieldwork Two. 1 credit.  
The focus of this course provides an opportunity for the student to gain clinical experience serving pediatric and adolescent clients in the areas of education, health and human services. This clinical experience is designed to enrich didactic course work through directed observation and participation in selected aspects of the occupational therapy process. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program director.

OT 651. Community and Health Practice in Occupational Therapy. 4 credits.  
As a result of the continued emphasis on health promotion and prevention, it is important for the occupational therapist to be cognizant of community health and human service agencies and how they serve the needs of individuals with special needs. This course will expose the student to community based models of service provision and provide interaction with local agencies. A proposal for and occupational therapy based program will be developed and the process for securing external funding (that can serve as a fiscal resource for practice) will be examined. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program director.

OT 655. Level I Fieldwork Three. 1 credit.  
This course provides an opportunity for the students to gain clinical experience serving clients with orthopedic or neurological conditions in the areas of education, health or human services. This clinical experience is designed to enrich didactic course work through directed observation in selected aspects of the occupational therapy process. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 660. Independent Study in Occupational Therapy. 3 credits.  
This course provides an opportunity for the student to explore theoretical, clinical and evidence based practice concepts related to experience gained from both didactic and fieldwork education in greater breadth and depth. Exploration and dissemination of current health and human services professional literature will be emphasized as students examine the efficacy of traditional and contemporary practice approaches. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum.

OT 663. Policy Analysis and Systems of Service Provision. 3 credits.  
Federal, state, and local laws and regulations related to health and human services are identified and their impact on occupational therapy practice is examined. Particular emphasis is placed on access to services, systems of services and payment for services. The role of advocacy in change is emphasized. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum or permission of the program coordinator.

OT 665. Level II Fieldwork One. 6 credits.  
This supervised 12-week fieldwork external affiliation provides in-depth experience in delivering occupational therapy services on-site at a hospital, community agency or human service setting. Students demonstrate an ability to evaluate, treat, document and discharge clients. Professionalism, clinical reasoning skills and communication with clients, significant others and professional colleagues are enhanced. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 675. Level II Fieldwork Two. 6 credits.  
Students participate in a second 12-week in-depth supervised fieldwork affiliation in a different practice setting such as a hospital, community agency or human service settings. Students demonstrate increased independence in evaluating, treating, documenting and discharging clients. Professionalism, clinical reasoning and communication skills are further enhanced. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program coordinator.

OT 680. Community and Health Practice in Occupational Therapy. 3 credits.  
As a result of the continued emphasis on health promotion and prevention, it is important for the occupational therapist to be cognizant of community health and human service agencies and how they serve the needs of individuals with special needs. This course will expose the student to community based models of service provision and provide interaction with local agencies. A proposal for and occupational therapy based program will be developed and the process for securing external funding (that can serve as a fiscal resource for practice) will be examined. Prerequisites: Admission to the occupational therapy program and successful completion of all previous courses in the curriculum, or permission of the program director.

OT 691. Occupational Therapy Tutorial Group II. 1 credit.  
This tutorial course is a continuance of the small group case-based discussion seminar process facilitated by a clinical tutor who is an occupational therapist. Students research and discuss clinical cases related to content that is integrated from all courses that semester in the occupational therapy program. Prerequisite: Satisfactory completion of all previous program course work.

OT 692. Occupational Therapy Tutorial Group III. 1 credit.  
This tutorial course is a continuance of the small group case-based discussion seminar process facilitated by a clinical tutor who is an occupational therapist. Students research and discuss clinical cases related to content that is integrated from all courses that semester in the occupational therapy program. Prerequisite: Satisfactory completion of all previous program course work.
Physician Assistant

Mr. James Hammond, P.A.-C., Graduate Coordinator
Phone: (540) 568-2395
Web site: http://www.jmu.edu/healthsci/paweb

Admission Requirements
To be considered for admission to the Master in Physician Assistant Studies (M.P.A.S) a prospective student must be admitted to The Graduate School and to the PA master’s degree program via separate application processes.

- Submit an application to The Graduate School
- Submit scores from the Graduate Record Examination
- Have earned a bachelor degree from a regionally accredited college or university. An overall GPA of 3.0 or higher is preferred.
- 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 or mammalian anatomy — a one semester course
  - Human or mammalian physiology — a one semester course
  - Anatomy and physiology may be completed as separate courses or as a series of A&P combined courses. In either case the prerequisite course work must include all body systems and regions. Anatomy must include laboratory work, either as a component of the course or as a separate lab course.
  - Biochemistry — a one semester course
  - Genetics — a one semester course
  - Microbiology — a one semester course
- 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 record technician; respiratory technologist; radiology technologist; medical technologist; mental health worker; or clinical research assistant. Other professions and experiences not listed may also qualify as direct, patient care.
  - Health care related professions that do not include hands-on patient contact are not considered toward meeting the health care experience requirement. These typically include transporter, CPR or ACLS instructor, lifeguard, non-clinical research assistant, candy stripers, unit clerks and others. Although desirable for other reasons, PA shadowing does not count toward the required 1,000 hours of patient care experience. Contact the PA program with any questions regarding health care 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 http://www.caspaonline.org.

Application Deadlines
One cadre of students is admitted each year. Classes begin in the fall semester. For deadlines for application to The Graduate School, see “Admission to The Graduate School.”
- For deadlines for application to the PA Program see either http://www.jmu.edu/healthsci/paweb or http://www.caspaonline.org.

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, prerequisite and 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 — maturity of insight, judgment, problem-solving (Interview)
- Self-awareness, self-confidence, motivation (Application and interview)
- Service to society (Written application and interview)

Mission
The Master of Physician Assistant Studies program prepares students for clinical positions as primary care physician assistants. The course of study requires 28 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 Graduate School and to the PA master’s degree program via separate application processes.

Physician assistants are highly skilled medical professionals who have for over 40 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 program 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 to practice.

**Program Policies**

Academic standards: The PA Program defines satisfactory academic progress as achieving at least a “B” or 3.0 grade in each course. The PA Academic Review Committee reviews all performance that falls below this standard. In accord with each circumstance, the committee recommends a course of action to the department head. Students do not progress to clinical rotations until the committee is satisfied that they have achieved minimal mastery of the didactic course work of the first year. The policies of The Graduate School regarding unsatisfactory progress also apply.

Advanced standing: Students are required to take all the courses in the curriculum at JMU. No advanced standing is given for experience, transfer credit or credit by exam.

Scheduling: The PA program is a full-time curriculum. Students are required to take courses in the sequence and during the semesters they are scheduled. There is no part-time or extended time option.

Clinical rotations: Rotations during the clinical year are done at sites distant from the university. Students must have transportation and must pay for secondary housing and transportation costs. The program assigns students to multiple clinical sites during the second year. Students do not choose the sites of their clinical rotations.

**Curriculum**

All courses are required and must be taken in sequence. Students must be full-time and must take the curriculum in a consecutive 28 month period. Exceptions are rare and are granted only by the program director. The classroom or didactic component of the curriculum is 16 months or four semesters long. The clinical year is 12 months in length.

**Physician Assistant Degree Requirements**

<table>
<thead>
<tr>
<th>Fall Semester Year One</th>
<th>Credit Hours</th>
</tr>
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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>
</tr>
<tr>
<td>PA 510. Physical Diagnosis I</td>
<td>3</td>
</tr>
<tr>
<td>PA 540. The Physician Assistant Profession</td>
<td>1</td>
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<td><strong>Total degree credits</strong></td>
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<th>Spring Semester Year One</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BIO 517. Pathophysiology II</td>
<td>3</td>
</tr>
<tr>
<td>PA 630. Clinical Laboratory Medicine I</td>
<td>2</td>
</tr>
<tr>
<td>PA 532. Pharmacology for PAs I</td>
<td>3</td>
</tr>
<tr>
<td>PA 520. Clinical Medicine I</td>
<td>5</td>
</tr>
<tr>
<td>PA 551. Managing Medical Information I: Clinical Biostatistics</td>
<td>3</td>
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<td><strong>Total degree credits</strong></td>
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<th>Summer Session Year One (12 weeks)</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HTH 659. Health Care Environment</td>
<td>3</td>
</tr>
<tr>
<td>PA 511. Physical Diagnosis II</td>
<td>2</td>
</tr>
<tr>
<td>PA 631. Clinical Laboratory Medicine II</td>
<td>2</td>
</tr>
<tr>
<td>PA 621. Clinical Medicine II</td>
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<tbody>
<tr>
<td>PA 622. Women’s Medicine</td>
<td>2</td>
</tr>
<tr>
<td>PA 623. Pediatric Medicine</td>
<td>2</td>
</tr>
<tr>
<td>PA 624. Behavioral Medicine</td>
<td>2</td>
</tr>
<tr>
<td>PA 626. Clinical Medicine III</td>
<td>2</td>
</tr>
<tr>
<td>PA 633. Pharmacology for PAs II</td>
<td>3</td>
</tr>
<tr>
<td>PA 652. Managing Medical Information II: Clinical Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>PA 653. Managing Medical Information III: Research Design and Implementation</td>
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<td><strong>Total degree credits</strong></td>
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<th>Spring Semester Year Two</th>
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<tr>
<td>PA 625. Health Promotion &amp; Disease Prevention</td>
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<tr>
<td>Rotation Period 1</td>
<td>2</td>
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<tr>
<td>Rotation Period 2</td>
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<tr>
<td>Rotation Period 3</td>
<td>2</td>
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<tr>
<td>Rotation Period 4</td>
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<th>Summer Session Year Two</th>
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<tr>
<td>PA 643. Values in Primary Care</td>
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<tr>
<td>Rotation Period 5</td>
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<tr>
<td>Rotation Period 6</td>
<td>2</td>
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<tr>
<td>Rotation Period 7</td>
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<th>Fall Semester Year Three</th>
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<tr>
<td>Rotation Period 8</td>
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<tr>
<td>Rotation Period 9</td>
<td>2</td>
</tr>
<tr>
<td>Rotation Period 10</td>
<td>2</td>
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<tr>
<td>Rotation Period 11</td>
<td>2</td>
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<tr>
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Total degree 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 three-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, pharmacodynamics and pharmacotherapeutics. Within each class of therapeutic drugs, the course examines drug actions, interactions, reactions, and contraindications. The course also includes 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. 3 credits.
This is the second of a three-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 and includes workshops to support the diagnosis and treatment of selected disorders. 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 626. Clinical Medicine III. 2 credits.
This is the third of a three-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 and includes workshops to support the diagnosis and treatment of selected disorders.

PA 630. Clinical Laboratory Medicine I. 2 credits.
This is the first of 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 pharmacotherapeutics. Within each class of therapeutic drugs, the course examines drug actions, interactions, reactions, and contraindications. The course also includes 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 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: Directed 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. Elective Clinical Rotation. 2 credits.
This four-week clinical rotation is devoted to an area of study of the student’s choosing and the faculty’s approval. It might be additional time in a specialty already introduced through another rotation, a different medical specialty of interest or a non-clinical area associated with the PA profession such as education, professional practice issues, etc. 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. Family Medicine Clinical Rotation I. 2 credits.
This is the first of two four-week clinical rotations in family medicine. The student gains knowledge, experience and skill in interviewing and examining patients of all ages, diagnosing and treating disorders and educating and counseling patients and families through participation in these activities while under the supervision of an experienced clinician practicing family medicine. The course also includes assigned reading and exercises. 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. Family Medicine Clinical Rotation II. 2 credits.
This is the second of two four-week clinical rotations in family medicine. The student gains knowledge, experience and skill in interviewing and examining patients of all ages, diagnosing and treating disorders, and educating and counseling patients and families through participation in these activities while under the supervision of an experienced clinician practicing family medicine. The course also includes assigned reading and exercises. 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. Internal Medicine Clinical Rotation I. 2 credits.
This is the first of two four-week clinical rotations in internal medicine. The student gains knowledge, experience and skill in interviewing and examining adults, diagnosing and treating disorders, and educating and counseling patients through participation in these activities while under the supervision of an experienced clinician practicing internal medicine. This course also includes assigned readings and exercises. 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. Internal Medicine Clinical Rotation II. 2 credits.
This is the second of two four-week clinical rotations in internal medicine. The student gains knowledge, experience and skill in interviewing and examining adults, diagnosing and treating disorders, and educating and counseling patients through participation in these activities while under the supervision of an experienced clinician practicing internal medicine. This course also includes assigned readings and exercises. 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. Pediatrics Clinical Rotation. 2 credits.
During this four-week clinical rotation the student gains knowledge, experience and skill in interviewing and examining children, diagnosing and treating disorders, and educating and counseling children and parents through participation in these activities while under the supervision of an experienced clinician practicing pediatric medicine. The course also includes assigned readings and exercises. 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. Obstetrics and Gynecology Clinical Rotation. 2 credits.
During this four-week clinical rotation the student gains knowledge, experience and skill in interviewing and examining women, diagnosing and treating disorders, and educating and counseling women through participation in these activities while under the supervision of an experienced clinician practicing obstetric and gynecologic medicine. The course also includes assigned readings and exercises. 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. General Surgery Clinical Rotation. 2 credits.
During this four-week clinical rotation the student gains knowledge, experience and skill in interviewing and examining patients, diagnosing and treating disorders, and educating and counseling patients with surgical problems through participation in these activities while under the supervision of an experienced clinician practicing surgery. The course also includes assigned readings and exercises. 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. Emergency Medicine Clinical Rotation. 2 credits.
During this four-week clinical rotation the student gains knowledge, experience and skill in interviewing and examining patients, diagnosing and treating disorders, and educating and counseling patients with emergent problems through participation in these activities while under the supervision of an experienced clinician practicing emergency medicine. The course also includes assigned readings and exercises. 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. Behavioral Medicine Clinical Rotation. 2 credits.
During this four-week clinical rotation the student gains knowledge, experience and skill in interviewing and examining patients, diagnosing and treating disorders, and educating and counseling patients and family members through participation in these activities while under the supervision of an experienced clinician practicing behavioral medicine. The course also includes assigned readings and exercises. Prerequisites: Admission to the physician assistant program and successful completion of all previous courses in the curriculum, or permission of the program director.