## Department of Health Sciences

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#### **Professors**

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#### Assistant Professors

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#### Instructors

L. Blosser, E. Richardson

#### Lecturers

T. Howley, R. Prodoehl, M. Stickney

### Mission Statement

The purpose of the Department of Health Sciences is to contribute to the liberal arts education of all students and prepare students for professional careers in the health sciences and/or for entry into professional programs.

### Goals

The goals of the Department of Health Sciences are to:

- Promote the health and well-being of the JMU community.
- Support the General Education program.
- Educate health professionals.
- Provide service to the community, the state, the region and the nation
- Conduct, disseminate, and publish research/scholarship in health sciences.

## Career Opportunities

- Athletic Trainer
- Registered Dietitian
- Health Administrator
- Health Assessment and Promotion Specialist
- Health Fitness Specialist
- Occupational Therapist (Graduate Program)
- Physician Assistant (Graduate Program)
- Public Health Educator
- Substance Abuse Prevention Professional

## Co-curricular Organizations

- American College of Sports Medicine
- Madison Athletic Training Student Association
- Eta Sigma Gamma (Health Sciences Honor Society)
- Health Administration Student Association
- JMU Dietetic Association
- JMU Physician Assistant Student Society

- JMU Student Occupational Therapy Association
- Pre-OT Association
- Pre-PT Society

## **Special Admission Requirements**

Admission to JMU does not guarantee admission to all academic majors and minors. Special applications are required for admission to the clinical portions of the athletic training program, dietetics program and the occupational studies program.

### Deadline for Change or Declaration of Majors

Deadlines for change or declaration of major forms are:

Semester	Deadline
Summer	February 15
Fall	February 15
Spring	Sentember 15 of the previous year

Forms received in the health sciences office after the deadline will be processed the following semester. Students changing their major to health sciences after February 15 of the sophomore year should expect an additional semester(s) to complete the program. The number of additional semesters required to complete the program will depend on the timing of the change to health sciences and the number of summer courses completed.

## **Degree and Major Requirements**

The Department of Health Sciences offers the following degrees:

- Bachelor of Science in Athletic Training
- Bachelor of Science in Dietetics
- Bachelor of Science in Health Services Administration
- Bachelor of Science in Health Sciences with a concentration in:
  - Health Assessment and Promotion
  - Health Studies
  - Occupational Studies
  - Public Health Education

The physician assistant program and the occupational therapy program are available at the master's degree level.

# Bachelor of Science in Athletic Training

This major prepares students to sit for the national certification examination through the Board of Certification. Areas of study include injury prevention, clinical examination and diagnosis, acute care of injuries and illnesses, therapeutic interventions, psychosocial strategies and referrals, healthcare administration, evidence-based practice, and professional development and responsibility. The Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). This program is comprised of both academic and clinical requirements

Any student may declare athletic training as his/her major upon entering JMU and enroll in the pre-professional phase of the program. Students must apply to the professional phase of the program for a limited number of seats at the end of their sophomore year or upon completion of required prerequisite courses. Performance in the prerequisite courses is a strong consideration in the admission process. In order to make a formal application, students must have completed the following courses with a grade of "C" or better, or be currently enrolled or planning to enroll in May:

BIO 290. Human Anatomy

ATEP 205. Introduction to Athletic Training

ATEP 206. Recognition and Management of Athletic Injuries

ATEP 291. Pre-Professional Practicum in Athletic Training

The athletic training program application and supporting documents are available to students while enrolled in ATEP 291 or by contacting the program director. Applications can be submitted to the program director after January 15, but must be submitted no later than April 1 to be considered for full admission.

Specific program requirements, including academic, clinical and technical standards, may be found on the Athletic Training Curriculum website (http://www.healthsci.jmu.edu/AT) or in the Athletic Training Curriculum Handbook, which can also be found on the ATEP website.

### **Degree Requirements**

Required Courses Cred	lit Hours
General Education <sup>1</sup>	41
Quantitative requirement (in addition to General Education)	3
Scientific Literacy requirement (in addition to General Education)	4
Major and elective requirements (listed below)	72

<sup>120
1</sup> The General Education program contains a set of requirements each student must fulfill. The number of credit hours necessary to fulfill these requirements may vary.

## Required Courses/Recommended Schedule for Majors

First Year Cred	dit Hours
MATH 220. Elementary Statistics <sup>1</sup>	3
ATEP 205. Introduction to Athletic Training <sup>2</sup>	3
Electives	5
General Education courses (CHEM 120 or CHEM 131 suggested)	18

Second Year Credit Ho	urs
BIO 270. Human Physiology <sup>1</sup>	4
BIO 290. Human Anatomy <sup>2</sup>	4
ATEP 206. Recognition and Management of Athletic Injuries <sup>2,3</sup>	3
ATEP 291. Pre-Professional Practicum in Athletic Training <sup>2, 3</sup>	2
General Education courses	5-16

	28-29
Third Year Credit	Hours
ATEP 304A. Lower Quarter Evaluation <sup>2,4</sup>	3
ATEP 304B. Upper Quarter Evaluation <sup>2,3</sup>	3
ATEP 305. Rehabilitation in Athletic Training: Lower Extremity <sup>2, 3</sup>	3
ATEP 306. Therapeutic Modalities <sup>2, 4</sup>	4
ATEP 307. Acute Care of Injuries and Illnesses <sup>2, 4</sup>	3
ATEP 350. Measurement Techniques in Athletic Training <sup>2, 4</sup>	2
ATEP 355. Infectious Disease Control <sup>2,3</sup>	1
ATEP 377. General Medicine in Athletic Training <sup>2, 3</sup>	2
ATEP 378. Assessment Skills in Athletic Training <sup>2, 3</sup>	1
ATEP 392. Level II Practicum in Athletic Training 2,4	3
ATEP 393. Level III Practicum in Athletic Training <sup>2, 3</sup>	2
HTH 354. U.S. and Global Health Care Systems <sup>2</sup>	3
HTH 441. Rehabilitative Biomechanics <sup>2, 3</sup>	3
NUTR 280. Nutrition for Wellness <sup>2</sup>	3

Fourth Year Credit	
ATEP 376. Pharmacology for Athletic Trainers <sup>2,4</sup>	2
ATEP 405. Rehabilitation in Athletic Training: Upper Extremity <sup>2, 4</sup>	3
ATEP 406. Organization and Administration in Athletic Training <sup>2, 3</sup>	3
ATEP 494. Level IV Practicum in Athletic Training 2, 4	2-3
ATEP 495. Level V Practicum in Athletic Training 2,3	2
KIN 302. Exercise Physiology <sup>2</sup>	3
KIN 302L. Exercise Physiology/Lab <sup>2</sup>	1
NUTR 382. Sports Nutrition <sup>2, 4</sup>	3
General Education courses	7-8

26-28

36

 $1\,BIO\,270\,and\,MATH\,220\,may\,be\,met\,by\,choosing\,the\,correct\,course\,in\,General\,Education\,and\,be\,counted\,for\,both\,general\,education\,and\,the\,major.$ 

### **Bachelor of Science in Dietetics**

The Bachelor of Science in dietetics is the first step toward registration as a dietitian. The Registered Dietitian (RD) credential is a national credential that requires completion of a Didactic Program in Dietetics (DPD), a Dietetic Internship (DI), and successful completion of the national registration examination. The DPD at James Madison University is accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 S. Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-4876. The program in dietetics gives the student a wide view of dietetics careers including clinical dietetics, administrative dietetics, community dietetics, food service, education and research.

## **Special Admission Requirements**

Any student admitted to JMU can declare dietetics as his/her major and will be permitted to enroll in NUTR 280 Nutrition for Wellness and NUTR 295 Foundations of Nutrition Practice. However, to make progress in the major beyond the first few

<sup>2</sup> Grade of "C" or better required.

<sup>3</sup> Offered only in spring semester 4 Offered only in fall semester

courses students need to apply and be admitted to the professional program.

Students wishing to be admitted to the dietetics program at JMU must apply in the spring semester no later than February 15 during which admission requirements will be met, usually in the sophomore year.

Students applying for admission must have a cumulative GPA of at least 3.0 in the following courses, with no grade lower than a "C."  $\,$ 

CHEM 131 and 131L General Chemistry I
CHEM 132 and 132L General Chemistry II
BIO 270 Human Physiology
SCOM 121, 122 or 123 Human Communication
POSC 225 U.S. Government
PSYC 101 General Psychology
or PSYC 160 Life Span and Human Development
WRTC 103 Critical Reading and Writing
MATH 220 Elementary Statistics
NUTR 280 Nutrition for Wellness
NUTR 295 Foundations of Nutrition Practice

## Retention and Receiving Didactic Program in Dietetics Verification

To remain in the major, students must maintain a GPA of at least 3.0 in the major and earn grades of "C" (2.0) or higher in all remaining required courses. Transfer credit will not be accepted for the following courses: NUTR 363, NUTR 446, NUTR 482, NUTR 484 and NUTR 490. All successful graduates will receive four copies of a signed verification statement from the James Madison University DPD as soon as final transcript verifying all grades and degree confirmation is available.

## Required Courses/ Recommended Schedule for Majors

First Year	Credit Hours
CHEM 131–131L. General Chemistry I with Laboratory <sup>3</sup>	4
CHEM 132–132L. General Chemistry II with Laboratory	4
NUTR 295. Foundations of Nutrition Practice	2
Quantitative requirement (B.S. degree requirement)	3
General Education courses	18

	31
Second Year	Credit Hours
BIO 270. Human Physiology <sup>3</sup>	4
PSYC 101. General Psychology <sup>3</sup>	3
or PSYC 160. Life Span Human Development <sup>3</sup>	
POSC 225. U.S. Government <sup>3</sup>	4
MATH 220. Elementary Statistics <sup>3</sup>	3
NUTR 280. Nutrition for Wellness	3
General Education courses	12
Elective	3

	32
Third Year Cre	edit Hours
CHEM 241-241L. Concepts of Organic Chemistry with Lab <sup>2</sup>	4
CHEM 260-260L. Concepts of Biochemistry with Lab <sup>1</sup>	4
HTH 210. Medical Terminology	3
HTH 354. U.S. and Global Health Care Systems	3
NUTR 340. Science of Food Preparation <sup>2</sup>	3
NUTR 362. Food Service Systems <sup>1</sup>	3
NUTR 380. Global Nutrition	3
NUTR 384. Clinical Nutrition I <sup>1</sup>	3

NUTR 385. Nutrition throughout the Life Cycle <sup>1</sup>	3
NUTR 395. Introduction to Patient Care in Dietetics <sup>2</sup>	2
	31
Fourth Year	Credit Hours
BIO 280. Allied Health Microbiology	4
BIO 290. Human Anatomy	4
NUTR 360. Management in Dietetics <sup>1</sup>	3
NUTR 363. Quantity Food Production	3
NUTR 446. Experimental Foods <sup>1</sup>	3
NUTR 482. Nutrition and Metabolism <sup>2</sup>	3
NUTR 484. Clinical Nutrition II <sup>1</sup>	3
NUTR 485. Community Nutrition <sup>2</sup>	3
NUTR 490. Field Experiences in Dietetics <sup>4</sup>	3
NUTR 495. Senior Seminar in Dietetics <sup>2</sup>	2

<sup>1</sup> Offered only in spring semester.

# Bachelor of Science in Health Services Administration

The program in health services administration prepares the student for entry-level administrative positions, and staff positions requiring administrative skills, in various health services organizations including hospitals, hospital systems, managed care organizations, retirement and long term care facilities, ambulatory care organizations, and public health organizations. The student is prepared to plan, organize, direct and control health programs and/or facilities. In addition, the program provides the foundation for graduate study in health services administration and related fields.

The health services administration program is approved as a Full Certified undergraduate program by the Association of University Programs in Health Administration (AUPHA).

Upon completion of all JMU and program requirements, the student is awarded the B.S. in Health Services Administration. No more than 30 hours may be taken in the College of Business.

### Deadline for Change or Declaration of Majors

Deadlines for change or declaration of major forms are:

Semester	Deadline
Summer	February 15
Fall	February 15
Spring	September 15 of the previous year

### **Degree Requirements**

5 1	
Required Courses	Credit Hours
General Education <sup>1</sup>	40
Quantitative requirement (in addition to General Educa	tion) 3
Scientific Literacy requirement (in addition to General I	Education) 3
Major requirements (listed after schedule)	74

120

<sup>2</sup> Offered only in fall semester.

<sup>3</sup> These courses may count for both General Education and the major depending on General Education course choice

<sup>4</sup> Field Experience Practicum should be completed during summer between junior and senior years.

## Required Courses/Recommended Schedule for Majors

First Year General Education courses	Credit Hours 31
	31
Second Year	Credit Hours
ACTG 244. Accounting for Non-Business Majors	3
COB 204. Computer Information Systems	3
ECON 201. Principles of Economics (Micro)	3
HSA 290. Gerontology for Health Services Administration	1 <sup>2</sup> 3
HSA 385. Health Services Administration Career Seminar	r <sup>2</sup> 1
HTH 354. U.S. and Global Health Care Systems 5	3
MATH 220. Elementary Statistics	3
General Education courses	9

	28
Third Year C	redit Hours
FIN 345. Finance for the Non-Financial Manager	3
HTH 320. Statistical Methods for Health Science Research <sup>2</sup>	3
(B.S. degree requirement)	
HSA 358. Health Administration <sup>2,4</sup>	3
HSA 363. Health Economics <sup>2,4</sup>	3
HSA 365. Values in Health Care <sup>2</sup>	3
MGT 305. Management and Organizational Behavior	3
MKTG 380. Principles of Marketing	3
HSA 463. Quality Management in Health Care 2,3	3
Program electives	6

Fourth Year	<b>Credit Hours</b>
HTH 450. Epidemiology <sup>2</sup>	3
HSA 454. Internship in Health Organizations <sup>6</sup>	3
HTH 458. Health Program Planning and Evaluation <sup>2</sup>	3
HSA 466. Health Politics and Policy (B.S. degree requirem	nent) <sup>2</sup> 3
HSA 462. Managed Care <sup>2, 3</sup>	3
Choose two of the following:	6
HSA 452. Hospital Organization and Administration <sup>2, 3</sup>	
HSA 455. Long Term Care Organization and Administrat	ion <sup>2, 3</sup>
HSA 456. Ambulatory Care Services: Organization and Administ	tration 2,4
HSA 464. Funding in Health Care <sup>2, 3</sup>	3
Electives	7

1 The General Education program contains a set of requirements each student must fulfill. The number of credit hours necessary to fulfill these requirements may vary.

- 2 Grade of "C" or better required.
- 3 Offered only in spring semester.
- 4 Offered only in fall semester.
- 5 Grade of "B" or better required.
- 6 Grade of "C" or better required in all HSA courses.

# Bachelor of Science in Health Sciences

The B.S. degree with a major in health sciences consists of health science course requirements in addition to general education requirements and B.S. requirements. For specialization in a professional area, concentrations are available in health assessment and promotion, health studies, occupational studies, and public health education.

### Health Science Core

All students pursing the B.S. in Health Science must complete the following core courses:

Health Sciences Core Courses	<b>Credit Hours</b>
CHEM 120. Concepts of Chemistry	3-8
or CHEM 131/ 132+L. General Chemistry	
MATH 220. Elementary Statistics	3
HTH 100. Personal Wellness	3
Quantitative requirement for B.S. degree	3
(HTH 320. Statistical Methods will count)	
HTH 245. Foundations of Infectious Disease	3
HTH 351. Health Behavior Change	3
HTH 408. Health Research Methods	3
HTH 450. Epidemiology	3
Select two of the following:	8
BIO 270. Human Physiology	
BIO 280. Allied Health Microbiology	
BIO 290. Human Anatomy	

32-37

## Health Assessment and Promotion Concentration

This concentration prepares students for positions in wellness, hospital, and corporate-based health promotion and assessment programs. Students are trained to develop and implement comprehensive health promotion activities by combining health education, assessment techniques and fitness concepts. HAP students master a variety of clinical assessments and can begin to develop health communication skills prior to graduation.

The concentration includes 12-18 hours of electives which can be used to complete any minor requirements or which pre-professional students can use to finish prerequisites for their selected professional program. Additionally, this broad-based program provides a strong foundation for related graduate studies. Upon completion, students are prepared to enroll in the Health Fitness Specialist and/or the Physical Activity in Public Health Specialist certifications sponsored by the American College of Sports Medicine.

### **Concentration Requirements**

Students must complete the General Education requirements, the B.S. degree requirements, the health sciences core and the health assessment and promotion core requirements.

Course Requirements	Credit Hours
Health Sciences Core (See Health Sciences Core)	32-37
ATEP 205. Introduction to Athletic Training	3
BIO 290. Human Anatomy	4
NUTR 280. Nutrition for Wellness	3
NUTR 382. Sports Nutrition	3
HTH 150. Introduction to Health Sciences	1
HTH 210. Medical Terminology	3
HTH 308. Physiological Responses to Human Movement	3
HTH 320. Statistical Methods for Health Science Research	:h 3
HTH 389. Practicum in Health Education	3
HTH 441. Rehabilitative Biomechanics	3
HTH 442. Chronic Diseases	3
HTH 458. Health Program Planning and Evaluation	3
HTH 471. Health Aspects of Gerontology	3
HTH 480 Health Assessment Techniques	3

30

HTH 482. Advanced Health Assessment Techniques 3 HTH 495. Internship in Health Organizations 3

### Required Courses/Recommended Schedule for Health Assessment and Promotion Concentration

Evidence of CPR/First-Aid certification must be presented for graduation.

First Year	Credit Hours
CHEM 120. Concepts of Chemistry <sup>1</sup>	3
HTH 100. Personal Wellness	3
HTH 150. Introduction to Health Sciences	1
HTH 210. Medical Terminology	3
MATH 220. Elementary Statistics <sup>1</sup>	3
General Education courses	15-17

28-30 Second Year Credit Hours BIO 270. Human Physiology 1 BIO 290. Human Anatomy 4 ATEP 205. Introduction to Athletic Training 3 NUTR 280. Nutrition for Wellness 3 General Education courses 15-18

Third Year C	Credit Hours
HTH 308. Physiological Responses to Human Movement <sup>2</sup>	3
HTH 245. Foundations of Infectious Disease	3
HTH 320. Statistical Methods for Health Science Researc	h 3
HTH 351. Health Behavior Change	3
HTH 389. Practicum in Health Education	3
HTH 471. Health Aspects of Gerontology	3
NUTR 382. Sports Nutrition <sup>3</sup>	3
General Education courses	3-4
Core and elective courses	6

	30-31
Fourth Year	Credit Hours
HTH 408. Health Research Methods	3
HTH 441. Rehabilitative Biomechanics	3
HTH 442. Chronic Diseases <sup>3</sup>	3
HTH 450. Epidemiology	3
HTH 458. Health Program Planning and Evaluation	3
HTH 480. Health Assessment Techniques <sup>3</sup>	3
HTH 482. Advanced Health Assessment Techniques <sup>2</sup>	3
Core and elective courses	6
HTH 495. Internship in Health Organizations	3

1 BIO 270, CHEM 120 and MATH 220 may be counted for both general education and the major.

### Health Studies Concentration

The health studies concentration is designed for students interested in understanding the causes of disease, strategies for promoting wellness, and the scientific basis and methodologies for analysis of health concerns. The health studies concentration combines a broad foundation of healthrelated course work with a choice of preparatory courses suitable for entry into graduate programs in medicine, dentistry, optometry, occupational therapy, physical therapy, pharmacy, physician assistant and veterinary medicine.

Students must complete the core course requirements for a major in health sciences and the requirements for the concentration in health studies. Students are encouraged to identify individual professional program requirements to select courses within the concentration requirements that will be most suitable for the graduate program of their choice.

Health Studies Concentration	Credit Hours
Health Sciences Core (see previous core requirements)	32-37
Required Courses	19
HTH 150. Introduction to Health Sciences	
HTH 210. Medical Terminology	
HTH 231. Population Health Determinants	
HTH 320. Statistical Methods for Health Science Res	search
HTH 340. Chronic Disease and Disabilities	
HTH 354. U.S. and Global Health Care Systems	
HTH 423. Ethics and Critical Thinking in Health	
Select 16 credits from these pre-professional courses:	16
(check with pre-professional adviser prior to course sel-	ection)
BIO 114. Organisms	
BIO 214. Cell and Molecular Biology	
BIO 224. Genetics and Development	
BIO 280. Allied Health Microbiology <sup>1</sup>	
BIO 324. Human Genetics	
BIO 370. Animal Physiology	
CHEM 241-241L. Organic Chemistry	
CHEM 260. Concepts of Biochemistry	
CHEM 242-242L. Organic Chemistry II	
HTH 441. Rehabilitative Biomechanics	
PHYS 140-140L. College Physics I	
PHYS 150-150L. College Physics II	
PSYC 101. General Psychology	
PSYC 160. Life Span Human Development	
PSYC 250. Introduction to Abnormal Psychology	
	67-72

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1 Will not count for the 16 credits in this category unless also take BIO 270 and BIO 290.

### Recommended Schedule for Health Studies Concentration

First Year	Credit Hours
HTH 100. Personal Wellness	3
MATH 220. Elementary Statistics	3
HTH 150. Introduction to Health Sciences	1
Pre-professional courses	4-8
General Education courses	13-17

	30-32
Second Year C	redit Hours
CHEM 120-120L. Concepts of Chemistry	3-8
or CHEM 131-131L and CHEM 132-132L	
Choose one of the following:	4
BIO 270. Human Physiology	
BIO 280. Allied Health Microbiology	
BIO 290. Human Anatomy	
HTH 210. Medical Terminology	3
HTH 231. Population Health Determinants	3
HTH 245. Foundations of Infectious Disease	3
General Education, pre-professional courses and electives	9-17

30

Third Year Credit Hours Choose one of the following: BIO 270. Human Physiology BIO 280. Allied Health Microbiology

BIO 290. Human Anatomy

<sup>2</sup> Offered only in spring semester.

<sup>3</sup> Offered only in fall semester

HTH 320. Statistical Methods for Health Science Research	ch 3
HTH 340. Chronic Disease and Disabilities	3
HTH 351. Health Behavior Change	3
HTH 354. U.S. and Global Health Care System	3
General Education, pre-professional courses and elective	es 11
	27
Fourth Year	Credit Hours
HTH 408. Health Research Methods	3
HTH 423. Ethics and Critical Thinking in Health	3
HTH 450. Epidemiology	3
General Education, pre-professional courses and elective	es 21

## Occupational Studies Concentration

Academic preparation for entry into the Occupational Therapy Profession currently occurs at the Masters level, please review the Graduate Catalog for more information about James Madison University's Masters of Occupational Therapy (M.O.T.) Program. The Occupational Studies Concentration provides an opportunity for highly performing undergraduate JMU students to apply for early entry into the M.O.T. Program at James Madison University. Students who are admitted into this concentration remain as undergraduate students during the first year they are enrolled in the Occupational Therapy Program. Thus, students in this program complete both their bachelor's and master's degrees in 5 ½ years rather than the traditional 6 ½ year program (assuming students progress through the degree in the intended timeframe.)

### **Special Admission Requirements**

Students should be advised that admission into the occupational studies concentration is competitive. Enrollment as a health sciences major *does not* guarantee admission into the concentration, nor the Masters of Occupational Therapy program. Typically each year several students are admitted into the occupational studies concentration.

Students interested in applying to this program should meet their academic adviser to help them follow the pre-OT course sequence to ensure they complete the required prerequisite courses.

Students wishing to be admitted to the Occupational Studies Concentration must apply during the fall semester of their junior (third) year no later than December 1. Students who are admitted must start during the summer before their senior year. Students who are interested in applying to the Occupational Studies Concentration must meet all of the following criteria:

- Students must be enrolled at James Madison University as a health science majors and declare health studies as their concentration.
- Students must be able to complete all required General Education, health science Core, health studies concentration, and pre-professional courses prior to enrolling in the occupational studies program.
- Students must be able to complete a minimum of 85 credits by the end of their junior year.
- Students must demonstrate a consistent record reflecting strong academic performance as evidenced by;

- An overall GPA of 2.8 is required, while an overall GPA of 3.0 or higher is strongly recommended.
- Grades earned in all of the following prerequisite courses must be a "C" or higher. ("C-" does not meet this criteria).

A minimum of 6 credit hours of sociology or anthropology courses must be completed. Content must include information about the influences of both culture and society upon the individual. Examples of course meeting this requirement at JMU include but are not limited to:

SOCI 140. Microsociology: The Individual in Society

SOCI 110 Social Issues in a Global Context

ANTH 195. Cultural Anthropology (Physical anthropology does not meet this criteria)

BIO 270. Human Physiology (with lab)

BIO 290. Human Anatomy (with lab)

30

HTH 441. Rehabilitative Biomechanics (PHYS 140 +L & PHYS 150+L, or KIN 306)

MATH 220. Elementary Statistics

PSYC 160. Life Span Human Development

PSYC 250. Introduction to Abnormal Psychology

HTH 210. Medical Terminology

HTH 408. Health Research Methods

HTH 100. Personal Wellness

CHEM 120. Concepts of Chemistry (lecture only)

HTH 245. Foundations of Infectious Disease

NUTR 280. Nutrition for Wellness

HTH 320. Statistical Methods for Health Sciences Research

HTH 351. Health Behavior Change

HTH 354. U.S. and Global Health Care Systems

HTH 450. Epidemiology

#### Recommended Schedule

For students desiring admission into the occupational studies concentration in their senior year

First Year	Credit Hours
General education courses	18
CHEM 120. Concepts of Chemistry	3
ANTH 195. Cultural Anthropology	3
HTH 100. Personal Wellness	3
PSYC 160. Life Span Human Development	3

	30
Second Year	Credit Hours
General education courses	3
SOCI 110. or SOCI 140. Sociology	3
MATH 220. Elementary Statistics	3
HTH 210. Medical Terminology	3
PSYC 250. Introduction to Abnormal Psychology	3
HTH 245. Foundations of Infectious Disease	3
NUTR 280. Nutrition for Wellness	3
HTH 354. U.S. and Global Health Care Systems	3
HTH 351. Health Behavior Change	3
BIO 290. Human Anatomy	3

Third Year	Credit Hours
HTH 320. Statistical Methods for Health Science Researc	h 3
BIO 270. Human Physiology	4
HTH 441. Rehabilitative Biomechanics	3
HTH 408. Research	3
HTH 450. Epidemiology	3
Electives	8

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In addition to the course requirements listed above, students must submit all required admissions materials directly to the Occupational Therapy Program Office. Applications are accepted by mail and in person at the following location:

James Madison University
Department of Health Sciences – Occupational Therapy Program
801 Carrier Drive, MSC 4301
Harrisonburg, VA 22807

#### Additional Materials:

- Documentation providing evidence of completing a minimum of 40 hours of observation of occupational therapy services (documentation form can be found in the application packet on the OT Program's website).
- References reflecting a high level of motivation to enter the profession, strong academic potential, consistent demonstration of ethical behaviors, professionalism, and strong inter & intra-personal skills.
- Records of GRE exams (verbal, quantitative, and writing) on or prior to October 15 of their junior year.
- A completed application for the M.O.T. program.

Students interested in the occupational studies concentration apply to and are admitted directly to the M.O.T. program including application to the OT program and to The Graduate School. Although accepted by The Graduate School during the junior year admission process, actual entry to the graduate level of the M.O.T. program will be delayed one year from the application to allow students to complete the undergraduate degree.

Following official acceptance into the Occupational Therapy Program, early-entry students will be switched from the health sciences major-health studies concentration to the health sciences major-occupational studies concentration.

Additionally students admitted into the occupational science concentration/occupational therapy program must;

- Agree to abide by the JMU Honor Code.
- Demonstrate behaviors in line with professional codes of conduct as described within the OT Program Manual and as established by occupational therapy regulatory bodies.
- Meet technical standards in supporting performance as an occupational therapist.
- Provide documentation of clean background checks as described by the OT Program Manual.

Students in this program start coursework during the summer prior to the senior year and complete their undergraduate courses/first year occupational therapy courses during the senior year to earn their bachelor's degree. Students will need to officially apply to the Graduate School during the fall of their senior year. Upon earning their bachelor's degree, and successfully completing all occupational therapy program requirements during the first year, students in the occupational studies concentration will officially transition to graduate level status in the M.O.T. program. For accreditation information, please see the graduate catalog.

### Curriculum

Once accepted into the occupational studies concentration, students complete the following courses during their senior year of study. All of the following courses are required and must be taken in the sequence specified. All 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 the JMU graduate school and occupational therapy program policies.

### Occupational Studies Required Classes

Summer Year One	Credit Hours
HTH 409. Therapeutic Interactions	3
HTH 430. Human Occupations & the Foundations of the Profession	3
HTH 440. The Occupational Therapy Process	3
	12
Fall Year One	Credit Hours
HTH 424. Occupational Development through the Lifespa	n 3
BIO 414. Clinical Anatomy for Occupational Therapists	4
BIO 440. Functional Neuroscience for Occupational Thera	pists 3
HTH 461. Therapeutic Media in Occupational Therapy	2
	12
Spring Year One	Credit Hours
HTH 435. Level I Fieldwork One	1
HTH 460. Sensorimotor Foundations of Occupation	3
HTH 478. Occupational Dysfunction — Cause and Impact	3
HTH 479. Foundations of Research in Occupational Thera	ipy 3
HTH 485. Psychosocial Perspectives in OT Practice	3
HTH 491. Occupational Therapy Tutorial I	1

Students who wish to pursue a career in occupational therapy but who are not able to gain admission via the early-entry program may remain as health sciences majors (or change to another major if preferred) to complete their bachelor's degrees. Qualified students are encouraged to re-apply to the traditional M.O.T. program upon completion of their bachelor's

For more information on this program, including the complete application process and requirements, see the Graduate Catalog at http://www.jmu.edu/catalog.

## Public Health Education Concentration

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This concentration prepares the student for entry-level public health education positions or health-related positions in a wide variety of government, community, and voluntary health agencies, such as health departments and community-based health programs. This concentration also provides a strong foundation for students to pursue a Master of Public Health degree. Students completing this concentration are eligible to sit for the Certified Health Education Specialist (CHES) exam. The program has been approved by the Society for Public Health Education and the American Association for Health Education.

### **Concentration Requirements**

Students must complete the General Education requirements, the B.S. degree requirements, health sciences core and the public health education requirements.

Required Courses	<b>Credit Hours</b>
Health Sciences Core (see core requirements in previous section	n) 32-37
HTH 210. Medical Terminology	3
HTH 230. Community Health	3

NUTR 280. Nutrition for Wellness	3
HTH 352. Environmental Health	3
HTH 354. U.S. and Global Health Care Systems	3
HTH 370. Child and Adolescent Health	3
HTH 372. Human Sexuality	3
HTH 378. The Use and Effects of Drugs	3
HTH 423. Ethics and Critical Thinking in Health	3
HTH 453. Public Health Education Methods 1	3
HTH 458. Health Program Planning and Evaluation	3
HTH 471. Health Aspects of Gerontology	3
HTH 495. Internship in Health Organizations	3

Public health education students are encouraged to have foreign language skills, particularly Spanish. Elective credits may be used for this purpose.

## Recommended Schedule for Public Health Education Concentration

First Year	Credit Hours
CHEM 120. Concepts of Chemistry <sup>2</sup>	3
MATH 220. Elementary Statistics <sup>2</sup>	3
General Education courses and electives	24

	30
Second Year	Credit Hours
BIO 270. Human Physiology <sup>2</sup>	7-8
and/or BIO 280. Allied Health Microbiology	
and/or BIO 290. Human Anatomy	
HTH 210. Medical Terminology	3
HTH 230. Community Health	3
NUTR 280. Nutrition for Wellness	3
General Education courses and electives	11

	30
Third Year	Credit Hours
HTH 351. Health Behavior Change	3
HTH 352. Environmental Health	3
HTH 354. U.S. and Global Health Care Systems	3
HTH 370. Child and Adolescent Health	3
HTH 372. Human Sexuality	3
HTH 378. The Use and Effects of Drugs	3
Quantitative requirement for B.S. degree (will count)	3
General Education courses	3
Electives	6

In order to graduate in May of the senior year, a student must save HTH 423, HTH 458 and HTH 471 to be completed the third block of the senior year. The internship, HTH 495, is completed the fourth block. The internship is full-time supervised work at a professional site for eight weeks; thus, semester long courses cannot be taken the spring semester of the senior year.

Students who need additional courses must complete their internship during the summer after their senior year.

### Fourth Year

Fall Semester	Credit Hours
HTH 408. Health Research Methods	3
HTH 450. Epidemiology	3
HTH 453. Public Health Education Methods	3
Electives	9
	18

	18
Spring Semester	Credit Hours
Third Block	
HTH 423. Ethics and Critical Thinking in Health 3	3
HTH 458. Health Program Planning and Evaluation <sup>3</sup>	3
HTH 471. Health Aspects of Gerontology 3	3
Fourth Block	
HTH 495. Internship in Health Organizations <sup>4</sup>	3

1 Offered fall semester only.

2 BIO 270, CHEM 120 and MATH 220 may be counted for both general education and the major.

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- 3 Offered first eight weeks of spring semester.
- 4 Offered only in spring or summer.

## Master Level Degrees

In addition to undergraduate programs, the Department of Health Sciences offers several advanced degrees. For more information about any of the programs listed, refer to the JMU Graduate Catalog or gain access through the Health Sciences website at the Health Sciences website.

- Master of Occupational Therapy
- Master of Physician Assistant Studies
- Master of Science in Health Sciences/Dietetics Concentration
- Master of Science in Health Sciences/Nutrition and Physical Activity Concentration

# Physical and Health Education Teacher Education Certification

This program is housed in the Department of Kinesiology and culminates in a Master of Arts in Teaching degree.

## Credit by Examination

The Department of Health Sciences offers credit by examination for a limited number of the courses taught in the department. Students who want permission to take an examination must apply to the department head during the regular registration period. Students will receive details regarding approval and examination dates after they apply. Examinations will be given only in courses offered during the semester.

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