Department of Health Sciences

Dr. Robert Koslow, Head

Phone: (540) 568-6510
E-mail: koslowre@jmu.edu
Location: Health and Human Services Building, Room 3126
Web site: www.healthsci.jmu.edu/

Professors

H. Amato, A. Bopp, P. Brevard, J. Hammond, R. Koslow, J. Martino-McAllister, J. Thompson, M. Warner, D. Wenos, M. Wessel

Associate Professors

D. Cockley, B. Diduch, J. Gloeckner, J. Loveland, P. Maxwell, G. Polacek, D. Sutton, D. Torisky, T. Wagner

Assistant Professors

P. Bailey, C. Cadieux, T. Enyeart Smith, J. Frye, A. Kent, K. Lewis, S. Maiewski, K. Peabody, C. Peterson, R. Prodoehl, M. Rittenhouse, T. Sabato, K. Walter, J. Wenos, A. Russell Yun

Instructors

S. Cook, S. Hudy, J. Kaltenborn, T. Kuster, B. McSorley, E. Richardson, C. Smith, S. Summers, G. Weniger

Lecturer

L. Wilson

Affiliate Instructor

C. Nye

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
- Occupational Therapist (Graduate Program)
- Physician Assistant (Graduate Program)
- Public Health Educator
- Substance Abuse Prevention Professional

Co-curricular Activities and Organizations

- American College of Health Care Executives Student Association
- American College of Sports Medicine
- Student Athletic Trainers Association
- Eta Sigma Gamma (Health Sciences Honor Society)
- JMU Dietetic Association
- JMU Physician Assistant Student Society
- JMU Student Occupational Therapy Association
- Pre-OT Society
- 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, the health services administration program and the occupational studies program.

Deadline Notice for Change or Declaration of Majors

Deadlines for change or declaration of major forms are will be as follows:

Summer semester	February 15
Fall semester	February 15
Spring semester	September 15 of the previous year

Forms submitted after the deadline will apply to the following semester.

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 become Certified Athletic Trainers through the Board of Certification. Areas of study include injury prevention, emergency care, injury evaluation and rehabilitation of the physically active. 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. It is not an open major; students are selected through a competitive admission process. Specific program requirements, including academic, clinical and technical standards, may be found on the Athletic Training Curriculum Web site (www.jmu.edu/healthsci/at/at.htm). Additional information pertaining to admission and retention policies may also be found online or in the Athletic Training Curriculum Handbook, located in the CISAT Library, in the Program Director's office or on the ATEP Web site.

Degree Requirements

General Education[1]	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
	120

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.

Required Courses/ Recommended Schedule for Majors

First Year	Credit Hours
MATH 220. Elementary Statistics[1]	3
ATEP 205. Introduction to Athletic Training[2]	3
Electives (CHEM 120/131 suggested)	6
General Education courses	18
	30

Second Year	Credit Hours
BIO 270. Human Physiology[1]	4
BIO 290. Human Anatomy[2]	4
ATEP 206. Recognition and Management of Athletic Injuries[2,3]	3
ATEP 291. Pre-Professional Practicum in Athletic Training[2,3]	2
Electives	0-1
General Education courses	15-16
	30

Third Year	Credit Hours
ATEP 304A. Lower Quarter Evaluation[2,4]	3
ATEP 304B. Upper Quarter Evaluation[2,3]	3
ATEP 305. Rehabilitation in Athletic Training (Lower)[2,3]	3
ATEP 306. Therapeutic Modalities[2,4]	4
ATEP 307. Field Application in Athletic Training[2,4]	2
ATEP 350. Measurement Techniques in Athletic Training[2,4]	2
ATEP 355. Infectious Disease Control[2,3]	1
ATEP 377. General Medicine in Athletic Training[2,3]	2
ATEP 392. Level II Practicum in Athletic Training[2,4]	3
ATEP 393. Level III Practicum in Athletic Training[2,3]	2
HTH 354. U.S. Health Care Systems[2]	3
HTH 441. Rehabilitative Biomechanics[2]	3
NUTR 280. Nutrition for Wellness[2]	3
	32

Fourth Year	Credit Hours
ATEP 376. Pharmacology for Athletic Trainers[2,4]	2
ATEP 405. Rehabilitation in Athletic Training (Upper)[2,4]	3
ATEP 406. Organization and Administration of Athletic Training[2,3]	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. Physiology of Muscular Activity[2]	3
KIN 302L. Physiology of Muscular Activity/Lab[2]	1
NUTR 382. Sports Nutrition[2,4]	3
Elective	2
General Education courses	7
	28

1 BIO 270 & MATH 220 may be met by choosing the correct course in General Education and be counted for both general education and the major 2 Grade of "C" or better required 3 Offered only in spring semester 4 Offered only in fall semester.

Bachelor of Science in Dietetics

The major in dietetics is an accredited Didactic Program in Dietetics (DPD) which prepares the student as a generalist in dietetics. The program in dietetics gives the student a wide view of dietetic careers including clinical dietetics, administrative dietetics, community dietetics, education and research. It is not an open major; students are selected through a competitive admission process. Following the completion of the program in dietetics, students should plan to meet the experience requirements for registered dietitian status by completing a dietetic internship (DI). The Didactic Program in Dietetics (DPD) at James Madison University is accredited by the Commission on Accreditation for Dietetics Education of The American Dietetic Association, 120 S. Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-4876.

Meeting the Didactic Program in Dietetics

Any student wishing to complete the DPD at James Madison University must be enrolled in either the B.S. program in Dietetics or in the M.S. program in Health Sciences with a concentration in Dietetics or Nutrition and Physical Activity and completing DPD classes at the undergraduate level concurrently. In order to receive a signed Verification Statement from JMU, students must take a minimum of NUTR 482, Nutrition and Metabolism; NUTR 484, Clinical Nutrition II; NUTR 446, Experimental Foods; NUTR 363, Quantity Food Production; NUTR 460, Computer Systems for Foods and Nutrition; and NUTR 490, Field Experience Practicum on campus at James Madison University.

Receiving Verification Statement

In order to receive a signed Verification Statement from James Madison University, a student must have documentation of the following:

- Completion of all DPD courses required at JMU, with a "C" or higher in all nutrition classes and an average GPA of at least 2.5 in all DPD classes.
- Final transcript verifying all grades and degree confirmation.

As soon as the final transcript is received, the student will be given four copies of the signed Verification Statement, which is necessary before beginning a dietetic internship.

Required Courses/ Recommended Schedule for Majors

First Year	Credit Hours
CHEM 131-131L. General Chemistry I with laboratory and CHEM 132-132L. General Chemistry II with laboratory	8
NUTR 140. Contemporary Foods	3
NUTR 280. Nutrition for Wellness	3
NUTR 295. Foundations of Nutrition Practice[1]	2
Quantitative requirement (B.S. degree requirement)	3
General Education courses	12
	31

Second Year	Credit Hours
CHEM 221-221L. Concepts of Organic Chemistry with laboratory[2]	4
CHEM 222-222L. Concepts of Biochemistry with laboratory[1]	4
NUTR 385. Nutrition throughout the Life Cycle[2]	3
NUTR 386. Community Nutrition	3
*G*PSYC 101. General Psychology[3] or *G*PSYC 160. Life Span Human Development[3]	3
*G*POSC 225. U.S. Government[3]	4
General Education courses	12
	33

Third Year	Credit Hours
BIO 270. Human Physiology[3]	4
BIO 290. Human Anatomy	4
MATH 220. Elementary Statistics	3
NUTR 360. Management in Dietetics[2]	3
NUTR 362. Food Service Systems[1]	3
NUTR 363. Quantity Food Production	3
NUTR 380. Global Nutrition	3
NUTR 384. Clinical Nutrition I[1]	3
NUTR 395. Introduction to Patient Care in Dietetics[2]	2
Elective	3
	31

Fourth Year	Credit Hours
BIO 280. Allied Health Microbiology	4
NUTR 446. Experimental Foods[2]	3
NUTR 482. Nutrition and Metabolism[2]	3
NUTR 484. Clinical Nutrition II[1]	3
NUTR 490. Field Experience Practicum[4]	3
NUTR 495. Senior Seminar in Dietetics[2]	2
Elective	7
	25

1 Offered only in spring semester. 2 Offered only in fall semester. 3 These courses may count for both General Education and the major depending on General Education course choice. 4 Field Experience Practicum should be completed during summer between junior and senior years.

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 not an open program; students must meet specific criteria for admission to the program. The criteria are available from the program director and are available on the program's Web site at www.healthsci.jmu.edu/hsa/pages. 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.

Degree Requirements

First Year	Credit Hours
General Education[1]	40
Quantitative requirement (in addition to General Education)	3
Scientific Literacy requirement (in addition to General Education)	3
Major requirements (listed after schedule)	74
	120

Required Courses/ Recommended Schedule for Majors

First Year	Credit Hours
HTH 151. Foundations of Health Sciences[2]	3
General Education courses	28
	31

Second Year	Credit Hours
COB 218. Legal Environment of Business	3
COB 241. Financial Accounting	3
COB 204. Computer Information Systems	3
ECON 201. Principles of Economics (Micro)	3
HTH 354. U.S. Health Care System[6]	3
HSA 385. Seminar in Health Services Administration[2]	1
General Education courses	12
	28

Third Year	Credit Hours
FIN 345. Managerial Finance	3
GERN 280. Social Gerontology	3
HTH 320. Statistical Methods for Health Science Research[2] (B.S. degree requirement)	3
HSA 366. Health Politics and Policy[2,5] (B.S. degree requirement)	3
HSA 358. Health Administration[2,5]	3
HSA 363. Health Economics[2,5]	3
HSA 365. Values in Health Care[2]	3
MGT 305. Management and Organizational Behavior	3
MKTG 380. Principles of Marketing	3
MATH 220. Elementary Statistics[1]	3
	30

Fourth Year	Credit Hours
HTH 450. Epidemiology[2]	3
HSA 454. Internship in Health Organizations[7]	3
HTH 458. Health Program Planning and Evaluation[2]	3
HSA 462. Managed Care[2,3]	3
Choose one of the following:	3
HSA 452. Hospital Organization and Administration [2, 3]	
HSA 455. Long Term Care Organization and Administration[2, 3]	
HSA 456. Ambulatory Care Services: Organization and Administration[2,5]	
HSA 464. Funding in Health Care[2,3]	3
Program electives (selected from list of approved courses)	6
Electives	7
	31

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. 5 Offered only in fall semester.
6 Grade of "B" or better required. 7 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 and 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.

General Education (41-44)

Health Sciences Core (35-40 hours)	Credit Hours
CHEM 120 Concepts of Chemistry or CHEM 131/ 132+Ls General Chemistry	3-8
MATH 220 Elementary Statistics	3
*G*HTH 100 Personal Wellness	3
HTH 230 Community Health	3
Quantitative requirement for B.S. degree (HTH 320 Statistical Methods will count)	3
HTH 330 Introduction to Human Disease	3
HTH 408 Health Research Methods	3
HTH 450 Epidemiology	3
HTH 451 Health Behavior Change	3
Select two of the following: BIO 270 Human Physiology BIO 280 Allied Health Microbiology BIO 290 Human Anatomy	8

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 Instructor certification program sponsored by the American College of Sports Medicine.

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	35-40
ATEP 205. Introduction to Athletic Training	3
BIO 290. Human Anatomy	4
CHEM 120 + 120L. Concepts of Chemistry with Laboratory	4
NUTR 280. Nutrition for Wellness	3
NUTR 382. Sports Nutrition	3
HTH 308. Therapeutic Assessment	3
HTH 389. Practicum in Health Education	3
HTH 441. Rehabilitative Biomechanics	3
HTH 442. Chronic Disease	3
HTH 454. Internship in Health Organizations	3
HTH 458. Health Program Planning and Evaluation	3
HTH 471. Health Aspects of Gerontology	3
HTH 480. Health Assessment Techniques	3
HTH 482. Advanced Health Assessment Techniques	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[1] + CHEM 120L	4
*G*HTH 100. Personal Wellness	3
HTH 230. Community Health	3
MATH 220. Elementary Statistics[1]	3
General Education courses	15
	31

Second Year	Credit Hours
BIO 270. Human Physiology[1]	4
BIO 290. Human Anatomy	4
ATEP 205. Introduction to Athletic Training[2]	3
NUTR 280. Nutrition for Wellness	3
General Education courses	15
	29

Third Year	Credit Hours
HTH 308. Therapeutic Assessment[2,3]	3
HTH 330. Introduction to Human Disease	3
HTH 389. Practicum in Health Education[2]	3
HTH 451. Health Behavior Change[2]	3
HTH 471. Health Aspects of Gerontology[2]	3
NUTR 382. Sports Nutrition[4]	3
Quantitative requirement for B.S. degree HTH 320 will count)	3
General Education courses	4
Core and elective courses	5
	31

Fourth Year	Credit Hours
HTH 408. Health Research Methods	3
HTH 441. Rehabilitative Biomechanics[2]	3
HTH 442. Chronic Diseases[2,4]	3
HTH 450. Epidemiology[2]	3
HTH 454. Internship in Health Organizations[2]	3
HTH 458. Health Program Planning and Evaluation[2]	3
HTH 480. Health Assessment Techniques[2,4]	3
HTH 482. Advanced Health Assessment Techniques[2,3]	3
Core and elective courses	6
	30

1 BIO 270, CHEM 120 and MATH 220 may be counted for both general education and the major.
2 Grade of "C" or better required.
3 Offered only in spring semester.
4 Offered only in fall semester.

Health Studies Concentration

The health studies concentration is designed for students interested in applying to a professional program. The health studies concentration combines a broad foundation of health-related 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	35-40
Required Courses	6
HTH 354. U. S. Health Care System	
HTH 300. Medical Terminology	
Select 16 credits from the following courses	16
BIO 114. Organisms	
BIO 214. Cell and Molecular Biology	
BIO 224. Genetics and Development	
BIO 280. Allied Health Microbiology[1]	
BIO 370. Animal Physiology	
BIO 430. Human Genetics	
CHEM 221 + 221L. Concepts of Organic Chemistry	
CHEM 222. Concepts of Biochemistry	
CHEM 341/342/346 Organic Chemistry	
HTH 441. Rehabilitative Biomechanics	
PHYS 140 + 140L Physics	
PHYS 150 + 150L Physics	
*G*PSYC 101. General Psychology	
*G*PSYC 160. Life Span Human Development	
PSYC 250. Introduction to Abnormal Psychology	

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

Select five courses from the following	15
HTH 352. Environmental Health	
HTH 360. Contemporary Health Issues	
HTH 370. Child and Adolescent Health	
HTH 372. Human Sexuality	
HTH 378. Use and Effects of Drugs	
HTH 441. Rehabilitative Biomechanics	
HTH 471. Health Aspects of Gerontology	
NUTR 280 Nutrition for Wellness	

Recommended Schedule for Health Studies Concentration

First Year	Credit Hours
*G*HTH 100. Personal Wellness	3
MATH 220. Elementary Statistics	3
Other quantitative course for B.S. degree requirement or HTH 320. taken later	
Health studies electives	4-8
General Education courses	13-17
	30

Second Year	Credit Hours
HTH 230. Community Health	3
CHEM 120 + L or CHEM 131 + L and CHEM 132 + L	3-8
BIO 270 or BIO 280 or BIO 290	4
Health studies electives	3-6
General Education courses	12-17
	30

Third Year	Credit Hours
HTH 300. Medical Terminology	3
BIO 270 or BIO 280 or BIO 290	4
HTH 330. Introduction to Human Disease	3
HTH 354. U.S. Health Care System	3
Health studies electives	3-6
General Education electives	6-9
Electives	0-5
	30

Fourth Year	Credit Hours
HTH 408. Managing and Interpreting HS Research Information	3
HTH 450. Epidemiology	3
HTH 451. Health Behavior Change	3
Health Studies electives	11-16
General Education courses	3-8
Electives	0-7
	30

Occupational Studies Concentration

This concentration is an early-entry program that can lead toward the Master in Occupational Therapy (MOT) program. Through this concentration qualified and selected JMU undergraduate students prepare for admission to the MOT program during their senior year. The health sciences major core is combined with prerequisite courses and first year requisite courses that can lead to the MOT degree. This concentration allows the occupational studies student the opportunity to earn a B.S. degree prior to applying to, and gaining admission to, the MOT program. Entry into this concentration requires a supplemental admission process.

Admission to JMU does not guarantee admission to the occupational studies concentration or to the MOT program; likewise, admission into the occupational studies program as a senior does not ensure direct admission in the JMU Graduate School or the MOT program. Application to the MOT program will occur during the student's senior year with admission based on academic performance and other factors. Students must complete the General Education requirements, the health sciences major core requirements and the occupational studies core requirements prior to admission.

Students who successfully complete the required 87 undergraduate credits and meet all criteria listed for the supplemental application process, and are selected by the OT program admission committee, will be admitted to the occupational studies concentration prior to the start of their senior year. These students will then complete the remaining prescribed 33 undergraduate credits and will earn a Bachelor of Science in Health Sciences with an occupational studies concentration.

Admission Requirements

Applicants to the occupational studies concentration must initially be accepted to JMU and can apply once all requirements for admission are completed. Applicants must have a minimum cumulative grade point average of 2.8 and earn a "C" (2.0) grade or better in all prerequisite course work. Applicants must submit evidence of:

- A minimum cumulative grade point average of 2.8 (3.0 recommended) and must earn a "C" (2.0) grade or better in all prerequisite course work.
- Graduate Record Examination (www.gre.org) scores in Verbal, Quantitative and Writing. The GRE should be taken the student's junior year (fall term) prior to applying to the occupational studies concentration. Contact the JMU Graduate School for more information.
- Documentation verifying a minimum of 40 hours of observation of occupational therapy services
- Three reference forms: one from an instructor, one from an employer/volunteer supervisor and one from another non-related individual

- Autobiography (1500 words or less)
- Evidence of at least one instructional experience in the arts or media (from high school, community college or college course, private instruction, or community arts certificate)
- Meet all General Education requirements including the Information Seeking Skills Test (ISST) and computer competency requirements as required by the university.
- All prerequisites and requirements must be complete by the stated deadlines. Incomplete application packages will not be considered for admission.

Applicants who already have an earned baccalaureate degree should visit the Occupational Therapy Program Web site for prerequisite and admission requirements or call (540) 568-2399.

Occupational Studies Core

Required Courses/Recommended Schedule

First Year	Credit Hours
Critical Thinking	3
Human Communication	3
Writing	3
Historical, Cultural, Philosophical Perspectives	3
Fine Arts	3
Literature	3
American Experience	4
Global Experience (*G*ANTH 195)	3
*G*HTH 100. Personal Wellness	3
*G*SOCI 240. Individual in Society	3
	31

Second Year	Credit Hours
*G*PSYC 160. Life Span Human Development	3
MATH 220. Elementary Statistics	3
CHEM 120. Concepts of Chemistry	3
HTH 230. Community Health	3
NUTR 280. Nutrition for Wellness	3
BIO 290. Human Anatomy	4
PSYC 250. Abnormal Psychology	3
HTH 354. U.S. HealthCare Systems	3
HTH 300. Medical Terminology	3
HTH 408. Health Research Methods	3
	31

Third Year	Credit Hours
BIO 270. Human Physiology	4
HTH 330. Intro to Human Disease	3
HTH 451. Health Behavior Change	3
Elective	6
HTH 450. Epidemiology	3
HTH 320 or MATH Elective	3
HTH 441. Rehab Biomechanics	3
	25

Fourth Year	Credit Hours
(Admission to the occupational studies concentration required)	
HTH 409. Therapeutic Interaction	3
HTH 431. Human Occupation and Foundations of the Profession	3
BIO 414. Functional Anatomy for OTs	4
BIO 440. Functional Neuroscience	3
HTH 424. Occupational Development Through the Life Span	3
HTH 445. The Occupational Therapy Process	3
HTH 460. Sensorimotor Foundations of Occupation	3
HTH 461. Therapeutic Media in Occupational Therapy	2
HTH 478. Occupational Dysfunction - Cause & Impact	3
HTH 479. Foundations of Research in OT	3
HTH 435. Level One Fieldwork One	1
HTH 485. Psychosocial Perspectives in OT Practice	3
HTH 491. Occupational Therapy Tutorial I	1
	35

The Occupational Therapy Program has achieved full accreditation from the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA- www.aota.org), located at 4720 Montgomery Lane, PO Box 31220, Bethesda, MD 20824-1220; (301) 652-AOTA. All entry-level occupational therapy programs are now accredited at the post-baccalaureate level.

With full accreditation, program graduates are able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT), 12 South Summit Avenue, Suite 100, Gaithersburg, MD 20877-4150; (301) 990-7979; www.nbcot.org. After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, most states require licensure in order to practice. State licenses are usually based in part on the results of the NBCOT Certification exam. A prior felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

Public Health Education Concentration

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

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

Required Courses	Credit Hours
Health Sciences Core	35-40
HTH 352. Environmental Health	3
HTH 360. Contemporary Health Issues	3
HTH 370. Child and Adolescent Health	3
HTH 372. Human Sexuality	3
HTH 378. Use and Effects of Drugs	3
HTH 450. Epidemiology	3
HTH 451. Health Behavior Change	3
HTH 453. Public Health Education Methods	3
HTH 458. Health Program Planning and Evaluation	3
HTH 471. Health Aspects of Gerontology	3
HTH 454. Internship in Health Organizations	3
Select 6 credits from the following designated electives	6
HTH 300. Medical Terminology	
HTH 354. U.S. Health Care System	
HTH 407. Health Education Facilitation/Synthesis	
NUTR 280. Nutrition for Wellness	

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[1]	3
MATH 220. Elementary Statistics[1]	3
General Education courses and electives	24
	30

Second Year	Credit Hours
BIO 270. Human Physiology[1] and/or BIO 280. Allied Health Microbiology and/or BIO 290. Human Anatomy	7-8
HTH 230. Community Health	3
Public health designated electives	6
General Education courses and electives	14
	30

Third Year	Credit Hours
HTH 330. Introduction to Human Disease	3
HTH 352. Environmental Health	3
HTH 360. Contemporary Health Issues	3
HTH 370. Child and Adolescent Health	3
HTH 372. Human Sexuality	3
HTH 378. The Use and Effects of Drugs	3
HTH 451. Health Behavior Change	3
Quantitative requirement for B.S. degree. (HTH 320 will count)	3
General Education courses	3
Electives	3
	30

In order to graduate in May of the senior year, a student must save HTH 450, HTH 453 and HTH 471 to be completed the third block of the senior year. The internship, HTH 454, 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 May-June after their senior year.

Fourth Year Fall Semester	Credit Hours
HTH 408. Health Research Methods	3
HTH 458. Health Program Planning and Evaluation	3
Electives	12
	18

Spring Semester	Credit Hours
Third Block	
HTH 450. Epidemiology[2]	3
HTH 453. Public Health Education Methods[2]	3
HTH 471. Health Aspects of Gerontology[2]	3
Fourth Block	
HTH 454. Internship in Health Organizations[3]	3
	12

1 BIO 270, CHEM 120 and MATH 220 may be counted for both general education and the major.
2 Offered only first eight weeks of spring semester.
3 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 Graduate Catalog, College of Graduate and Outreach Programs Web site at http://www.jmu.edu/cgop or gain access through the Health Sciences Web site at http://www.healthsci.jmu.edu.

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.

Minor Requirements

Substance Abuse Intervention Minor

The interdisciplinary substance abuse intervention minor prepares the student to understand the impacting forces on the abusing individual and help the individual seek aid as appropriate. The SAI minor also prepares the student to assist communities in designing science-based prevention programs. Course work in the SAI minor can lead to a Certified Prevention Professional, Alcohol, Tobacco and Other Drug (CPP-ATOD). For a full description of this program, see "Interdisciplinary Programs," Page 95.

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.