

# Biology, Health Promotion, and Health Care Management

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## ***Chairperson***

Dr. Kathleen Nolan

## ***Professors***

Burdowski  
Corrigan  
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## ***Associate Professors***

Eaddy

## ***Assistant Professor***

Dell  
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## ***Lecturer***

Florio

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## ***Laboratory Instructor***

Joseph

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## ***Adjuncts***

Ali  
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Pamar  
Peterson  
Rivera  
Samms  
Wendt

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## **Mission of Biology Major**

Biology is the study of living organisms at the molecular, microscopic, and systemic levels and deals with the interrelation of life forms and their environments. Students will learn classical biology and concepts in molecular and cellular biology and biotechnology that are current and cutting-edge areas of study in biology and medicine. Students will be prepared for graduate study, professional training in the medical sciences and allied health fields, teaching, or employment in industry concerned with the biological sciences.

Besides the traditional classroom experience, biology majors are encouraged to consider the diverse opportunities available through field placements, internships, or semesters at other academic institutions, both domestic and abroad. Taking full advantage of these opportunities requires careful planning, and students are urged to discuss their plans and interests with their academic advisors early. It is also our goal to acquaint non-science students with the issues presented by both human biology and the physical environment.

The Biology and Health Promotion department offers majors in Biology, Biomedical Science (podiatric ONLY), Medical Technology, and Radiologic Sciences; Radiologic Sciences and Medical Technology are offered in association with NY Methodist Hospital and St. Johns' Catholic Medical Centers of New York (St. Francis College awards the B.S. degree). The Radiologic Sciences program at NY Methodist Hospital has three areas of concentration: radiography, radiation therapy and diagnostic medical sonography. All programs are supervised by the SFC Biology and Health Promotion Department.

## **Goals**

- *Students will learn the scientific method.*
- *Students will learn important concepts in population biology, ecology and evolution, molecular and cellular biology and organismal biology.*
- *Students will read and interpret a wide variety of biological literature.*

- *Students will write research papers and make oral presentations about biology.*
- *Students will use the scientific resources of New York City to help them in their learning.*
- *Students will be prepared to pursue graduate degrees in the sciences.*

## **Objectives**

- *Students will understand and apply the proper usage of biology vocabulary in novel situations.*
- *Students will perform biological lab experiments that demonstrate the scientific method.*
- *Students will be able to write a cogent lab report that uses the scientific method*
- *Students will make oral presentations that demonstrate the scientific method.*
- *Students will be able to demonstrate connections among population biology, ecology and evolution, molecular and cellular biology and organismal biology, and among biology, chemistry and physics.*
- *Students will be able to collect and analyze data using statistics.*
- *Students will make qualitative and quantitative assessments of their own data as well as that in scientific literature.*
- *Students will be able to discuss and explain biological phenomena learned through field trips.*
- *Students will be able to create and explain illustrations of biological phenomena.*

## **Major in Biology**

The Biology curriculum is a four-year program introducing students to the major in the biological sciences as well as offering practical, hands-on experience in the laboratory. It is taught as pure science for the intellectual good of the student and the inherent importance of the subject matter. Students are trained in reflective and analytical and critical thinking and sound judgment. The scientific method builds a foundation for graduate school and professional study, e.g., medical, dental, veterinary health fields, academic research, industrial research, and secondary school teaching. The program fosters and

approaches significant contributions of biological scientists to humanity.

During the first year, student take chemistry and general biology courses emphasizing energetics, cellular biology, molecular biology, genetics, and evolution. The second semester emphasizes an evolutionary, ecological, and organismal approach to biology. During the first year, the student is encouraged to take IT 1001 to gain the basic computer and analytical skills that are needed to analyze and present data. In addition, all students are required to take the math placement exam. Those students who do not test into calculus should see the department for guidance.

In the second year, students study organic chemistry, basic cell biology, genetics, and other 2000- or 3000-level courses. Third-year students take physics, biochemistry, and cell and molecular biology. During the last year, students are encouraged to take electives in areas of interest. Students are also encouraged to undertake research early on in their education. All students are required to take a comprehensive exam in their senior year, the MFAT exam as part of a senior seminar course.

The courses required for the major are BIO 1201-1202 General Biology; BIO 2250 Introduction to Cell Biology, recommended in the semester following the completion of BIO 1202; BIO 3303 Genetics; BIO 4998 Biology Seminar (must be taken senior year); and CHE 3001 Biochemistry, which must be taken junior year. Students interested in going on to medical school are encouraged to take MAT 2203 Calculus II. Students must choose at least one course listed under each of the three areas of concentration for their advanced biology classes.

## **Mission of the Health Promotion and Science Major**

The Health Promotion and Science major provides a fundamental and thorough education in the liberal arts tradition while concurrently providing pre-professional preparation in the field of health and wellness education. Mastery of the liberal arts core as well as communication skills built sequentially into the major curriculum support the graduate as he or she enters and adapts to changes in the professional domain and contributes to his or her success as a mature and responsible citizen beyond graduation. The program is designed to prepare students for careers immediately after graduation and/or graduate school and professional training.

### **Goals**

- Prepare Health Promotion majors for national certification as health education specialists.
- Prepare students for graduate study.
- Prepare students for entry into the allied health or health and fitness career professions.

### **Objectives**

- Students will demonstrate knowledge, skills and behaviors appropriate to entry-level positions in health and fitness organizations.
- Students will demonstrate respect and understanding of diverse populations and achieve a level of cultural competency appropriate for professional working environments.
- Students will learn to work constructively and collaboratively in a working/research group or committee.
- Students will gain “hands-on” experience working and/or volunteering in a professional work environment as part of a “service-learning” or internship experience.

- Students will investigate, analyze and write a well-documented research paper based on a complex health problem.
- Students will formulate a comprehensive oral presentation.
- Students will develop, achieve and sustain a commitment to personal and professional growth.

### **Program Requirements**

## **Program Requirements**

### **Major in Health Promotion and Science**

The Health Promotion and Science major offers students the opportunity to study an exciting and growing segment of the health and fitness industry, preparing them for employment in corporations, local, state and national health organizations, health facilities, and community settings. Students investigate disease prevention and health promotion in a variety of settings, learn concepts and principles underlying educational strategies, and apply these theories to planning, designing, implementing, and evaluating a program of their own (such as smoking cessation, heart-healthy eating, or fitness). Field placement and a capstone seminar are integral to this program. The flexible elective pool allows each student to customize his or her degree with concentrations based on career interests. At the completion of this major, the student may be prepared to sit for the national certifying examination, C.H.E.S. (Certified Health Education Specialist) examination.

## **Policy on Transfer Credits in Health Promotion**

The Health Promotion major affirms its commitment to welcoming transfer students but also to retaining high standards of performance for our graduates. To that end we apply the following criteria to transfers from other colleges.

*Accept up to 9 credits of health requirements or electives, but only for courses we already offer. Examples of required courses include Community Health (HS 1201) and Epidemiology (HS 2406). Examples of health electives include Nutrition, Safety & First Aid, Coping with Stress.*

*Do NOT accept general health or clinical courses for health electives. These credits can be applied to the copious free electives in the major. Do NOT accept transfer credits for the basic major sequences of requirements (HS 2150, 2151, 3250, 3251, HS 4995, 4350 and 4998. These must be taken within the department to ensure consistency in both content and format (APA).*

## **Policy on D Grades within the Major**

The Chairperson reserves the right to waive one D in a required major course, provided both of the following are true:

- The D is not in HS 4998 Seminar in Health Promotion.
- The student otherwise has a 3.0 index in major courses (both required and elective courses).

It is the student's responsibility to request the waiver in sufficient time to complete any work needed for graduation should the waiver be denied. This policy is reviewed with the student upon declaration of the major as well as at each advisement session for those who have earned any D grades. Please see the Chairperson for any questions or clarification.

## **Mission of the Health Care Management Major**



The Health Care Management major provides a fundamental and thorough education in the liberal arts tradition while concurrently providing pre-professional preparation in the field of health care management, particularly as regards health care facilities such as hospitals and nursing homes. Mastery of the liberal arts core as well as communication skills built sequentially into the major curriculum support the graduate as he or she enters and adapts to changes in the professional domain and contributes to his or her success as a mature and responsible citizen beyond graduation. The program is designed to prepare students for careers immediately after graduation and/or graduate school and professional training.

## Goals

- Prepare Health Care Management majors with the tools they will need to work in health care facilities.
- Prepare students for graduate study.

## Objectives

- Students will demonstrate knowledge, skills and behaviors appropriate to entry-level positions in health care management.

- Students will demonstrate respect and understanding of diverse populations and achieve a level of cultural competency appropriate for professional working environments.
- Students will learn to work constructively and collaboratively in a working/research group or committee.
- Student will gain “hands-on” experience working and/or volunteering in a professional work environment as part of a “service-learning” or internship experience.
- Students will investigate, analyze and write a well-documented research paper based on a complex health problem
- Students will formulate a comprehensive oral presentation.
- Students will develop, achieve and sustain a commitment to personal and professional growth.
- Students will formulate strategic plans for a health care facility
- Students will solve case studies involving health care management issues.
- Students will become proficient in health policy and regulations regarding health care facilities.



## Major in Biology

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
General Education Program (see page 15).....	52		
First Year College .....			
Bodies of Knowledge.....			
→ NPW - Take CHE 1201 General Chemistry I (5 crs) ...			BIO 1201 and MAT 1107
→ NPW - Take CHE 1202 General Chemistry II (5 crs) .			BIO 1201
BIO 1201 General Biology I.....	5		CHE 1201
BIO 1202 General Biology II.....	5		BIO 1201 .....
BIO 2250 Introduction to Cell Biology.....	4		CHE 1202
BIO 3303 Genetics.....	4		BIO 1202 .....
BIO 4998 Biology Seminar.....	1		CHE 2101
BIO Distribution, choose one course in each group .....	15-16 <sup>1</sup>		BIO 1202
Select <b>ONE</b> course from Group A below .....			
Select <b>ONE</b> course from Group B below .....			
Select <b>ONE</b> course from Group C on the next page .....			
Select <b>ONE</b> BIO course 2000 or higher .....			
CHE 2101 Organic Chemistry I .....	5		
CHE 2102 Organic Chemistry II.....	5		
CHE 3001 Biochemistry .....	4		
MAT 2202 Calculus I.....	4		
Select <b>ONE</b> of the following courses.....	3		MAT 1107 or placement exam
MAT 2203 Calculus II .....			
MAT 2301 Statistics .....			
PHY 2001 General Physics I.....	4		MAT 2202
PHY 2002 General Physics II .....	4		MAT 1104 or higher or placement exam
General Electives <sup>2</sup> .....	13		MAT 2202
Total credits required.....	128-129		

*The successful completion of BIO 4998 satisfies the College's Comprehensive Examination/ Thesis requirement.*

<sup>1</sup> Three of these electives must be four credit laboratory courses.

<sup>2</sup> All majors are strongly encouraged to become conversant in a language other than English.

### Group A—Population Biology Ecology and Evolution

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
Select <b>ONE</b> of the following courses.....	4		
BIO 2203 Invertebrate Zoology .....		BIO 1202	
BIO 2204 Ecology .....		BIO 1202	
BIO 2280 Biological Evolution.....		BIO 1202	
BIO 3302 Botany .....		BIO 1202	
BIO 4005 Parasitology.....		BIO 1202	
Total credits required .....	4		

### Group B—Molecular and Cellular Biology

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
Select <b>ONE</b> of the following courses.....	4		
BIO 2206 Histology .....		BIO 1202	
BIO 3310 Advanced Cell Biology.....		{ BIO 2250 CHE 2102	
BIO 3320 Molecular Biology.....		{ BIO 1202 CHE 2102	
BIO 4405 Immunology .....		{ BIO 3310 BIO 2250	
BIO 4480 Bioinformatics .....		{ CHE 2102 IT 1104	
Total credits required .....	4		

## **Group C—Organismal Biology**

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
Select <b>ONE</b> of the following courses.....	3-4		
BIO 2202 Comparative Anatomy.....		BIO 1202	
BIO 2210 Developmental Biology .....		BIO 1202	
BIO 3300 Microbiology.....		BIO 1202	
BIO 3350 Physiology .....		BIO 1202 CHE 2102	
BIO 4409 Neurobiology.....		BIO 3310	
BIO 4420 Virology .....		BIO 3300 CHE 2102	
BIO 4403 Endocrinology.....			
BIO 4450 Pharmacology .....			BIO 1202 or BIO 1141
Total credits required .....	3-4		

## **Major in Biomedical Science (Podiatric Medicine)**

In cooperation with the New York College of Podiatric Medicine, the department has an accelerated Biomedical Science program, which enables highly qualified students to complete a science-studies curriculum in three years and then make application to the New York College of Podiatric Medicine. Upon completion of the first year of study at the New York College of Podiatric Medicine,

the student is awarded a B.S. in Biomedical Science from St. Francis College. Then, after completing four years of study at the New York College of Podiatric Medicine, the student is awarded the degree of Doctor of Podiatric Medicine (D.P.M.) from the College of Podiatric Medicine. This curriculum can be completed in seven rather than eight years.

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
General Education Program ( <a href="#">see page 15</a> ).....	52		
First Year College .....			
Bodies of Knowledge.....			
→ NPW - Take CHE 1201 General Chemistry I (5 crs) .....			BIO 1201 and MAT 1107
→ NPW - Take CHE 1202 General Chemistry II (5 crs) .....		CHE 1201	BIO 1201
BIO 1201 General Biology I.....	5		CHE 1201
BIO 1202 General Biology II.....	5	BIO 1201.....	CHE 1201
BIO 2250 Introduction to Cell Biology.....	4	BIO 1202.....	CHE 2101
BIO 3303 Genetics.....	4	BIO 1202	
BIO 3320 Molecular Biology.....	4	BIO 1202 CHE 2102	
CHE 2101 Organic Chemistry I .....	5	CHE 1202	
CHE 2102 Organic Chemistry II.....	5	CHE 2101	
CHE 3001 Biochemistry .....	4	CHE 2102	
MAT 2202 Calculus I .....	4	MAT 1107 or placement exam	
MAT 2301 Statistics .....	3	MAT 1104 or higher or placement by exam	
PHY 2001 General Physics I.....	4	MAT 2202	
PHY 2002 General Physics II .....	4	PHY 2001	
Cooperative Training Program through New York College of Podiatric Medicine .....	33		
Total credits required .....	136		



## Major in Medical Technology

The program in Medical Technology prepares the student for acceptance into New York Methodist Hospital or St. Vincent's Catholic Medical Centers of New York. Upon completion of

clinical training, the student receives a B.S. in Medical Technology from St. Francis College and a certificate of program completion from the New York Methodist Hospital or the St. John's Catholic Medical Centers of New York.

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
General Education Program <a href="#">(see page 15)</a>	52		
First Year College .....			
Bodies of Knowledge.....			
⇒ <b>NPW - Take CHE 1201 General Chemistry I (5 crs)</b> .....		CHE 1201	BIO 1201 and MAT 1107
⇒ <b>NPW - Take CHE 1202 General Chemistry II (5 crs)</b> .....			BIO 1201
BIO 1201 General Biology I.....	5		CHE 1201
BIO 1202 General Biology II.....	5	BIO 1201	CHE 1202
BIO 3300 Microbiology .....	4		
BIO 4405 Immunology .....	4		
CHE 2101 Organic Chemistry I .....	5		CHE 1201
CHE 2102 Organic Chemistry II.....	5	BIO 1201 .....	CHE 1202
CHE 3001 Biochemistry .....	4	BIO 1202	
MAT 2202 Calculus I.....	4		
MAT 2301 Statistics .....	3	BIO 3310	
PHY 2001 General Physics I.....	4	{ MAT 1107 or exam	
PHY 2002 General Physics II .....	4	CHE 1201	
Cooperative Hospital Training.....	32	CHE 1202	
Total credits required .....	131		

## Major in Radiologic Sciences

The Biology and Health Promotion department offers majors in Biology, Biomedical Science (podiatric), Medical Technology, and Radiologic Sciences. Radiologic Sciences are offered at St. Johns' Catholic Medical Centers of New York (St. Francis College awards the B.S. degree). Radiologic Sciences are also offered in association with NY Methodist Hospital (St. Francis College awards the B.S. degree). St. Francis students placed at New York Methodist Hospital complete clinical work in three areas of concentration: Radiation Therapy, Diagnostic Medical

Sonography, and Radiography. St. Francis College awards the BS degree.

The Radiologic Sciences program at NY Methodist Hospital has three areas of concentration: radiography, radiation therapy and diagnostic medical sonography.

The SFC Biology and Health Promotion Department supervise all programs.

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
General Education Program <a href="#">(see page 15)</a>	50		
First Year College .....			
⇒ <b>FH - Take HS 1001 Health Issues</b> .....			
⇒ <b>ITML - Take IT 1001 Computer Tools</b> .....			
Bodies of Knowledge.....			
⇒ <b>NPW - Take BIO 1140 Anatomy and Physiology I (4 crs)</b> .....			
⇒ <b>NPW - Take BIO 1141 Anatomy and Physiology II (4 crs)</b> .....		BIO 1140	
Any MAT course* .....	3		
PSY 1100 General Psychology.....	3		
PHY 1001 Physics and the Modern World*.....	3		
Radiologic Science credits at Catholic Medical Center .....	63		
Liberal Arts <sup>1</sup> <a href="#">(for specific academic subjects, see page 15)</a> .....	6		
Total credits required .....	128		

*Must complete an AA\_Liberal Arts prior to commencing clinical work.*

*\*Students must achieve required grades in MATH and SCIENCE courses; see department for specific information.*

*<sup>1</sup>Students pursuing a Bachelor of Science degree must complete 1/2 of their degree credits (i.e. minimum 60 credits) from courses in the Liberal Arts category.*

*For specific academic subjects, see page 15.*

## Major in Health Promotion and Science

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
General Education Program ( <a href="#">see page 15</a> ).....	50		
First Year College .....			
Bodies Of Knowledge.....			
► NPW - Take BIO 1140 Anatomy and Physiology I (4 crs).....			
► NPW - Take BIO 1141 Anatomy and Physiology II (4 crs).....		BIO 1140	
HS 1201 Community Health.....	3		
HS 2150 Methods of Teaching Health.....	3		
HS 2151 Theory and Research in Health Promotion .....	3		
HS 2406 Epidemiology.....	3		
HS 3250 Designing Health-Promotion Programs.....	3		
HS 3251 Implementation and Evaluation of Health-Promotion Programs .....	3		
HS 4350 Introduction to Research and Bioethics in Health Sciences .....	3	Senior standing Department chair approval 15 HS credits HS 4350	HS 3251
HS 4990 Internship in Allied Health Promotion.....	3		
HS 4998 Seminar in Health Promotion.....	3		
Select <b>THREE</b> health-promotion-electives.....	9		
HS 1206 Safety and First Aid .....			
HS 1207 Nutrition .....			
HS 1305 Coping with Stress .....			
HS 1306 Healing and Wholeness.....			
HS 1403 Women's Health Issues.....			
HS 1419 Death, Loss, and Grief.....			
HS 1501 Introduction to Public Health .....			
HS 2240 Introduction to Environmental Public .....			
MAT 2301 Statistics .....	3	MAT 1104 or higher or placement exam	
PSY 1100 General Psychology .....	3		
REL 2502 Moral Values and Health Issues .....	3		
General electives .....	33		
Total credits required .....	129		

*The successful completion of HS 4998 satisfies the College's Comprehensive Examination/Thesis requirement.*

## Major in Health Care Management

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
General Education Program( <a href="#">see page 15</a> ).....	48		
First Year College .....			
Bodies of Knowledge.....			
BIO 1101 Introduction to Human Biology .....	3		
HC 1001 Introduction to American Health Service Delivery .....	3		
HC 2001 Organization and Management of Health Institutions.....	3	HC 1001 with a grade of C or higher	
HC 2002 Legal Issues in Health Care .....	3	HC 1001 with a grade of C or higher	
HC 2003 Decision Making in Health Care .....	3	HC 1001 with a grade of C or higher	
HC 3001 Personnel Management in the Health Field .....	3	HC 1001 with a grade of C or higher	
HC 4990 Field Placement in the Health Field.....	3	Department Approval and Senior Standing	
HC 4998 Senior Seminar <sup>1</sup> .....	3	Department Approval and Senior Standing	
Select <b>TWO</b> Health-Care Management-electives or HS electives.....	6		
ACC 1700 Accounting for the Health Care Organization .....	3	MAT 1101 or higher	
HS 1201 Community Health.....	3		
HS 4350 Intro to Research and Bioethics in Health Science.....	3		HS 4351
MAT 2301 Statistics .....	3	MAT 1104 or higher or placement exam	
Liberal Arts <sup>2</sup> ( <a href="#">for specific academic subjects, see page 15</a> ).....	18		
General electives .....	21		
Total credits required .....	129		

<sup>1</sup>*The successful completion of HC 4998 satisfies the College's Comprehensive Examination/Thesis requirement.*

<sup>2</sup> *Students pursuing a Bachelor of Science degree must complete 1/2 of their degree credits (i.e. minimum 60 credits) from courses in the Liberal Arts category. For specific academic subjects, see page 15.*



## Minor in Biology

The minor in Biology is not intended as a preparation for graduate study, but it will reinforce the student's biological science background.

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
BIO 1201 General Biology I.....	5		CHE 1201
BIO 1202 General Biology II .....	5	BIO 1201 .....	CHE 1202
BIO 2250 Introduction to Cell Biology.....	4	BIO 1202 .....	CHE 2101
Select <b>TWO</b> BIO courses .....	6-8		
CHE 1201 General Chemistry I .....	5	{ MAT 1107 or exam	
CHE 1202 General Chemistry II.....	5	CHE 1201	
Total credits required .....	28-30		

## Minor in Health Promotion and Science

A minor in Health Promotion and Science is both useful and appropriate for a variety of students interested in the educational side of health care. Because health and fitness is a rapidly expanding industry, opportunities abound for individuals with

talents and backgrounds in areas such as English, communications, economics, pre-medicine, sociology, psychology, physical education, and management combined with health-promotion skills. Health promotion specialists find employment in schools, community centers, health clubs, and corporations.

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
HS 2150 Methods of Teaching Health.....	3		
HS 2151 Theory and Research in Health Promotion .....	3		
HS 3250 Designing Health-Promotion Programs .....	3		
HS 3251 Implementation and Evaluation of Health-Promotion Programs .....	3		
Select <b>TWO</b> of the following courses .....	6		
HS 1201 Community Health .....			
HS 1206 Safety and First Aid .....			
HS 1207 Nutrition .....			
HS 1305 Coping with Stress .....			
HS 1306 Healing and Wholeness.....			
HS 1403 Women's Health Issues.....			
HS 1419 Death, Loss, and Grief.....			
HS 1501 Introduction to Public Health .....			
HS 2406 Epidemiology.....			
HS 2240 Introduction to Environmental Public Health .....			
Total credits required .....	18		

## Minor in Public Health

The minor in Public Health will provide students with an introduction to the vital principles of public health. Through two required courses in public health and epidemiology students explore the ways social, political and economic forces influence the health of populations and learn about the causes and control of disease, including epidemics and pandemics. Elective courses allow students either to focus on public health, through courses in global public health, nutrition, economics, sociology, health care, history of medicine, and health policy. This minor is appropriate for students considering careers and/or further study in the health professions, particularly in medicine, community or global public health, political science, management, sociology, psychology, prelaw, social work, health promotion, nursing, and other fields. The past few years have

seen an increase of interest in public health, by not only students in Biology and the Health Promotion Department, but from other majors. The college has seen an increase in students expressing interest in applying to graduate programs in public health. The minor in public health will provide an opportunity for our students to utilize this program to augment their education in this area. Additionally, after reviewing the topics of the new MCAT exams, there is an increased expectation that students should be aware of issues that are related to the delivery of health care, health care, public health, the sociology of health care and epidemiology.

The minor in Public Health is an interdisciplinary program with two required courses offered and administered by the Department of Biology and Health Promotion.

Courses	Credits	Prerequisite(s)	Co-Requisite(s)
Select <b>TWO</b> of the following courses .....	7-8		
BIO 1101 Introduction to Human Biology .....			
BIO 1107 Anatomy and Physiology .....			
BIO 1108 Anatomy and Physiology II .....			
BIO 1201 General Biology I .....		BIO 1107	
BIO 1140 Anatomy and Physiology for Health Science I .....			CHE 1201
HS 1501 Introduction to Public Health .....	3		
HS 2406 Epidemiology .....	3		
Select <b>TWO</b> of the following courses .....	6		
BIO 1001 History of Science and Medicine in America .....		{ AMS 1001 WRI 1100	
HS 1201 Community Health .....			
HS 1207 Nutrition .....			
HS 1306 Healing and Wholeness .....			
HS 1403 Women's Health Issues .....			
HS 2240 Introduction to Environmental Public .....			
HS 2150 Methods of Teaching Health .....			
ECO 3310 Health Economics .....		ECO 1201	
REL 2502 Moral Values and Health Issues .....			
SOC 4008 Special Topics: Sociology of Health and Medicine .....		SOC 1000	
Total credits required .....	19-20		

## CHES Completion Program

The CHES completion program invites Bachelors prepared professionals in health education, public health and selected social sciences, to take the courses necessary to sit for the Certified Health Education Specialist (CHES) Examination.

The CHES examination is a competency-based tool used to measure possession, application and interpretation of knowledge in the Seven Areas of Responsibility for Health Educators delineated by A Competency-Based Framework for Health Education 2006. The exam reflects the entry-level sub-competencies of these areas of responsibility. They are:

- Area I: Assess Needs, Assets and Capacity for Health Education
- Area II: Plan Health Education
- Area III: Implement Health Education
- Area IV: Conduct Evaluation and Research Related to Health Education
- Area V: Administer and Manage Health Education
- Area VI: Serve as a Health Education Resource Person
- Area VII: Communicate and Advocate for Health and Health Education

Consisting of 150 multiple-choice questions, the CHES examination is offered in paper-and-pencil format at college campuses throughout the United States.

### **CHES Exam Eligibility**

Eligibility to take the CHES examination is based exclusively on academic qualifications. An individual is eligible to take the examination if he/she has:

- A. A bachelor's, master's or doctoral degree from an accredited institution of higher education; AND one of the following:
- B. An official transcript (including course titles) that clearly shows a major in health education, e.g., Health Education, Community Health Education, Public Health Education, School Health Education, etc.
- C. Degree/major must explicitly be in a discipline of "Health Education."

OR

- D. An official transcript that reflects at least 25 semester hours or 37 quarter hours of course work with specific preparation addressing the Seven Areas of Responsibility and Competency for Health Education.

### **Classes addressing the Core Competency areas include but are not limited to:**

#### **Courses**

	<b>Credits</b>	<b>Prerequisite(s)</b>	<b>Co-Requisite(s)</b>
HS 1001 Health Issues.....	2		
HS 1201 Community Health .....	3		
HS 2105 Introduction to Health Promotion .....	3		
HS 2151 Theory and Research in Health Promotion .....	3		
HS 2406 Epidemiology.....	3		
HS 3250 Designing Health Promotion Programs .....	3		
HS 3251 Implementation and Evaluation of Health Promotion Programs .....	3		
HS 4350 Introduction to Research and Bioethics in Health Promotion .....	3		
HS 4998 Seminar in Health Promotion.....	3	{ HS 4350 Senior Standing	

