



# COLLEGE OF HEALTH AND NURSING SCIENCES

## Undergraduate Programs

- **Advisement**
- **Honors Opportunities and Dean's Scholar Program**
- **Health and Exercise Sciences**
  - **Athletic Training**
  - **Exercise and Sport Science**
  - **Health and Physical Education**
  - **Recreation and Park Administration**
  - **Coaching Science Minor**

- **Medical Technology**
- **Nursing**
  - **Nursing (BSN)**
  - **Baccalaureate for the Registered Nurse (BRN)**
- **Nutrition and Dietetics**
  - **Applied Nutrition**
  - **Dietetics**
  - **Nutritional Sciences**

The College of Health and Nursing Sciences includes the Departments of Health and Exercise Sciences, Medical Technology, Nursing, and Nutrition and Dietetics, and the Biomechanics and Movement Science Program. Undergraduate major degree programs are offered in applied nutrition, athletic training, dietetics, exercise and sport science, health and physical education, medical technology, nursing, nutritional sciences, and recreation and parks administration.

The College encourages students to engage in undergraduate research projects, internships, study abroad, seminars, and the college's numerous student organizations. Students interested in such opportunities should consult with their faculty advisor. For more information, contact Dean Betty Paulanka, 345 McDowell Hall, or send email to [ud.chns@udel.edu](mailto:ud.chns@udel.edu) or visit <http://www.udel.edu/health/>.

### ADVISEMENT

Students are assigned a faculty advisor in their major department to provide advice on course selection, degree requirements, career opportunities, and graduate study. Faculty advisors can also assist with setting up special opportunities such as internships and research experience. It is recommended that students meet with their faculty advisors at least once each semester.

### HONORS OPPORTUNITIES AND DEAN'S SCHOLAR PROGRAM

Students in all of the college's majors are eligible to participate in the University's Honors Program, undergraduate research, and Degree with Distinction. Honors Degrees are available to students in programs offered by the Department of Nutrition and Dietetics. Also, the college's Dean's Scholar Program provides qualified students in

Health and Exercise Sciences or Nutrition and Dietetics with the opportunity to share the responsibility of developing an individualized program focusing on the student's academic interests. Additional information is available from the Advisement Resource Center.

### HEALTH AND EXERCISE SCIENCES

The offerings of the Department of Health and Exercise Science include elective lifetime activity courses, four undergraduate major degree programs, and an undergraduate minor in Coaching Science.

#### LIFETIME ACTIVITIES PROGRAM

A varied activity program is available to all students on a credit basis. Courses are provided for all levels of ability and interests.

The objectives of the lifetime activities program are: (1) to provide students with knowledge and skills essential for leisure-time enjoyment, (2) to develop healthy exercise habits in students as well as a sound knowledge base in the scientific principles of physical activity, and (3) to provide an enjoyable atmosphere for learning skills that encourage lifetime participation.

#### DEGREE PROGRAMS

The Department features a health and exercise sciences program with four undergraduate majors – athletic training, exercise and sports physical education studies, health and physical education, and recreation and park administration – as well as a minor in coaching science. Each curriculum features a liberal arts base and opportunities for in-depth study in a specialty field. Internships or clinical experiences are available in each degree option.

The athletic training program at the University of Delaware is a National Athletic Trainers' Association (N.A.T.A.) approved undergraduate program awarding the Bachelor of Science Degree in Athletic Training (B.S.A.T.)

Students interested in the exercise and sport science major, with concentrations in biomechanics, exercise physiology, fitness management, figure skating science, physical education studies, or strength and conditioning enroll in this program leading to a Bachelor of Science in Physical Education Studies.

The Health and Physical Education (HPE) program is accredited by the National Council For Accreditation of Teacher Education (NCATE). The program has been recognized as meeting the standards established by the American Alliance for Health, Physical Education, recreation and Dance and by the Association for the Advancement of Health Education. Students who complete program requirements will receive a Bachelor of Science in Health and Physical Education and are eligible for teacher certification through the individual states in the NCATE agreement.

Students interested in preparing for careers in the recreation or leisure service industry can major in the program leading to a Bachelor of Science in Recreation and Park Administration, concentrating either in parks or in programming and leadership.

Telephone: (302) 831-2265

<http://www.udel.edu/HESC/>

## DEGREE REQUIREMENTS

### HEALTH AND EXERCISE SCIENCES MAJORS

#### UNIVERSITY REQUIREMENTS (required for all programs)

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content. (see p. 57). This course may also fulfill requirements in the General Studies Area		3

#### DEPARTMENT GENERAL STUDIES REQUIREMENTS

##### Second Writing Course

A writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. Appropriate writing courses are normally designated in the semester's Registration Booklet as "Satisfies Arts and Science Second Writing Course Requirement." (See list of courses approved for Arts and Science second writing requirement, page 81.)

#### BREADTH REQUIREMENTS

Students in all majors within the Department of Health and Exercise Sciences must complete a minimum number of credits (listed with each major following) within Groups A through D below

##### Group A—Communication/Writing Skills

Courses from Cognitive Science (CGSC 496), Communication (COMM), Educational Studies (EDST 521, 522, 523), English (ENGL - must state that course "meets A&S Second Writing Requirement"), Foreign Language (includes ARAB, CHIN, FERN, GREK, GRMN, HEBR, ITAL, JAPN, LATN, PORT, RUSS, SPAN, and SWAH), and Linguistics (LING).

##### Group B—Humanities/Fine Arts

Courses from Art (ART), Art History (ARTH), Arts and Science (ARSC 125, 126, 127, 130, 295, 296, 360), Art Conservation (ARTC), Science and Culture (CSCC 206, 229, 241, 246, 250, 330, 365, 368, 369, 444), Comparative Literature (CMLT), Consumer Studies (CNST 114, 213, 214, 221, 225, 233), English (ENGL literature courses), Foreign Languages and Literature (FLT - all courses except 100, 105, 106, 107), Museum Studies (MSST), Music (MUSC), Philosophy (PHIL), Theater (THEA), and Women's Studies (WOMS 203, 205, 210, 216, 222, 242, 320, 325, 326, 328, 330, 338, 353, 380, 381, 382, 389, 390, 392, 401, 440, 442, 465, 471, 480).

##### Group C—History/Social Sciences

Courses from Accounting (ACCT 352), Anthropology (ANTH - all courses except 102, 104, 202, 404), Black American Studies (BAMS), Business Administration (BUAD 309), Cognitive Science (CGSC 270), Criminal Justice (CRJU), Economics (ECON), Educational Studies (EDST 304, 305), Food and Resource Economics (FREC), Geography (GEOG 102, 120, 203, 210, 225, 226, 227, 230, 235, 236, 240, 270, 310, 320, 325, 328, 330, 340, 345, 346, 351, 380, 422, 425, 428, 430, 438, 440, 445, 448, 454, 455), History (HIST), Human Resources (HURE 401), Indi-

vidual and Family Studies (IFST), Jewish Studies (JWST), Legal Studies (LEST), Political Science and International Relations (POSC), Psychology (PSYC - all courses except 306, 309, 314, 380, 411, 412, 414, 481), Sociology (SOC), and Women's Studies (WOMS).

##### Group D—Natural Sciences/Mathematics

Must include an approved 3-credit mathematics course at the 100-level or higher plus additional courses from Accounting (ACCT 160, 261), Animal Science (ANSC 101, 111, 140, 251, 300, 310, 332, 345, 404, 417, 418, 421, 431, 441), Anthropology (ANTH 102, 104, 202, 404), Biological Sciences (BISC), Chemistry (CHEM), Computer and Information Sciences (CISC), Engineering (includes Chemical (CHEG), Civil and Environmental (CIEG), Computer (CPEG), Electrical (ELEG), Engineering/Graphics and General (EGGG), Engineering Technology (EGTE), Materials Science (MASC), Mechanics (MECH), and Mechanical Engineering (MEEG)), Entomology and Applied Ecology (ENTO), Food Science (FOSC), Geography (GEOG 101, 152, 206, 220, 250, 255, 272, 330, 342, 343, 351, 357, 370, 372, 412, 420, 423, 450, 451, 452, 453, 470, 472, 505), Geology (GEOL), Marine Studies (MAST), Mathematics (MATH - all courses except 251, 252, 253, 379, 380, 381), Medical Technology (MEDT), Nutrition and Dietetics (NTDT), Physics and Astronomy (PHYS), Plant and Soil Sciences (PLSC), Psychology (PSYC 306, 309, 314, 380, 411, 412, 414, 481), Science (SCEN), and Statistics (STAT).

## DEGREE: BACHELOR OF SCIENCE IN ATHLETIC TRAINING MAJOR: ATHLETIC TRAINING

### CURRICULUM

### CREDITS

See University and Department requirements (page 164) for additional degree requirements.

#### BREADTH REQUIREMENTS

##### Group A—Communication/Writing Skills

Must include courses from two different departments.

##### Group B—Humanities/Fine Arts

##### Group C—History/Social Sciences

Must include courses from two different departments

##### Group D—Natural and Biological Sciences/Mathematics

Must include an approved 3-credit MATH course at the 100-level or higher, plus additional courses from two different departments and at least 3 credits of BISC

#### MAJOR REQUIREMENTS

NTDT 200	Nutrition Concepts	3
PSYC 201	General Psychology	3
BISC 106/116	Elementary Human Physiology and Lab	
or		
BISC 276	Human Physiology	4
STAT 200	Basic Statistical Practice	3
CSCC 241	Ethical Issues in Health Care	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 258	Advanced Taping and Bracing Methods	1
HESC 276	Personal Computers in Health, Physical Education and Recreation	2
HESC 305	Fundamentals of Athletic Training	3
HESC 320	Principles of Strength/Conditioning	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 395	Sports Medicine Pharmacology	3
HESC 405	Program Development/Athletic Injury Rehabilitation	3
HESC 407	Prevention/Recognition/Athletic Injuries	3
HESC 409	Therapeutic Modalities	4
HESC 420	Functional Human Anatomy	4
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1
HESC 448	Organization & Administration/Athletic Training	3
HESC 449	Advanced Topics in Sports Medicine	3
HESC 480	Practicum in Athletic Training I	3
HESC 481	Practicum in Athletic Training II	3

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

Incoming freshmen and transfer students interested in the athletic training major at the University of Delaware are admitted to "Athletic Training Interest." At the completion of the freshman year, students desiring admission into the athletic training major must have completed the following:

- (1) Freshman Year – B.S.A.T. Curriculum:
 

BISC 106/116 (or BISC 207)	4	ENGL 110	3
HESC 210	3	MATH	3
HESC 220	3	HESC 305	3
HESC 276	2	HESC 214	3
Elective	3	General Studies	3
	<u>15</u>		<u>15</u>
- (2) Minimal overall cumulative index of 2.75.
- (3) Minimum of 30 credits after completion of first year.
- (4) Minimum of 100 hours of direct observation in the University of Delaware training room under the supervision of qualified faculty/professionals.
- (5) Three letters of recommendation; students must obtain the University of Delaware Athletic Training Admission Recommendation Form from the program director.
- (6) Completion of N.A.T.A. taping checksheet.
- (7) Successful interview with the Athletic Training Program Director and faculty. During the interview, students will be evaluated by the Athletic Training Program faculty, a senior student trainer enrolled in the program and/or a certified athletic trainer working in the profession. All evaluators will use a standard evaluation form.
- (8) Submission of a written essay.

N.A.T.A. guidelines state the student-clinical instructor ratio shall not exceed eight (8) students to one (1) clinical instructor during the course of an academic year. Acceptance into the program is based upon the stated criteria and the number of available openings in the program. Meeting the minimum admission requirements does not guarantee acceptance into the program. Offers of admission into the athletic training education program are presented on a competitive basis to those individuals who are most qualified. Students may apply for admission to the program at the end of each fall and spring semester. Acceptance/rejection letters will be mailed to each candidate by February 1 and July 1, respectively.

Students interested in transferring from another institution or from another major at the University of Delaware must meet University and College of Health and Nursing Sciences transfer requirements and complete the same requirements as freshmen in the Athletic Training Interest Program.

Students enrolled in the Athletic Training Program meet with the Program Director to plan the clinical education experience. Students are required to gain clinical experience in the training room and at practices and home and away games in the men's and women's athletic program. The clinical experience is structured so the student trainer gains progressive development of technical skills and knowledge. Once students are admitted to the program, they are required to work five weeks in the training room. When this requirement is completed, they begin working with individual teams. Students are required to work with at least one men's high-risk sport, one men's low-risk sport, one women's high-risk sport and one women's low-risk sport, for a minimum of five weeks with each of the sports selected. Once this requirement is completed, the student, in consultation with the Program Director, is allowed to select specific sports for future assignments until completion of their clinical education experience. In addition, all candidates for NATA Certification must verify that at least 25% of their clinical hours credited in fulfilling the NATA Certification Requirements were attained in actual (on location/site) practice and/or games coverage with one or more of the following sports: football, soccer, hockey, basketball, volleyball and lacrosse. The Athletic Training Faculty formally evaluates each student's progress at the end of each semester.

Once students are admitted to the program, they are required to maintain the following minimum standards:

1. complete 200 clinical hours per semester;
2. cumulative index of 2.0;
3. satisfactory clinical education evaluations.

Students who do not maintain the above minimum standards are placed on probation and are required to correct all deficiencies by the end of the next semester. Students who do not correct deficiencies are dropped from the curriculum.

#### N.A.T.A. GUIDELINES FOR CERTIFICATION

1. Completion of the Athletic Training Program.
2. Minimum of 800 hours practical work under the supervision of the training room staff. The hours must be accumulated over a minimum of two years and not more than four years. No more than 400 hours may be accumulated in one year.
3. Completion of the NATA Competency Evaluation Checklist.
4. Proof of current American National Red Cross Advanced First Aid Certification and CPR. Must be current on examination date.
5. Proof of graduation (official transcript).

#### EXERCISE AND SPORT SCIENCE ADMISSION REQUIREMENTS AND GUIDELINES

The Department of Health and Exercise Sciences offers a major program in Exercise and Sports Science. Students in the major must choose one of six concentrations: Biomechanics, Exercise Physiology, Figure Skating Science, Fitness Management, Physical Education Studies, or Strength and Conditioning. Admission to and completion of the major and the concentrations requires that students fulfill the following requirements:

1. Completion of at least 28 credits at the University of Delaware.
2. Successful completion of the following courses: ENGL 110; HPER 210; HPER 214; HPER 220; HPER 276; HPER 305; BISC course with lab, and a MATH course.
3. Completion of the appropriate application form for the chosen concentration. Applications are due by June 15th of each year for admission the following fall. Forms are available in and must be returned to the HESC Advisement Center, Carpenter Sports Building.
  - a. Only students matriculated in the Department of Health and Exercise Sciences may apply for admission to the concentrations.
  - b. Meeting the minimum admission requirements does not guarantee admission to the concentration. Offers of admission to Biomechanics, Exercise Physiology, Figure Skating Science, Fitness Management, and Strength and Conditioning are presented on a competitive basis to those individuals who are most qualified.
4. Each of the concentrations have additional requirements, as follows:
  - a. Biomechanics: Admission will be based on cumulative and major GPA as well as the criteria listed in 1-3 above, with selection on a competitive basis.
  - b. Exercise Physiology: Admission will be based on cumulative and major GPA, as well as the criteria listed in 1-3 above, with selection on a competitive basis.
  - c. Figure Skating Science: After the criteria listed in 1-3 above have been met, each student must meet with the Director of the Figure Skating Science Concentration to determine eligibility.
  - d. Fitness Management: Requires a minimum grade-point average of 2.00. Students will be evaluated and offered admission based on the following criteria: Cumulative and major grade-point averages; application; written essay; and inter-

view (if necessary). Approximately 20 seats are available each year. Once admitted to the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review. Students must complete HPER 354 Fitness Management and all courses in the concentration before enrolling in HPER 464 Internship Experience.

- e. Physical Education Studies: Upon completion of HPER 235 Professional Transitions and a conference with the faculty advisor, students must declare either two University-approved minors or one University-approved minor and one area of study, approved by the advisor.
- f. Strength and Conditioning: Students desiring admission must have a minimum grade-point average of 2.00 and must have completed 100 hours of direct observation in the Chuck Hall Weight Room under the supervision of the Director of the program. Students will be evaluated and offered admission based on the following criteria: Cumulative and major grade-point averages; application; written essay; written log of direct observation hours; and interview (if necessary). Approximately 3 to 5 seats are available each year. Once admitted to the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review. A minimum of 300 hours of clinical experience must be obtained upon acceptance into the program. The hours must be accumulated over a minimum of three semesters (100 hours per semester) and students cannot participate in clinical experience for more than five semesters. Students must complete HPER 416 Practicum in Strength and Conditioning, the United States Weightlifting Federation Certification course, and the 300 hours of clinical experience before enrolling in HPER 464 Internship Experience.

**DEGREE: BACHELOR OF SCIENCE  
IN PHYSICAL EDUCATION STUDIES  
MAJOR: EXERCISE AND SPORT SCIENCE  
CONCENTRATION: BIOMECHANICS**

**CURRICULUM**

**CREDITS**

See University and Department requirements (page 164) for additional degree requirements.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

Must include courses from two different departments.

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include PSYC 201 and either PSYC 325 or PSYC 334

**Group D—Natural and Biological Sciences/Mathematics** ..... 23

Must include BISC 207, BISC 208, CHEM 103, CHEM 104, MATH 241, NDT 200

**Additional credits from Group A-D** ..... 9

**MAJOR REQUIREMENTS**

HESC 210 Safety, First Aid, & Emergency Care ..... 3

HESC 214 Wellness: A Way of Life ..... 3

HESC 220 Anatomy and Physiology ..... 3

HESC 276 Personal Computers in Health, ..... 2

Physical Education and Recreation

HESC 305 Fundamentals of Athletic Training ..... 3

HESC 342 Survey in Adaptive Physical Education ..... 3

HESC 350 Basic Concepts in Kinesiology ..... 3

HESC 430 Physiology of Activity ..... 3

HESC 431 Physiology of Activity Lab ..... 1

**CONCENTRATION REQUIREMENTS**

BISC 276 Human Physiology and Anatomy ..... 4

or  
BISC 306 General Physiology ..... 4

BISC 442	Vertebrate Morphology	
or		
HESC 420	Functional Human Anatomy	4
HESC 426	Biomechanics (Biomechanics I)	4
HESC 427	Biomechanics (Biomechanics II)	3
CSCC 241	Ethical Issues in Health Care	3
MATH 242	Analytic Geometry and Calculus B	4
MATH 349	Elementary Linear Algebra	3
MEEG 112	Statics	3
MEEG 211	Dynamics	3
PHYS 207	Fundamentals of Physics I	4
PHYS 208	Fundamentals of Physics II	4
STAT 200	Basic Statistical Practice	3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

**DEGREE: BACHELOR OF SCIENCE  
IN PHYSICAL EDUCATION STUDIES  
MAJOR: EXERCISE AND SPORT SCIENCE  
CONCENTRATION: EXERCISE PHYSIOLOGY**

**CURRICULUM**

**CREDITS**

See University and Department requirements (page 164) for additional degree requirements.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

Must include courses from two different departments.

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include PSYC 201 and either PSYC 325 or PSYC 334.

**Group D—Natural and Biological Sciences/Mathematics** ..... 14

Must include MATH 221, BISC 207, NDT 200, and CHEM 103

**Additional credits from Group A-D** ..... 9

**MAJOR REQUIREMENTS**

HESC 210 Safety, First Aid, & Emergency Care ..... 3

HESC 214 Wellness: A Way of Life ..... 3

HESC 220 Anatomy and Physiology ..... 3

HESC 276 Personal Computers in Health, ..... 2

Physical Education and Recreation

HESC 300 Issues in Physical Activity Studies and Sports ..... 3

HESC 305 Fundamentals of Athletic Training ..... 3

HESC 324 Measurement and Evaluation ..... 3

HESC 342 Survey in Adaptive Physical Education/Recreation ..... 3

HESC 350 Basic Concepts in Kinesiology ..... 3

HESC 430 Physiology of Activity ..... 3

HESC 431 Physiology of Activity Lab ..... 1

**CONCENTRATION REQUIREMENTS**

BISC 208 Introductory Biology II ..... 4

BISC 276 Human Physiology ..... 4

or

BISC 306 General Physiology ..... 4

CHEM 104 General Chemistry ..... 4

PHYS 201/202 Introductory Physics I and II ..... 8

STAT 200 Basic Statistical Practice ..... 3

HESC 353 Seminar in Exercise Physiology ..... 3

HESC 420 Functional Human Anatomy ..... 3

or

BISC 442 Vertebrate Morphology ..... 4

HESC 426 Biomechanics I ..... 4

HESC 432 Basic Exercise Prescription ..... 3

or

HESC 434 Exercise Test Technology ..... 3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

**DEGREE: BACHELOR OF SCIENCE  
IN PHYSICAL EDUCATION STUDIES**  
**MAJOR: EXERCISE AND SPORT SCIENCE**  
**CONCENTRATION: FIGURE SKATING SCIENCE**

CURRICULUM CREDITS

See University and Department requirements (page 164) for additional degree requirements.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

Must include courses from two different departments

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include PSYC 201 and one course from another department.

**Group D—Natural and Biological Sciences/Mathematics** ..... 14

Must include an approved 3-credit MATH course at the 100-level or higher, BISC course with lab, and NTDT 200

**Additional credits from Groups A-D** ..... 9

**MAJOR REQUIREMENTS**

NTDT 310 Nutrition and Activity ..... 3

HESC 210 Safety, First Aid, and Emergency Care ..... 3

HESC 214 Wellness: A Way of Life ..... 3

HESC 220 Anatomy and Physiology ..... 3

HESC 276 Personal Computers in Health, Physical ..... 2

Education and Recreation

HESC 300 Issues in Physical Activity Studies and Sport ..... 3

HESC 305 Fundamentals of Athletic Training ..... 3

HESC 324 Measurement and Evaluation ..... 3

HESC 342 Survey in Adaptive Physical Education ..... 3

HESC 350 Basic Concepts in Kinesiology ..... 3

HESC 430 Physiology of Activity ..... 3

HESC 431 Physiology of Activity Lab ..... 1

**CONCENTRATION REQUIREMENTS**

HESC 250 Motor Development ..... 3

HESC 260 Leisure Service Programming ..... 3

HESC 270 Recreation Leadership ..... 3

HESC 320 Principles of Strength & Conditioning ..... 3

HESC 355 Figure Skating Practicum I ..... 3

HESC 356 Figure Skating Practicum II ..... 3

HESC 360 Psychology of Coaching ..... 1

HESC 426 Biomechanics I ..... 4

HESC 440 Strategies for Athletic Peak Performance ..... 3

HESC 455 Figure Skating Practicum III ..... 3

HESC 456 Figure Skating Practicum IV ..... 3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

**DEGREE: BACHELOR OF SCIENCE  
IN PHYSICAL EDUCATION STUDIES**  
**MAJOR: EXERCISE AND SPORT SCIENCE**  
**CONCENTRATION: FITNESS MANAGEMENT**

CURRICULUM CREDITS

See University and Department requirements (page 164) for additional degree requirements. The Second Writing requirement must be filled with ENGL 312.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

Must include courses from two different departments

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include a PSYC course and a SOCI course

**Group D—Natural and Biological Sciences/Mathematics** ..... 14

Must include an approved 3-credit MATH course at the 100-level or higher, BISC course with lab, and NTDT 200.

**Additional credits from Groups A-D** ..... 9

**MAJOR REQUIREMENTS**

BUAD 301 Introduction to Marketing (prerequisite: ECON 151) ..... 3

or

BUAD 309 Management and Organizational Behavior ..... 3

FREC 201 Records and Accounts ..... 3

HESC 210 Safety, First Aid, and Emergency Care ..... 3

HESC 214 Wellness: A Way of Life ..... 3

HESC 220 Anatomy and Physiology ..... 3

HESC 276 Personal Computers in Health, Physical ..... 2

Education and Recreation

HESC 300 Issues in Physical Activity Studies and Sports ..... 3

HESC 305 Fundamentals of Athletic Training ..... 3

HESC 324 Measurement and Evaluation ..... 3

HESC 342 Survey in Adaptive Physical Education ..... 1

HESC 350 Basic Concepts in Kinesiology ..... 3

HESC 430 Physiology of Activity ..... 3

HESC 431 Physiology of Activity Lab ..... 1

**CONCENTRATION REQUIREMENTS**

HESC 263 Leadership Practicum ..... 1

HESC 320 Principles Strength and Conditioning ..... 3

HESC 332 Health Behavior Theory and Assessment ..... 3

HESC 354 Seminar in Fitness Management ..... 1

HESC 432 Individualized Physical Fitness ..... 3

HESC 434 Exercise Test Technology ..... 3

HESC 445 Concepts of Physical Fitness Testing ..... 3

HESC 452 Principles of Fitness Management ..... 3

HESC 464 Internship in Fitness Management ..... 9

HESC 490 Development of Health Promotion Programs ..... 3

Students must register for HESC 354 two semesters before registering for

HESC 464 and must complete all the courses listed under "Major

Requirements" before registering for HESC 464

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

**DEGREE: BACHELOR OF SCIENCE  
IN PHYSICAL EDUCATION STUDIES**  
**MAJOR: EXERCISE AND SPORT SCIENCE**  
**CONCENTRATION: PHYSICAL EDUCATION STUDIES**

CURRICULUM CREDITS

See University and Department requirements (page 164) for additional degree requirements.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

Must include courses from two different departments.

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include PSYC 201 and a course from another department

**Group D—Natural and Biological Sciences/Mathematics** ..... 14

Must include an approved 3-credit MATH course at the 100-level or higher, BISC course with lab, and NTDT 200.

**Additional credits from Groups A-D** ..... 9

**MAJOR REQUIREMENTS**

HESC 210 Safety, First Aid, and Emergency Care ..... 3

HESC 214 Wellness: A Way of Life ..... 3

HESC 220 Anatomy and Physiology ..... 3

HESC 276 Personal Computers in Health, ..... 2

Physical Education and Recreation

HESC 300 Issues in Physical Activity Studies and Sports ..... 3

HESC 305 Fundamentals of Athletic Training ..... 3

HESC 324 Measurement and Evaluation ..... 3

HESC 342 Survey in Adaptive Physical Education/Recreation ..... 3

HESC 350 Basic Concepts in Kinesiology ..... 3

HESC 430 Physiology of Activity ..... 3

HESC 431 Physiology of Activity Lab ..... 1

**CONCENTRATION REQUIREMENTS**

HESC 235 Professional Transitions ..... 3

Option I ..... minimum 30

Minor I (15 credits) and Minor II (15 credits)

or

Option II ..... minimum 30

Minor I (15 credits) and Area of Study (15 credits)

with course work in the Area of Study to be developed with a department academic advisor and approved by the Chair of the Health & Exercise Sciences Department.

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

## DEGREE: BACHELOR OF SCIENCE IN PHYSICAL EDUCATION STUDIES MAJOR: EXERCISE AND SPORT SCIENCE CONCENTRATION: STRENGTH AND CONDITIONING

### CURRICULUM

### CREDITS

See University and Department requirements (page 164) for additional degree requirements.

### BREADTH REQUIREMENTS

**Group A—Communication/Writing Skills** ..... 6

Must include courses from two different departments.

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include PSYC 201 and a course from another department.

**Group D—Natural and Biological Sciences/Mathematics** ..... 14

Must include an approved 3-credit MATH course at the 100-level or higher, BISC 106/116, NTD 200, and a CHEM course with lab.

**Additional credits from Groups A-D** ..... 9

### MAJOR REQUIREMENTS

NTDT 310	Nutrition & Activity	3
HESC 210	Safety, First Aid, and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 276	Personal Computers in Health, Physical Education and Recreation	2
HESC 300	Issues in Physical Activity Studies and Sports	3
HESC 305	Fundamentals of Athletic Training	3
HESC 324	Measurement and Evaluation	3
HESC 342	Survey in Adaptive Physical Education	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1

### CONCENTRATION REQUIREMENTS

HESC 320	Principles in Strength and Conditioning	3
HESC 321	Advanced Principles in Strength and Conditioning	4
HESC 322	Weight Room Safety and Design	1
HESC 323	Theories and Applications of Program Design	3
HESC 354	Seminar	1
HESC 390	Principles of Coaching	3
HESC 416	Practicum in Strength & Conditioning	3
HESC 426	Biomechanics I	3
HESC 440	Strategies of Peak Athletic Performance	3
HESC 464	Internship	9

Students must register for HESC 354 two semesters before registering for HESC 464 and must complete all the courses listed under "Major Requirements" and "Concentration Requirements" before registering for HESC 464.

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

## DEGREE: BACHELOR OF SCIENCE IN HEALTH AND PHYSICAL EDUCATION MAJOR: HEALTH AND PHYSICAL EDUCATION

### CURRICULUM

### CREDITS

See University and Department requirements (page 164) for additional degree requirements.

### BREADTH REQUIREMENTS

**Group A—Communication/Writing Skills** ..... 3

**Group B—Humanities/Fine Arts** ..... 3

**Group C—History/Social Sciences** ..... 6

Must include PSYC 201 and IFST 401

**Group D—Natural and Biological Sciences/Mathematics** ..... 10

Must include an approved 3-credit MATH course at the 100-level or higher, a BISC course with lab, and NTD 200.

### MAJOR REQUIREMENTS

C- or better required in all courses except EDUC.

COMM 356	Small Group Communication	3
EDUC 201	Diversity in the Classroom (fulfills University multicultural requirement)	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 400	Student Teaching	9

Students must have a minimum cumulative g.p.a. of 2.500, a g.p.a. in the major of at least 2.750, and must apply to student teach at least one semester in advance.

HESC 140	Fundamental Skills Analysis	2
HESC 150	Movement Education for Children	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 250	Motor Development	3
HESC 276	Personal Computers in Health, Physical Education and Recreation	2
HESC 300	Issues in Physical Activity Studies and Sports	3
HESC 315	Methods and Materials in Drug Education	3
HESC 324	Measurement and Evaluation	3
HESC 325	Human Sexuality: Methods and Materials	3
HESC 330	Mental Health	3
HESC 332	Health Behavior Theory and Assessment	3
HESC 342	Survey in Adaptive Physical Education/Recreation	3
HESC 360	Psychology of Coaching	1
HESC 414	Methods and Materials in Health Education	3
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1
HESC 141, 142, 143, 144, 242, 243, 244, 251, 252, 253, and 255	Skills Courses	11
HESC 370	Practicum in Methods of Elementary Physical Education	3
HESC 380	Practicum in Methods of Secondary Physical Education	3
HESC 465	Teaching Seminar in Health/Physical Education	3

Students must have completed HESC 214, HESC 315, HESC 325, and IFST 401 prior to enrolling in HESC 414.

Students must apply for Upper Division Clearance prior to enrolling in HESC 325, HESC 370, HESC 380, and HESC 414. In order to apply, students must have completed the eleven HESC Skills Courses and HESC 140 and must have attained a g.p.a. of at least 2.750 in the major and a 2.500 overall.

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 128**

**DEGREE: BACHELOR OF SCIENCE IN RECREATION  
AND PARK ADMINISTRATION**  
**MAJOR: RECREATION AND PARK ADMINISTRATION**  
**CONCENTRATION: PARKS**

CURRICULUM CREDITS

See University and Department requirements (page 164) for additional degree requirements.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

**Group B—Humanities/Fine Arts** ..... 6

**Group C—History/Social Sciences** ..... 6

Must include courses from two different departments.

**Group D—Natural and Biological Sciences/Mathematics** ..... 10

Must include an approved 3-credit MATH course at the 100-level or higher.

**Additional credits from Groups A-D** ..... 9

**MAJOR REQUIREMENTS**

Requires a grade of C- or better in each course.

FREC 201	Records and Accounts	3
HESC 105	Foundations of Recreation and Leisure Skills	3
HESC 164	Practicum in Recreation and Parks	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 260	Leisure Service Programming	3
HESC 270	Recreation Leadership	3
HESC 276	Personal Computers in Health, Physical Education and Recreation	2
HESC 318	Special Recreation	3
HESC 341	Principles of Outdoor Recreation	3
HESC 354	Seminar in Recreation	1
HESC 404	Organization, Administration, Recreation and Leisure Service	3
HESC 450	Facility and Park Management	3
HESC 464	Internship in Recreation	9

Students must register for HESC 354 two semesters before registering for HESC 464, and must complete all courses in the "Major Requirements" before enrolling in HESC 464.

POSC 220	Introduction to Public Policy	3
GEOG 428	Land Use and Environmental Planning	3
GEOG 235	Conservation of Natural Resources	3

or  
PHIL 448 Environmental Ethics ..... 3

6 credits from Plant Science, Engineering Technology, or Entomology & Applied Ecology with approval of advisor. .... 6

6 credits from Communication, Criminal Justice, Geography, Philosophy, or Political Science with approval of advisor. .... 6

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF** ..... 120

**DEGREE: BACHELOR OF SCIENCE IN RECREATION  
AND PARK ADMINISTRATION**  
**MAJOR: RECREATION AND PARK ADMINISTRATION**  
**CONCENTRATION: PROGRAMMING AND LEADERSHIP**

CURRICULUM CREDITS

See University and Department requirements (page 164) for additional degree requirements.

**BREADTH REQUIREMENTS**

**Group A—Communication/Writing Skills** ..... 6

**Group B—Humanities/Fine Arts** ..... 6

**Group C—History/Social Sciences** ..... 6

Must include courses from two different departments.

**Group D—Natural and Biological Sciences/Mathematics** ..... 10

Must include an approved 3-credit MATH course at the 100-level or higher.

**Additional credits from Groups A-D** ..... 9

**MAJOR REQUIREMENTS**

Requires a grade of C- or better in each course.

FREC 201	Records and Accounts	3
HESC 105	Foundations of Recreation and Leisure Skills	3
HESC 164	Practicum in Recreation and Parks	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 260	Leisure Service Programming	3
HESC 270	Recreation Leadership	3
HESC 276	Personal Computers in Health, Physical Education and Recreation	2
HESC 318	Special Recreation	3
HESC 341	Principles of Outdoor Recreation	3
HESC 354	Seminar in Recreation	1
HESC 404	Organization, Administration, Recreation and Leisure Service	3
HESC 450	Facility and Park Management	3
HESC 464	Internship in Recreation	9

Students must register for HESC 354 two semesters before registering for HESC 464, and must complete all courses in the "Major Requirements" before enrolling in HESC 464.

Programming and Leadership Courses reflecting a ..... 21

sub-discipline of recreation/leisure chosen under the direction of faculty advisor and submitted for approval to the advisor and Recreation Curriculum Coordinator no later than the beginning of the second semester of the junior year.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF** ..... 120

**REQUIREMENTS FOR A MINOR IN COACHING SCIENCE**

This minor will help students develop a personal coaching philosophy, an understanding of the body, how it performs, injury and injury prevention, teaching of skills and progressions, sport psychology, and a variety of team responsibilities. A practicum or field experience will be required in the student's chosen sport in order to further enhance the development of coaching skills and philosophy.

The Coaching Science Minor requires 18 credits. Students applying for the minor must have completed at least one semester of full time study with a minimum GPA of 2.25. A minimum grade of C- is required in all courses for the minor.

This minor requires the following courses:

	CREDITS
HESC 210	Safety, First Aid, and Emergency Care ..... 3
HESC 220	Anatomy and Physiology ..... 3
HESC 320	Strength and Conditioning ..... 3
HESC 390	Principles of Coaching ..... 3
HESC 360	Psychology of Coaching ..... 1
HESC 460	Coaching/Performance Practicum ..... 2

Sport Specific Electives in Skills/Coaching ..... 3

A total of twenty-six elective options exist to meet the 3 credits of Skills/Coaching requirement. Selection will be made with minor advisor's approval.

**MEDICAL TECHNOLOGY**

Medical Technology is clinical laboratory science related to the prevention, diagnosis and therapy of disease. The Medical Technology major is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (8410 West Bryn Mawr Ave., Suite 670, Chicago, IL 60631-3415; telephone 773-714-8880). The four-year B.S. degree curriculum offers an undergraduate professional education designed to prepare students for career entry positions in hospital clinical laboratories and industry as well as graduate study in medical technology and related areas.

During the first two years at the University, students interested in medical technology should take courses in the basic sciences and liberal arts, including prerequisite courses in biology and chemistry.

The professional and clinical courses in the third and fourth years include a final period of supervised clinical education in the Christiana Care Health Services and other affiliated institutions. One required Winter Session is included in the B.S. curriculum.

During the clinical rotation period (fall of junior year and winter and spring terms of the senior year), students should plan for the possibility of 1) added expense for transportation and uniforms and 2) added expense for living off-campus at the clinical site for at least a five-week rotation during the senior year when the commuting distance is excessive.

Freshmen or transfer students may be admitted to the University with a declared interest in medical technology. Students will be evaluated for admission to the Medical Technology major after completion of the prerequisite courses. Priority will be given to full-time University sophomores.

Class size is limited to 26 medical technology majors, and any interested student should talk with the Department Chair as early as possible.

Eligibility for admission to the junior year of the Medical Technology major will be based on the following criteria:

1. Minimal cumulative index of 2.0 in first four semesters of coursework.
2. Minimal grade point index of 2.0 computed from specified courses in biological sciences and chemistry, including laboratories: BISC 207, 208, 276, 371, and CHEM 103, 104, 213, and 214-216.
3. Completion of at least 60 credits, including the courses listed above.
4. Within the pool of eligible students, admission to the major courses will be determined by academic achievement. All applicants will be evaluated by the Medical Technology Undergraduate Program Committee.

The following course sequence is recommended. These courses may be subject to change, so it is essential that students meet regularly with their faculty advisors. A minimal grade of C- is required in each MEDT course in the Medical Technology major. In order to meet degree requirements, medical technology majors must have a minimum cumulative grade point average of 2.0 to progress in the medical technology sequence. A student who earns a grade lower than C- in a medical technology course must repeat the course and achieve a grade of at least C- before enrolling in any medical technology course which has the prior course as a prerequisite. Students are not permitted to repeat any medical technology course more than once. Further, students who earn a grade lower than C- in more than one medical technology course will not be permitted to continue in the major.

Telephone: (302) 831-2849

<http://www.udel.edu/medtech>

## DEGREE: BACHELOR OF SCIENCE MAJOR: MEDICAL TECHNOLOGY

### CURRICULUM

### CREDITS

#### UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) .....	3
Three credits in an approved course or courses stressing .....	3
multicultural, ethnic, and/or gender-related content (see p. 57)	

#### MAJOR REQUIREMENTS

Writing: (minimum grade C-) .....	3
A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)	

One of the following .....	3-4
MATH 114 College Mathematics and Statistics .....	
(for students who do not intend to continue the study of mathematics)	
MATH 115 Pre-Calculus .....	
(for students who intend to continue the study of mathematics)	
MATH 221 Calculus I .....	
MATH 241 Analytic Geometry and Calculus A .....	
Successful performance on the college proficiency exam (0 credits awarded).	

#### Breadth Requirements

(follow College of Arts and Science standards, See page 83.)

Group A: Understanding and appreciation of the creative arts and humanities .....	6
Group B: The study of culture and institutions over time .....	6
Group C: Empirically based study of human beings and their environment .....	6

(minimum grade of C- required in all MEDT courses)

MEDT 100 Introduction to Medical Technology .....	1
MEDT 370 Phlebotomy Practicum .....	1
MEDT 372 Diagnostic Parasitology .....	2
MEDT 374 Introduction to Clinical Chemistry .....	1
MEDT 376 Clinical Virology and Immunology .....	2
MEDT 378 Clinical Laboratory Computer Applications .....	2
MEDT 400 Urinalysis and Body Fluids .....	2
MEDT 401 Clinical Physiological Chemistry I .....	3
MEDT 411 Clinical Physiological Chemistry I Laboratory .....	2
MEDT 404 Hematology I .....	2
MEDT 414 Hematology I Laboratory .....	1
MEDT 406 Medical Microbiology .....	3
MEDT 416 Medical Microbiology Laboratory .....	2
MEDT 410 Principles of Medical Technology Education .....	1
MEDT 403 Clinical Physiological Chemistry II .....	4
MEDT 413 Clinical Physiological Chemistry II Laboratory .....	2
MEDT 418 Medical Technology Senior Seminar .....	0
MEDT 405 Hematology II .....	2
MEDT 415 Hematology II Laboratory .....	2
MEDT 409 Immunohematology .....	1
MEDT 419 Immunohematology Laboratory .....	1
MEDT 420 Immunohematology II .....	1
MEDT 421 Immunohematology II Laboratory .....	1
MEDT 430 Diagnostic Bacteriology and Medical Mycology .....	2
MEDT 431 Diagnostic Bacteriology and Medical Mycology Laboratory .....	2
MEDT 461 Management Topics in Medical Technology .....	1
MEDT 471 Seminar: Medical Technology Laboratory Management .....	1
MEDT 472 Clinical Urinalysis and Serology Practicum .....	1
MEDT 473 Clinical Chemistry Practicum .....	3
MEDT 475 Clinical Hematology Practicum .....	3
MEDT 477 Clinical Microbiology Practicum .....	3
MEDT 479 Clinical Immunohematology Practicum .....	3
BISC 207/208 Introductory Biology I and II .....	8
BISC 276 Human Physiology and Anatomy .....	4
BISC 371 Introduction to Microbiology .....	4
BISC 471 Introductory Immunology .....	3
CHEM 103/104 General Chemistry .....	8
CHEM 213 Elementary Organic Chemistry .....	
and	
CHEM 214/216 Elementary Biochemistry with Lab .....	
or	
CHEM 321/322 Organic Chemistry .....	8

**CREDITS TO TOTAL A MINIMUM OF ..... 123**

## NURSING

The Department of Nursing offers a four-year baccalaureate degree program in nursing and an accelerated nursing degree program for those who already hold a baccalaureate degree in another field. There is also a baccalaureate degree program (BRN) for registered nurses with associate degrees or diplomas. Returning nurses may complete some course work at home or in the worksite via video or web-enhanced courses. In addition, the Department offers a master's program in nursing, with concentrations in Family Nurse Practitioner, Nursing Administration, Clinical Nurse Specialist, and a combined Clinical Nurse Specialist/Specialty Nurse Practitioner option.

The four-year Bachelor of Science in Nursing program is designed to develop the knowledge, understanding and skill essential



for the practice of professional nursing and to provide the basis for graduate education. The program is accredited by both the Center for Collegiate Nursing Education and the National League for Nursing Accrediting Commission and information on program requirements is available from the League at 350 Hudson St., New York, NY, 10014; telephone 1-800-669-1656. The first two years of the program include foundation courses in the natural, social, and behavioral sciences, liberal arts, and three introductory nursing courses. The third and fourth years of study include clinical and nonclinical nursing courses as well as elective courses. The Department of Nursing uses many healthcare agencies in the Wilmington-Newark and nearby areas for clinical teaching.

During clinical rotations, students are exposed to many different experiences in a variety of healthcare settings. These include the major hospitals in New Castle County as well as regional community hospitals, a variety of extended care facilities, independent living facilities, and various community-based providers who offer a range of services across the life span. Students graduate as nurse generalists with experiences in pediatric, maternity, psychiatric, medical-surgical, and community health nursing.

Nursing students are encouraged to participate in the College chapter of the National Student Nurses' Association. Students who have earned recognition for superior academic achievement may be invited for membership in Beta Xi Chapter of Sigma Theta Tau, the International Honor Society of Nursing. Qualified students are encouraged to pursue the program requirements for a degree with distinction, and honors courses are available at the upper levels. Research opportunities are available to all undergraduates.

## POLICIES

In order to meet degree requirements, nursing majors must have a minimum cumulative grade point average of 2.0 to progress in the nursing sequence. A student who earns a grade lower than C- in a nursing course must repeat the course and achieve a grade of at least C- before enrolling in a more advanced nursing course.

Students are not permitted to repeat any nursing course more than once. Further, students who earn a grade lower than C- in more than one nursing course will not be permitted to continue in the program. Students should meet regularly with their faculty advisor to ensure that all requirements are being met.

Students are expected to provide their own transportation to all required clinical laboratories.

## LICENSURE

Graduates are eligible for registered nurse licensure in any state upon satisfactory completion of the National Council Licensure Examination for Registered Nurses (N-CLEX-RN). If the examination is passed and licensure granted in one state, application may be made to other states for licensure by endorsement.

Telephone: (302) 831-2193

<http://www.udel.edu/nursing/udnursing.html>

## ACCELERATED NURSING DEGREE PROGRAM

The Accelerated Degree Program is a course of study leading to a Bachelor of Science in Nursing and is designed for individuals who have a previously earned degree in another field and would like to pursue a career in nursing. Students in this program must complete all of the non-nursing requirements by transfer credit from their first degree, completion of coursework at the University of Delaware or by transfer of pre-approved equivalent courses from other accredited institutions. The program begins in the fall with one course which is offered in a video delivery format. Students will be required to come to campus for course examinations. If a student is unable to relocate until beginning full time study in January, special testing arrangements may be made on an individual basis. In January, students begin

their full time studies with a five week winter session. Coursework continues in the spring semester, followed by a ten week summer session, fall semester, and concluding with the following January winter session. All non-nursing coursework must be completed prior to the first winter session.

Students taking courses in an accelerated mode are sometimes out of sequence with on-campus course offerings. In these instances, lecture will be provided via videotape, augmented by small group discussion sessions. Each student will receive a complete set of video tapes for specified courses permitting greater flexibility in scheduling study time. Six courses incorporate video delivery plus discussion sessions.

Eligibility for this course of study includes the following:

1. An earned baccalaureate degree.
2. GPA of 3.0 or greater
3. Completion of all non-nursing courses prior to first Winter session.

The Department of Nursing holds information sessions periodically to present an overview of the program and answer questions. If you would like to attend an information session, please contact the Department at 302-831-2381 to be placed on our mailing list. You may wish to bring unofficial copies of your transcripts to a session if you have not submitted them previously. The exact curriculum plan will be tailored to each student's needs by an advisor; a sample plan may be viewed at the Accelerated Degree Program website (<http://www.udel.edu/nursing/accel.html>). Students who may need financial assistance in pursuing a second degree should contact the Financial Aid Office at 302-831-1534. In addition, students are encouraged to seek non-traditional opportunities for aid. Reference books on private financial aid sources are available in libraries or local academic institutions in your community.

Telephone: 302-831-2193

E-mail: [ud-chns@udel.edu](mailto:ud-chns@udel.edu)

<http://www.udel.edu/nursing/accel.html>

## DEGREE: BACHELOR OF SCIENCE IN NURSING MAJOR: NURSING

CURRICULUM	CREDITS
<b>UNIVERSITY REQUIREMENTS</b>	
ENGL 110 Critical Reading and Writing (minimum grade C-) .....	3
Three credits in an approved course or courses stressing .....	3
multicultural, ethnic, and/or gender-related content (see p. 57).	
<b>MAJOR REQUIREMENTS</b>	
BISC 207/208 Introductory Biology I and II .....	8
BISC 276 Human Physiology .....	4
BISC 371 Introduction to Microbiology .....	4
CHEM 105 General Chemistry .....	5
CHEM 106 Elementary Bioorganic Chemistry .....	5
NTDT 200 Nutrition Concepts .....	3
STAT 200 Basic Statistical Practice .....	3
ENGL 301 Expository Writing .....	3
Literature course 200-level or above .....	3
Philosophy course .....	3
Restricted Humanities course chosen from among .....	3
Art, Art History, Ancient Literature, Comparative Literature, Foreign Languages and Literatures, Modern Literature, History, Philosophy, Music, Theatre.	
PSYC 201 General Psychology .....	3
IFST 201 Life Span Development .....	3
Sociology course 200-level or above .....	3
Anthropology course 100-level or above .....	3
Restricted Social Science course chosen from among .....	3
History, Political Science, Economics, Black American Studies, Women's Studies, Psychology, Sociology.	
NURS 205 Societal Context of Nursing .....	3
NURS 212 Concepts in Pathophysiology .....	3
NURS 215 Basic Nursing Practice Skills .....	1

NURS 306	Determinants of Wellness	5
NURS 308	Restorative Nursing Practice I	4
NURS 315	Practicum I	4
NURS 312	Pathophysiology	3
NURS 314	Psychopathology	2
NURS 317	Practicum II	3
NURS 318	Practicum III	
or		
NURS 319	Practicum IV	3
NURS 332	Pharmacological Nursing Responsibility	3
NURS 405	Introduction to Research	3
NURS 408	Restorative Nursing Practice II	4
NURS 409	Professionalism in Nursing Practice	2
NURS 411	Topics in Health Care Delivery	3
NURS 417	Practicum V	3
NURS 418	Practicum VI	
or		
NURS 419	Practicum VII	3
NURS 420	Practicum VIII	6

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 126**

Most nursing courses are offered once each academic year. Students must complete required lower division courses before enrolling in nursing courses. Nursing courses must be taken in sequence.

**BACCALAUREATE PROGRAM FOR THE REGISTERED NURSE (BRN)**

The Department of Nursing offers a separate program to allow registered nurses to earn a Bachelor of Science in Nursing. Licensed registered nurses who are graduates of associate degree or diploma programs may apply for admission to this program. Graduates of National League for Nursing (NLN) accredited associate degree programs may directly transfer up to 30 credits in nursing as evidence of their basic nursing knowledge. Graduates of diploma schools of nursing and graduates of non-NLN accredited associate degree programs must complete validation examinations. Upon successful completion of these examinations, the student will be awarded 30 credits for basic nursing knowledge. Before enrollment in any nursing courses, students must meet the following criteria:

- Completion of 36 credits of non-nursing requirements which must include 24 credits in science and up to 6 credits of free electives.
- GPA of 2.5 or higher for non-nursing prerequisite courses
- Validation of basic nursing knowledge
- Validation of clinical competence

All required nursing courses in the BRN major, with the exception of three weekend courses (NURS 343, 441, and 445), are offered in a distance-learning video or web-enhanced format. Many of the support courses are also available in a distance-learning format.

Telephone: (302) 831-4549

<http://www.udel.edu/ContEd/brnwelc.html>

**DEGREE: BACHELOR OF SCIENCE IN NURSING**  
**MAJOR: BACCALAUREATE FOR THE REGISTERED NURSE (BRN)**

CURRICULUM	CREDITS
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**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits	in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).	3

**MAJOR REQUIREMENTS**

24 credits, to include a minimum of one course in each of the following five categories: (1) biology, (2) microbiology, (3) chemistry, (4) anatomy and physiology, and (5) nutrition.	24
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STAT 200	Basic Statistical Practice	3
English course	(second English composition course)	3
Literature course		3
Philosophy course		3
Psychology course		3
Sociology course		3
Lifespan development course		3
Restricted elective chosen from the following		3
Art, Art History, History, Philosophy, Music, Theatre, Comparative Literature, Black American Studies, Economics, Political Science, Women's Studies, Foreign Languages and Literatures, Linguistics, and English.		
NURS 312	Pathophysiology	4
NURS 314	Psychopathology	3
NURS 340	Current Perspectives in Professional Nursing	2
NURS 342	Nursing Informatics	2
NURS 343	Transition to Baccalaureate Nursing Education	1
NURS 344	Wellness/Health Assessment	2
NURS 405	Introduction to Nursing Research	2
NURS 411	Topics in Health Care Delivery	3
NURS 441	Learning Lab: Health Assessment	1
NURS 442	Community Health Nursing	3
NURS 443	BRN Role Practicum	3
NURS 445	Nursing Research Applications	1
NURS 446	Leadership/Organizational Behavior	2

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 125****NUTRITION AND DIETETICS**

The Department of Nutrition and Dietetics offers undergraduate majors in Applied Nutrition, Dietetics, and Nutritional Sciences, all with Honors Degree options, as well as a minor in Nutrition. The programs integrate chemistry, biology, social science and business courses with the study of nutrition. The baccalaureate programs in Nutrition and Dietetics provide opportunities for careers in business; industry; public, private, or government agencies; and education. In addition to the specialized courses necessary for competence in one's selected professional major, the curricula include courses in the humanities, the sciences, and the social sciences.

The Dietetics major leads to the attainment of certification as Registered Dietitian by the American Dietetic Association (ADA) and has approval status by the Commission on Accreditation/Approval for Dietetics Education. Students in this major complete the professional practice requirement after the Bachelor of Science degree by completing an ADA dietetic internship or alternative. See the Graduate Catalog for information on the Dietetic Internship Program.

The first two years of coursework are nearly identical for the Applied Nutrition and the Dietetics majors. Students are admitted to the Dietetics major after successful completion of three semesters of course work in the Applied Nutrition major. A 2.5 cumulative grade point average is included in the criteria for admission.

The Applied Nutrition major is designed for the student who can creatively combine the study of nutrition with other academic areas. The curriculum is flexible so that a focus such as Gerontology, Communication, Food Service Management, or Fitness may be incorporated. The Applied Nutrition major also serves as the entry major for students who later apply to Dietetics in their sophomore year. Students who plan on becoming a Registered Dietitian and on conducting counseling and the related activities of a dietitian/nutrition counselor should complete the Dietetics major.

The Nutritional Sciences major meets the needs of students who want to focus strongly on the science aspects of human nutrition. As a premedical program, it prepares students for careers in dentistry, veterinary and human medicine, laboratory research in nutrition, or

positions with companies or agencies requiring the extensive use of a strong science and human nutrition background. It provides students with a strong foundation for graduate work in human nutrition and related fields (e.g., physical therapy) and as such may be considered primarily as a preprofessional degree. Students planning on career-related employment upon graduation are encouraged to plan their electives in a concentrated area of interest such as journalism, dietetics, food science, child development, chemistry, biological sciences, or other related fields.

Each student's academic advisor, a faculty member with expertise in the student's field of interest, will assist in selecting courses and experiences that focus on the student's interests and professional goals. For example, careful selection of liberal arts requirements and elective courses allows students to pursue a minor or an area of interest outside of the college, a double degree, double major, or interdepartmental major. Students are encouraged to meet with their faculty advisors at least once each semester.

Nutrition and Dietetics students are encouraged to enrich their academic program by participating in the college's visiting student programs, study abroad experiences, seminars, and student organizations, such as the Nutrition and Dietetics Club. To enhance employment prospects, students are encouraged to seek experiences outside the classroom. For those planning to pursue a graduate program, research apprenticeships are available. Opportunities exist for students to participate in the American Dietetic Association and the Society of Nutrition Education.

There are several special academic opportunities for exceptionally talented and highly motivated students. Students in each Nutrition and Dietetics major may participate in the University's Honors Program, undergraduate research, and the Degree with Distinction program. Also, the College's Dean's Scholar Program provides qualified students with the opportunity to develop an individualized program focussing on the students' academic interests.

Selection and retention policies for all majors in this department have been established and are available from the department office.

Telephone: (302) 831-8729

<http://napa.ntdt.udel.edu/index.html>

## GENERAL EDUCATION COURSES

The following courses have been approved to fulfill humanities and social science electives for students in majors offered by the Department of Nutrition and Dietetics.

### HUMANITIES

Art, Art History, Communication, Comparative Literature, English, Foreign Language (including: ARAB, CHIN, FREN, GREK, GRMN, HEBR, ITAL, JAPN, LATN, PORT, RUSS, SPAN), Foreign Languages and Literatures, Jewish Studies, Linguistics, Museum Studies, Music, Philosophy, Theater, Women's Studies (WOMS 100, 203, 205, 208, 209, 210, 214, 216, 222, 318, 320, 324, 325, 326, 328, 330, 338, 353, 380, 381, 382, 389, 465, 471, 480), Science and Culture (CSCC 206, 229, 241, 246, 250, 330, 365, 368, 369, 444).

### SOCIAL SCIENCE

Anthropology (cultural/social, all except ANTH 102, 104, 202), Black American Studies, Business Administration (BUAD 309), Criminal Justice, Economics (including FREC 150), Geography (economic and social, including: GEOG 102, 120, 203, 210, 225, 226, 227, 236, 240, 310, 325, 328, 330, 340), History, Political Science, Psychology (except PSYC 309 and 314), Sociology, Women's Studies (WOMS 201, 202, 204, 206, 207, 211, 212, 213, 233, 240, 290, 291, 297, 298, 299, 300, 305, 323, 333, 335, 350, 363, 407, 409, 413, 415, 430, 436, 460, 473, 498), Science and Culture (CSCC 233, 242, 243, 271, 310, 311, 355, 382, 385).

## HONORS DEGREES IN THE DEPARTMENT OF NUTRITION AND DIETETICS

Students can earn an Honors Bachelor of Science Degree in Applied Nutrition, Dietetics, or Nutritional Sciences by completing the following requirements:

1. All requirements for the Bachelor of Science Degree in the respective major.
2. All the University's generic requirements for the Honors Baccalaureate Degree (see page 43 of this catalog).

## DEGREE: BACHELOR OF SCIENCE MAJOR: APPLIED NUTRITION

CURRICULUM	CREDITS
<b>UNIVERSITY REQUIREMENTS</b>	
ENGL 110 Critical Reading and Writing (minimum grade C-).....	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).....	3
<b>MAJOR REQUIREMENTS</b>	
Humanities electives .....	9
CHEM 101/102 General Chemistry or CHEM 103/104 General Chemistry .....	8
CHEM 213 Elementary Organic Chemistry .....	4
CHEM 214/216 Elementary Biochemistry with Lab .....	4
BISC 103/113 General Biology with Lab or BISC 207/208 Introductory Biology I and II .....	4-8
BISC 106/116 Elementary Human Physiology with Lab or BISC 276 Human Physiology and Anatomy .....	4
Students desiring to fulfill a Biology minor should take BISC 207, 208 and 276.	
ECON 100 Economic Issues and Policies or ECON 151 Introduction to Microeconomics: Prices and Markets .....	3
PSYC 201 General Psychology .....	3
Sociology course.....	
BUAD 309 Management and Organizational Behavior .....	3
Social Science elective.....	3
FOSC 305/306 Food Science with Lab (minimum grade of C-).....	3
MATH 114 Elementary Mathematics and Statistics.....	3
or Successful performance on the Proficiency Test in Mathematics administered by Department of Mathematical Sciences .....	
IFST course.....	3
IFST, NTD, HRIM courses .....	3
A minimum grade of C- must be achieved for credits to count toward the fulfillment of 28 credits in NTD; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses; only 300-level courses and a maximum of four credits of Special Problems/Independent Study (NTDT x66) may count toward the fulfillment of this requirement.	
NTDT 103 Introduction to Nutrition Professions.....	1
NTDT 200 Nutrition Concepts .....	3
NTDT 201 Food Principles .....	2
NTDT 211 Food Principles Laboratory.....	1
NTDT 400 Macronutrients .....	3
NTDT 401 Micronutrients .....	3
NTDT 445 Nutrition Education .....	3
NTDT courses (300-level or higher).....	9
NTDT courses .....	3

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree. May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music and four credits of 100- and 200-level courses in Military Science/Air Force may be counted toward the degree.)

**CREDITS TO TOTAL A MINIMUM OF ..... 120**

**DEGREE: BACHELOR OF SCIENCE  
MAJOR: DIETETICS****CURRICULUM** **CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).		3

**MAJOR REQUIREMENTS**

Humanities electives	9
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CHEM 101/102	General Chemistry	
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or

CHEM 103/104	General Chemistry	8
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CHEM 213	Elementary Organic Chemistry	4
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CHEM 214/216	Elementary Biochemistry with Lab	4
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BISC 103/113	General Biology with Lab	
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or

BISC 207/208	Introductory Biology I and II	4-8
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BISC 106/116	Elementary Human Physiology with Lab	
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or

BISC 276	Human Physiology and Anatomy	4
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BISC 371	Introduction to Microbiology	4
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Students desiring to fulfill a Biology minor should take BISC 207, 208 and 276.

ECON 100	Economic Issues and Policies	
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or

ECON 151	Introduction to Microeconomics: Prices and Markets	3
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PSYC 201	General Psychology	3
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One of the following courses		3
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SOCI 201	Introduction to Society	
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SOCI 202	Social Deviance	
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SOCI 203	The Individual and Society	
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SOCI 204	Urban Communities	
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SOCI 209	Social Problems	
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SOCI 210	Population Problems	
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SOCI 242	Society and the Health Professions	
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SOCI 243	Society, Politics and Health Care	
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PSYC 303	Introduction to Social Psychology	
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SOCI 310	Sociology of Healthcare	
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BUAD 309	Management and Organizational Behavior	3
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Social Science elective		3
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FOSC 305/306	Food Science with Lab (minimum grade C-)	3
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Statistics course selected from: STAT 200, PSYC 309, FREC 408		3
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MATH 114	Elementary Mathematics and Statistics	3
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or

Successful performance on the Proficiency Test in Mathematics administered by Department of Mathematical Sciences.		
IFST course		3

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 39 credits in NTDI; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses; only 300-level courses and a maximum of four credits of Special Problems/Independent Study (NTDI x66) may count toward the fulfillment of this requirement.

Admission into Dietetics requires the completion of most courses in the first three semesters of Applied Nutrition. A cumulative grade point average of 2.5 is required for admission.

NTDI 103	Introduction to Nutrition Professions	1
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NTDI 200	Nutrition Concepts	3
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NTDI 201	Food Principles	2
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NTDI 211	Food Principles Laboratory	1
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NTDI 240	Introduction to Clinical Dietetics	3
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NTDI 321	Quantity Food Production and Service	3
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NTDI 322	Management of Food and Nutrition Services	3
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NTDI 325	Laboratory in Quantity Food Production and Service	1
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NTDI 328	Foodservice Facility Design	1
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NTDI 330	Nutrition Counseling	3
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NTDI 400	Macronutrients	3
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NTDI 401	Micronutrients	3
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NTDI 403	Dietetics Seminar	1
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NTDI 421	Nutrition Assessment Methods	2
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NTDI 440	Nutrition and Disease	3
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NTDI 445	Nutrition Education	3
NTDI 460	Community Nutrition	3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music and four credits of 100- and 200-level courses in Military Science/Air Force may be counted toward the degree.)

**CREDITS TO TOTAL A MINIMUM OF ..... 126****DEGREE: BACHELOR OF SCIENCE  
MAJOR: NUTRITIONAL SCIENCES****CURRICULUM** **CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
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Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).		3
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**MAJOR REQUIREMENTS**

Humanities electives	9
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CHEM 103/104	General Chemistry	8
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CHEM 214/216	Elementary Biochemistry with Lab	4
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CHEM 220/221	Quantitative Analysis I with Lab	4
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CHEM 321/322	Organic Chemistry	8
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BISC 207/208	Introductory Biology I and II	8
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BISC 276	Human Physiology and Anatomy	4
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BISC 371	Introduction to Microbiology	4
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PHYS 201	Introductory Physics I	4
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ECON 100	Economic Issues and Policies	
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or

ECON 151	Introduction to Microeconomics: Prices and Markets	3
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Social Science electives	12
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FOSC 305/306	Food Science with Lab (minimum grade C-)	3
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FREC 408	Research Methods	3
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MATH 221/222	Calculus I and II	
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or

MATH 241/242	Analytic Geometry and Calculus A and B	6-8
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A minimum grade of C- must be achieved for credits to count toward the fulfillment of 29 credits in NTDI; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses; only 300-level courses and a maximum of four credits of Special Problems/Independent Study (NTDI x66) may count toward the fulfillment of this requirement.

NTDI 200	Nutrition Concepts	3
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NTDI 201	Food Principles	2
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NTDI 211	Food Principles Laboratory	1
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NTDI 400	Macronutrients	3
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NTDI 401	Micronutrients	3
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NTDI 421	Nutrition Assessment Methods	2
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NTDI 440	Nutrition and Disease	3
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NTDI courses (300-level or higher)		9
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NTDI course		3
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**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music and four credits of 100- and 200-level courses in Military Science/Air Force may be counted toward the degree.)

**CREDITS TO TOTAL A MINIMUM OF ..... 120****MINOR IN NUTRITION**

Requirements for a minor in nutrition requires NTDI 200, NTDI 400, NTDI 401 plus 6 credits in Nutrition and Dietetics at the 300-level or higher. A 2.0 grade point average is required for admission; a minimum grade of C- is required in all courses in the minor. Note that CHEM 214 and CHEM 216 are necessary prerequisites for NTDI 400 and NTDI 401.