COLLEGE OF HEALTH AND NURSING SCIENCES

Undergraduate Programs

- **Advisement**
- **Pass/Fail Courses**
- **Dean's Scholar Program**
- **Health and Exercise Sciences**
- **Medical Technology**
- **Nursing**
- **Nutrition and Dietetics**

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 science, health and physical education, medical technology, nursing, nutritional sciences, and health behavior management.

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 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.

PASS/FAIL COURSES

Courses taken pass/fail cannot be used to complete major requirements in the College of Health and Nursing Sciences. Pass/fail courses can be counted only as free electives.

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 Dean's Scholar's Program exists to serve the needs of students whose clearly defined educational goals cannot be effectively achieved by pursuing the standard curricula for all existing majors, minors, and interdepartmental majors sponsored by the University. Driven by an overarching passion or curiosity that transcends typical disciplinary bounds and curricula, a Dean's Scholar's intellectual interests may lead to broad interdisciplinary explorations of an issue or to more intense, in-depth studies in a single field at a level akin to graduate work. In consultation with faculty advisors and the Associate or Assistant Dean of their college, Dean's Scholars design an imaginative and rigorous individual plan of study to meet the total credit hours required for graduation. Contact the Assistant/Associate Dean in the college or go to http://www.udel.edu/provost/acadprog.html for more information and the application.

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 undergraduate minors in Coaching Science and Strength and Conditioning.

LIFETIME ACTIVITIES PROGRAM

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

The objectives of the lifetime activities program are: (1) to provide knowledge and skills essential for leisure-time enjoyment, (2) to develop healthy exercise habits 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 of Health and Exercise Sciences offers a broad spectrum of undergraduate programs that prepare students for a variety of careers in the arenas of health care, education, recreation, and sport/fitness management. Students graduate with a Bachelor of Science degree in one of four academic majors: Athletic Training, Exercise Science, Health and Physical Education, or Health Behavior Management.

The Athletic Training program is approved by the National Athletic Trainers' Association (NATA) and accredited by the Committee on Allied Health Education and Accreditation (CAHEA). The Health and Physical Education program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

Concentrations within the Exercise Science major allow students to further specialize in Biomechanics, Exercise Physiology, Figure Skating Science, or, Exercise and Sport Studies. Students in the Health Behavior Management major select a concentration in Fitness Management, Sport Management, or Recreation and Park Administration. Internships, practicums, and clinical experiences are available in each program. The Department also offers minors in Coaching Science and Strength Conditioning.

Telephone: (302) 831-2265
http://www.udel.edu/HESC/

DEGREE REQUIREMENTS
GENERAL STUDIES REQUIREMENTS

UNIVERSITY REQUIREMENTS (required for all programs)

ENGL 110 Critical Reading and Writing (minimum grade C-) 3

Multicultural course:
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content. (See p. 57) This course can be used in the Breadth Requirements, Major Requirements, or Electives 3

COLLEGE REQUIREMENTS

Second Writing Course *(minimum grade C-)* 3
Must be an approved course that involves a significant writing experience including two papers of moderate length (must state "Second Writing Course Requirement" in the Registration Catalog).

BREADTH REQUIREMENTS

Group A—Communication Skills
Can choose selected courses from the following departments: Communication (COMM), English (ENGL – courses must state that course "Meets Arts and Science Second Writing Requirement" to count in this area; must be SEPARATE from the Second Writing Course requirement), Foreign Languages and Literature (FLLT 100, 101, 105, and 106), Foreign Languages (includes ARAB, CHIN, FREN, GREK, GRMN, HEBR, ITAL, JAPN, JWST, LATN, PORT, RUSS, SPAN, and SWAH), and Linguistics (LING).

Group B —Humanities and Fine Arts
Can choose selected courses from the following departments: Art (ART), Art History (ARTH), Art Conservation (ARTC), Comparative Literature (CMLT), English (ENGL – must be literature courses), Foreign Languages and Literature (FLLT – does not include 100, 101, 105, and 106), Museum Studies (MSST), Music (MUSC), Music Education (MUED), Philosophy (PHIL), and Theater (THEA).

Group C—History and Social Sciences
Can choose selected courses from the following departments: Anthropology (ANTH), Black American Studies (BAMS), Criminal Justice (CRJU), History (HIST), Individual and Family Studies (IFST), Political Science and International Relations (POSC), Psychology (PSYC), Sociology (SOCI), and Women's Studies (WOMS).

Group D—Biological/Natural Sciences and Mathematics
Can choose selected courses from the following departments: Accounting (ACCT), Animal Science (ANSC), Biological Sciences (BISC), Chemistry (CHEM), Computer and Information Science (CISC), Computer Engineering (CPEG), Electrical Engineering (ELEG), Engineering Technology (EGTE), Materials Science (MASC), Mechanical Engineering (MEEG), Entomology and Applied Ecology (ENTO), Food Science (FOSC), Geography (GEOG), Geology (GEOL), Marine Studies (MAST), Mathematics (MATH), Medical Technology (MEDT), Nutrition and Dietetics (NTDT), Physics and Astronomy (PHYS), Plant and Soil Sciences (PLSC), Science (SCEN), and Statistics (STAT).

Additional Breadth Requirements (varies by program)
Most programs require additional credits from Groups A, B, C, and D; additional courses can be chosen from any of the areas.

DEGREE: BACHELOR OF SCIENCE
MAJOR: ATHLETIC TRAINING

CURRICULUM		CREDITS

See University and Department requirements (page 172) 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 courses from two different departments		
Group D—Natural and Biological Sciences/Mathematics		9
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 (minimum grade C- in each)

NTDT 200	Nutrition Concepts	3
PSYC 201	General Psychology	3
BISC 106	Elementary Human Physiology	
or		
BISC 276	Human Physiology	3
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 257	Athletic Training Practicum I	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 357	Athletic Training Practicum II	3
HESC 358	Athletic Training Practicum III	3
HESC 395	Sports Medicine Pharmacology	3
HESC 405	Rehabilitation of Athletic Injuries	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 457	Athletic Training Practicum IV	3
HESC 480	Upper Extremity and Spine Evaluation	3
HESC 481	Lower Extremity and Spine Evaluation	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 are admitted to "Athletic Training Interest." At the completion of the freshman year, students who wish admission into the athletic training major must have completed the following:

(1) Freshman Year – Athletic Training Curriculum:

BISC 106 (or BISC 207)	3	ENGL 110	3
HESC 210	3	MATH	3
HESC 220	3	HESC 214	3
HESC 276	2	HESC 305	3
General Studies	3	General Studies	3
	15		15

(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 the Student Competencies Checklist.

(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.

NATABOC REQUIREMENTS FOR CERTIFICATION

1. Completion of the Athletic Training Program.
2. Proof of graduation (an official transcript).
3. Proof of current certification in CPR.
4. Completion of a minimum of 800 hours of athletic training clinical experience under the supervision of a NATABOC certified athletic trainer. The hours must be accumulated over a minimum of two years and not more than five years. No more than 400 clinical education hours may be counted in one year. At the time of application, a candidate for certification must verify that at least twenty-five percent (200 hours) of the required athletic training experience hours credited in fulfilling the Certification Requirements were obtained in actual (on location) practice and/or game coverage with one or more of the following sports: football, soccer, volleyball, basketball, and lacrosse.
5. The endorsement of the certification application by an NATABOC Certified Athletic Trainer.

EXERCISE SCIENCE
ADMISSION REQUIREMENTS AND GUIDELINES

The Department of Health and Exercise Sciences offers a major in Exercise Science leading to a Bachelor of Science. Students in the major must choose one of four concentrations: Biomechanics, Exercise and Sport Studies, Exercise Physiology, or Figure Skating Science. Admission to the major and the concentrations requires that students fulfill the following requirements:

1. Completion of at least 12 credits at the University of Delaware with a minimum GPA of 2.0.
2. Successful completion of the following courses: HESC 210; HESC 214; HESC 220; and a BISC course with lab.
3. Completion of the appropriate application form for the chosen concentration. Applications are due by April 1st and November 1st of each year. Forms are available in and must be returned to the HESC Advisement Center, Carpenter Sports Building.
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 and Sport Studies: Upon completion of HESC 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.
   c. 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.
   d. 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.

DEGREE: BACHELOR OF SCIENCE
MAJOR: EXERCISE SCIENCE
CONCENTRATION: BIOMECHANICS

CURRICULUM CREDITS

See University and Department requirements (page 172) 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, NTDT 200

Additional credits from Group A-D 9

MAJOR REQUIREMENTS (minimum grade C- in each)

HESC 210	Safety, First Aid, & Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

BISC 276	Human Physiology	
or		
BISC 306/367	General Physiology	4
BISC 442	Vertebrate Morphology	
or		
HESC 420	Functional Human Anatomy	4
CISC 105	General Computer Science	3
HESC 400	Research Methods	3
HESC 427	Biomechanics II	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
MAJOR: EXERCISE SCIENCE
CONCENTRATION: EXERCISE PHYSIOLOGY

CURRICULUM CREDITS

See University and Department requirements (page 172) 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, NTDT 200, and CHEM 103.

Additional credits from Group A-D 9

MAJOR REQUIREMENTS (minimum grade C- in each)

HESC 210	Safety, First Aid, & Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

BISC 208	Introductory Biology II	4
BISC 276	Human Physiology	
or		
BISC 306/367	General Physiology	4
CHEM 104	General Chemistry	4
HESC 305	Fundamentals of Athletic Training	3
HESC 353	Seminar in Exercise Physiology	1
HESC 400	Research Methods	3
HESC 432	Basic Exercise Prescription	
or		
HESC 434	Exercise Test Technology	3
PHYS 201	Introductory Physics I	4
PHYS 202	Introductory 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
MAJOR: EXERCISE SCIENCE
CONCENTRATION: FIGURE SKATING SCIENCE

CURRICULUM CREDITS

See University and Department requirements (page 172) 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 (minimum grade C- in each)

HESC 210	Safety, First Aid, and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

HESC 250	Motor Development	3
HESC 260	Leisure Service Programming	3
HESC 270	Recreation Leadership	3
HESC 300	Issues in Physical Activity and Sports	3
HESC 305	Fundamentals of Athletic Training	3
HESC 320	Principles of Strength and Conditioning	3
HESC 324	Measurement and Evaluation	3
HESC 347	Legal Aspects of Sport Management	3
HESC 355	Figure Skating Practicum I	3
HESC 356	Figure Skating Practicum II	3
HESC 440	Strategies for Athletic Peak Performance	3
HESC 455	Figure Skating Practicum III	3
HESC 456	Figure Skating Practicum IV	3
NTDT 310	Nutrition and Activity	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
MAJOR: EXERCISE SCIENCE
CONCENTRATION: EXERCISE AND SPORTS STUDIES

CURRICULUM CREDITS

See University and Department requirements (page 172) 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, NTDT 200, and natural science with lab

Additional credits from Groups A-D 9

MAJOR REQUIREMENTS (minimum grade C- in each)

HESC 210	Safety, First Aid, and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

HESC 235	Professional Transitions	3
HESC 276	Personal Computers in HPER	2
HESC 300	Issues in Physical Activity and Sports	3
HESC 305	Fundamentals of Athletic Training	3
HESC 324	Measurement and Evaluation	
or		
HESC 400	Research Methods	3
HESC 342	Survey in Adaptive Physical Education	3

Plus, Option I or Option II below:

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
MAJOR: HEALTH AND PHYSICAL EDUCATION

CURRICULUM CREDITS

See University and Department requirements (page 172) for additional degree requirements.

BREADTH REQUIREMENTS

Group A—Communication/Writing Skills 3

Group B—Humanities/Fine Arts 3

Group C—History/Social Sciences 3
Must include PSYC 201

Group D—Natural and Biological Sciences/Mathematics 10
Must include an approved 3-credit MATH course at the 100-level or higher, and a BISC course with lab, and NTDT 200

Additional credits from Groups A-D 3

MAJOR REQUIREMENTS (minimum grade C- in each)

EDUC 400	Student Teaching	9
EDUC 413	Educational Psychology – Social Aspects	3
EDUC 414	Educational Psychology – Cognitive Aspects	3
EDUC 419	Diversity in the Classroom (fulfills University multicultural requirement)	3
EDUC 420	Reading in the Content Area	1
EDUC 430	Classroom Management	1

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 120	Lifeguard Training	1-2
or		
HESC 121	Water Safety Instruction	
HESC 139	Curriculum in Physical Education	3
HESC 140	Fundamental Skills Analysis	3
HESC 141	Adventure Challenge and Outdoor Recreation	1
HESC 143	Skills, Techniques and Knowledge of Stunts, Tumbling and Gymnastics	1
HESC 210	Safety, First Aid and Emergency Care	3
HESC 214	Wellness: A Way of Life	3
HESC 220	Anatomy and Physiology	3
HESC 230	Group Facilitation Skills in Health and Physical Education	3
HESC 250	Motor Development	3
HESC 251	Skills, Techniques and Knowledge of Rhythms and Dance	1
HESC 252	Lifetime Leisure Activities	1
HESC 255	Skills, Techniques and Knowledge of Racquet Sports	1
HESC 275	Tactical Approach to Teaching Sports	3
HESC 276	Personal Computers in Health, Physical Education and Recreation	2
HESC 300	Issues in Physical Activity Studies and Sports	3
HESC 315	Instructional Strategies for Drug Education	3
HESC 319	Health-Related Fitness	3
HESC 324	Measurement and Evaluation	3
HESC 325	Instructional Strategies for Human Sexuality	3
HESC 330	Teaching Community and Mental Health	3
HESC 332	Health Behavior Theory and Assessment	3
HESC 342	Survey in Adaptive Physical Education/Recreation	3
HESC 370	Practicum in Methods of Elementary Physical Education	3
HESC 380	Practicum in Methods of Secondary Physical Education	3
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 465	Teaching Seminar in Health/Physical Education	3

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

In order to apply for Upper Division Clearance and enroll in methods courses, students must have completed all HESC and EDUC required courses except HESC 430, HESC 431, HESC 426, EDUC 420, EDUC 430, EDUC 400, and HESC 465. Students must have a minimum g.p.a. of 2.750 in the major and 2.500 overall, and have completed PRAXIS I with a passing score.

CREDITS TO TOTAL 124

DEGREE: BACHELOR OF SCIENCE
MAJOR: HEALTH BEHAVIOR MANAGEMENT
CONCENTRATION: FITNESS MANAGEMENT

CURRICULUM CREDITS

See University and Department requirements (page 172) for additional degree requirements.

BREADTH REQUIREMENTS

Group A—Communication/Writing Skills 6
Must include courses from at least two departments

Group B—Humanities/Fine Arts 3

Group C—History/Social Sciences 6
Must include PSYC and SOCI courses.

Group D—Natural and Biological Sciences/Mathematics 13
Must include an approved 3-credit MATH course at the 100-level or higher, BISC with lab, NTDT 200 and STAT 200.

Additional credits from Groups A-D 6

MAJOR REQUIREMENTS (minimum grade C- in each)

FREC 201	Records and Accounts	3
or		
ACCT 200	Survey of Accounting	4
BUAD 100	Introduction to Business	3
HESC 155	Personal Health Management: An Approach for a Lifetime	3

HESC 200	Issues in Health Behavior Management	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 332	Health Behavior Theory and Assessment	3
HESC 335	Health and Aging	3
HESC 342	Survey in Adaptive Physical Education	3
HESC 354	Seminar in Fitness Management	1
HESC 400	Research Methods	3
HESC 422	Organization and Administration of Leisure Services	3
HESC 464	Internship	9

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

HESC 220	Anatomy and Physiology	3
HESC 263	Leadership Practicum	1
HESC 305	Fundamentals of Athletic Training	3
HESC 320	Strength and Conditioning	3
HESC 329	Dynamics of Team Problem Solving	3
HESC 350	Basic Kinesiology	3
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Lab	1
HESC 432	Basic Exercise Prescription	3
HESC 445	Concepts of Physical Fitness Testing	3
HESC 490	Development of Health Promotion Programs	3
NTDT 310	Nutrition and Activity	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
MAJOR: HEALTH BEHAVIOR MANAGEMENT
CONCENTRATION: RECREATION AND PARK ADMINISTRATION

CURRICULUM CREDITS

See University and Department requirements (page 172) for additional degree requirements.

BREADTH REQUIREMENTS

Group A—Communication/Writing Skills 6
Must include courses from at least two departments.

Group B—Humanities/Fine Arts 6

Group C—History/Social Sciences 6
Must include PSYC and SOCI courses.

Group D—Natural and Biological Sciences/Mathematics 10
Must include an approved 3-credit MATH course at the 100-level or higher and STAT 200.

Additional credits from Groups A-D 9

MAJOR REQUIREMENTS (minimum grade C- in each)

FREC 201	Records and Accounts	3
or		
ACCT 200	Survey of Accounting	4
BUAD 100	Introduction to Business	3
HESC 155	Personal Health Management: An Approach for a Lifetime	3
HESC 200	Issues in Health Behavior Management	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 332	Health Behavior Theory and Assessment	3
HESC 335	Health and Aging	3
HESC 342	Survey in Adaptive Physical Education	3
HESC 354	Seminar in Fitness Management	1
HESC 400	Research Methods	3
HESC 422	Organization and Administration of Leisure Services	3
HESC 464	Internship	9

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

HESC 207	Introduction to Recreation and Sport Management	3
HESC 261	Programming and Leadership	3
HESC 302	Practicum in Sport Management/Recreation	1
HESC 341	Principles of Outdoor Recreation	3

Plus, 18 credits reflecting a sub-discipline in recreation/leisure chosen under the direction of the faculty advisor and submitted for approval 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

DEGREE: BACHELOR OF SCIENCE
MAJOR: HEALTH BEHAVIOR MANAGEMENT
CONCENTRATION: SPORT MANAGEMENT

CURRICULUM CREDITS

See University and Department requirements (page 172) for additional degree requirements.

BREADTH REQUIREMENTS

Group A—Communication/Writing Skills 6
Must include courses from at least two departments.

Group B—Humanities/Fine Arts 6

Group C—History/Social Sciences 6
Must include PSYC and SOCI courses.

Group D—Natural and Biological Sciences/Mathematics 10
Must include an approved 3-credit MATH course at the 100-level or higher and STAT 200.

Additional credits from Groups A-D 9

MAJOR REQUIREMENTS (minimum grade C- in each)

FREC 201	Records and Accounts	3
or		
ACCT 200	Survey of Accounting	4
BUAD 100	Introduction to Business	3
HESC 155	Personal Health Management: An Approach for a Lifetime	3
HESC 200	Issues in Health Behavior Management	3
HESC 210	Safety, First Aid and Emergency Care	3
HESC 332	Health Behavior Theory and Assessment	3
HESC 335	Health and Aging	3
HESC 342	Survey in Adaptive Physical Education	3
HESC 354	Seminar in Fitness Management	1
HESC 400	Research Methods	3
HESC 422	Organization and Administration of Leisure Services	3
HESC 464	Internship	9

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

COMM 245	Mass Communication and Culture	3
ECON 100	Economic Issues and Policies	3
FINC 200	Fundamentals of Finance	3
HESC 207	Introduction to Recreation and Sport Management	3
HESC 261	Programming and Leadership	3
HESC 302	Practicum in Sport Management/Recreation	1
HESC 347	Legal Aspects of Sport Management	3
HESC 437	Sport Marketing	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

REQUIREMENTS FOR A MINOR IN COACHING SCIENCE

This minor is designed to help students develop an understanding of the instructional, psychological, and management aspects of coaching, as well as a personal philosophy of coaching. Successful completion of the minor prepares students to take the American Sport Education Program (ASEP) Coaching Certification examination.

Students applying for the minor are expected to have had previous athletic experience and must have completed at least one semester of full time study with a minimum GPA of 2.25. The application process involves an interview with the faculty director of the minor. A grade of C- or better in required courses is needed for successful completion of the minor.

CURRICULUM CREDITS

HESC 210	Safety, First Aid, and Emergency Care	3
HESC 220	Anatomy and Physiology	3
HESC 320	Principles of Strength and Conditioning	3
HESC 390	Principles of Coaching	3
HESC 440	Strategies for Athletic Peak Performance	3
HESC 460	Coaching/Performance Practicum	3

REQUIREMENTS FOR A MINOR IN STRENGTH AND CONDITIONING

This minor is designed to provide students with in depth understanding of the theory and practical considerations associated with physical training to enhance strength and conditioning. Students successfully completing the minor will be prepared to take the Strength and Conditioning Specialist Certification examination offered by the National Strength and Conditioning Association.

Students applying for the minor must have completed at least one semester of full time study with a minimum GPA of 2.25. Enrollment in the minor for at least four semesters is necessary due to sequencing of courses. A grade of C- or better in required courses is needed for successful completion of the minor.

CURRICULUM		CREDITS
Prerequisite Courses:		
The following courses are identified as prerequisites for selected courses in the minor. It is not necessary to take all of the prerequisite courses prior to enrolling in the first course in the minor. See course descriptions for the required courses to identify individual course prerequisites.		
HESC 220	Anatomy and Physiology	3
HESC 350	Basic Concepts in Kinesiology	3
HESC 426	Biomechanics I	4
HESC 430	Physiology of Activity	3
HESC 431	Physiology of Activity Laboratory	1
NTDT 200	Nutrition Concepts	3
Required Courses:		
HESC 320	Principles of Strength/Conditioning	3
HESC 432	Basic Exercise Prescription	3
HESC 440	Strategies for Athletic Peak Performance	3
HESC 447	Advanced Topics in Strength and Conditioning	3
HESC 462	Practicum in Strength and Conditioning	3
NTDT 310	Nutrition and Activity	3

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 gradepoint index of 2.0 computed from specified courses in biological sciences and chemistry, including laboratories: BISC 207, 208, 276, 300, 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. Courses taken pass/fail cannot be used to complete major requirements. Pass/fail courses are for free electives only. 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 multicultural, ethnic, and/or gender-related content (see p. 57)		3
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 45 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 83.)		
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	
MATH 117	Pre-Calculus for Scientists and Engineers (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 85.)		
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
Three credit Pathways Course may be substituted for one Breadth Requirement		
(minimum grade of C- required in all MEDT courses)		
MEDT 100	Introduction to Medical Technology	1
MEDT 310	Information Technologies and Communication Skills	2
MEDT 370	Phlebotomy Practicum	1
MEDT 375	Clinical Laboratory: Principles and Statistics	2

MEDT 380	Clinical Immunology and Medical Virology	4
MEDT 390	Introduction to Molecular Diagnostics	2
MEDT 391	Introduction to Molecular Diagnostics Laboratory	1
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 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	Laboratory Practice and Leadership I	1
MEDT 471	Laboratory Practice and Leadership II	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 300	Introduction to Microbiology	4
CHEM 103/104	General Chemistry	8
CHEM 213 and CHEM 214/216	Elementary Organic Chemistry and 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 fully accredited by the National League for Nursing Accrediting Commission and has provisional accreditation from the Commission for Collegiate Nursing Education. Information on program requirements is available from the League at 350 Hudson St., New York, NY 10014, telephone 1-800-669-1656. The first year of the program includes foundation courses in the natural, social, and behavioral sciences, and liberal arts. The second, 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 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.

Telephone: (302) 831-2193
http://www.udel.edu/nursing/
e-mail: ud-nursing@udel.edu

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.

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 302-831-2193 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/accelerated.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.

DEGREE: BACHELOR OF SCIENCE IN NURSING
MAJOR: NURSING

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		
BISC 207	Introductory Biology I	4
BISC 276	Human Physiology	4
BISC 300	Introduction to Microbiology	4
CHEM 105	General Chemistry	4
CHEM 106	Elementary Bioorganic Chemistry	5
NTDT 200	Nutrition Concepts	3
PHYT 267	Anatomy	2
STAT 200	Basic Statistical Practice	3
Second Writing Course		3
Pathways Course/Elective		3
Creative Arts/Humanities		3
Culture/Institutions Over Time		3
Human Beings and Their Environment		3
PSYC 201	General Psychology	3
IFST 201	Life Span Development	3
NURS 100	New Student Connections	1
NURS 220	Concepts of Nursing Practice	3
NURS 222	Pharmacology	3
NURS 230	Foundations of Nursing	3
NURS 240	Scientific Basis of Nursing	5
NURS 352	Nursing Care of Adults I	2
NURS 353	Clinical Applications: Adult I	3
NURS 354	Psychosocial Nursing	2
NURS 355	Clinical Applications: Psychosocial Nursing	3
NURS 356	Nursing Care: Children/Families	2
NURS 357	Clinical Applications: Children/Families	3
NURS 358	Nursing Care: Childbearing	2
NURS 359	Clinical Applications: Childbearing Family	3
NURS 362	Research Concepts in Health Care	3
NURS 411	Topics in Health Care Delivery	3
NURS 452	Nursing Care of Adults II	3
NURS 453	Clinical Applications: Adults II	3
NURS 454	Nursing of Populations	2
NURS 455	Clinical Applications: Community	4
NURS 474	Professionalism in Nursing Practice	2
NURS 475	Senior Preceptorship	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

Many nursing courses are offered once each academic year. Students must complete selected required lower division courses before enrolling in upper division nursing courses. Nursing courses must be taken in sequence unless otherwise specified.

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 (NLNAC) 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/DSP

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

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		
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
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: 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		3
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 section of the Catalog for information on the Dietetic Internship Program.

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, Food Service Management, or Fitness may be incorporated. 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 prospects for employment and obtaining dietetic internships, 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
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	6
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 104 Principles of Biology or BISC 207/208 Introductory Biology I and II	4-8
BISC 276 Human Physiology	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 ... 3
BUAD 309 Management and Organizational Behavior ... 3
FOSC 305 Food Science (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

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 25 credits in NTDT; 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 Concepts ... 3
NTDT 400 Macronutrients ... 3
NTDT 401 Micronutrients ... 3
NTDT 445 Teaching Methods: Nutrition and Food ... 3
NTDT courses (300-level or higher) ... 9
NTDT Restricted Elective (minimum grade of C- must be achieved) ... 3
One of the following:
NTDT 305 Nutrition in the LifeSpan
NTDT 350 Nutrition and Older Adults
NTDT 420 Maternal and Infant Nutrition

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 ... 6

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 207/208 Introductory Biology I and II ... 8
BISC 276 Human Physiology ... 4
BISC 300 Introduction to Microbiology ... 4
ECON 100 Economic Issues and Policies
or
ECON 151 Introduction to Microeconomics: Prices and Markets ... 3
PSYC 201 General Psychology ... 3
One of the following courses ... 3
SOCI 201 Introduction to Society
SOCI 202 Social Deviance
SOCI 203 The Individual and Society
SOCI 204 Urban Communities
SOCI 209 Social Problems
SOCI 210 Population Problems
SOCI 242 Society and the Health Professions
SOCI 243 Society, Politics and Health Care
PSYC 303 Introduction to Social Psychology
SOCI 310 Sociology of Healthcare
BUAD 309 Management and Organizational Behavior ... 3
FOSC 305 Food Science (minimum grade C-) ... 3
Statistics course selected from: STAT 200, PSYC 309, FREC 408 ... 3
MATH 114 Elementary Mathematics and Statistics ... 3
or
Successful performance on the Proficiency Test in Mathematics administered by Department of Mathematical Sciences

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 41 credits in NTDT; 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 Concepts ... 3
NTDT 321 Quantity Food Production and Service ... 3
NTDT 322 Management of Food and Nutrition Services ... 3
NTDT 326 Onsite Food Products ... 3
NTDT 330 Nutritional Counseling ... 3
NTDT 400 Macronutrients ... 3
NTDT 401 Micronutrients ... 3
NTDT 403 Dietetics Seminar ... 1
NTDT 421 Nutrition Assessment Methods ... 3
NTDT 445 Teaching Methods: Nutrition and Foods ... 3
NTDT 450 Medical Nutrition Therapy I ... 3
NTDT 451 Medical Nutrition Therapy II ... 3
NTDT 460 Community Nutrition ... 3
NTDT Restricted Elective (minimum grade of C- must be achieved) ... 3
One of the following:
NTDT 305 Nutrition in the LifeSpan
NTDT 350 Nutrition and Older Adults
NTDT 420 Maternal and Infant Nutrition

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: NUTRITIONAL SCIENCES

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 ... 6

CHEM 103/104 General Chemistry ... 8
CHEM 214/216 Elementary Biochemistry with Lab ... 4
CHEM 220/221 Quantative Analysis I with Lab ... 4
CHEM 321/322 Organic Chemistry ... 8
BISC 207/208 Introductory Biology I and II ... 8
BISC 276 Human Physiology ... 4
BISC 300 Introduction to Microbiology ... 4
PHYS 201 Introductory Physics I ... 4
ECON 100 Economic Issues and Policies
or
ECON 151 Introduction to Microeconomics: Prices and Markets ... 3
Social Science electives ... 9
FOSC 305 Food Science (minimum grade C-) ... 3
FREC 408 Research Methods ... 3
MATH 221/222 Calculus I and II
or
MATH 241/242 Analytic Geometry and Calculus A and B ... 6-8

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 30 credits in NTDT; 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 200	Nutrition Concepts	3
NTDT 201	Food Concepts	3
NTDT 400	Macronutrients	3
NTDT 401	Micronutrients	3
NTDT 421	Nutrition Assessment Methods	3
NTDT 450	Medical Nutrition Therapy I	3
NTDT 451	Medical Nutrition Therapy II	3
NTDT courses (300-level or higher)		6
NTDT course		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

MINOR IN NUTRITION

A minor in nutrition requires NTDT 200, NTDT 400, NTDT 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 NTDT 400 and NTDT 401.