# COLLEGE OF HEALTH AND NURSING SCIENCES 

## - Advisement

- Pass/Fail Courses
- Dean's Scholar Program
- Health, Nutrition, and Exercise Sciences

The College of Health and Nursing Sciences includes the Departments of Health, Nutrition and Exercise Sciences, Medical Technology, and Nursing. 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.

Students in the college are encouraged 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 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. The Office of the Assistant Dean for Student Services, 343 McDowell Hall also provides advisement to students who experience academic difficulties or who require additional guidance or information.

## Pass/Fall Courses

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

- Health Studies
- Medical Technology
- Nursing


## 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 Departments of Health, Nutrition, and Exercise Sciences, Medical Technology, and Nursing. 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 www.udel edu/deansscholar/ for more information and the application.

## Health, Nutrition, And Exercise Sciences

The Department of Health, Nutrition and Exercise Sciences offers undergraduate majors in Applied Nutrition, Athletic Training, Dietetics, Exercise Science, Health and Physical Education, Health Behavior Management, and Nutritional Sciences, all with Honors Degree options, as well as minors in Coaching Science, Nutrition, and Strength and Conditioning. The programs integrate background coursework in the natural and physical sciences, and, for some programs, courses in business, with the study of the major field. This broad spectrum of undergraduate programs prepares students
for a variety of careers in the arenas of health care, education, recreation, and sport/fitness/nutrition management, as well as business, industry, and public, private, or government agencies.

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. 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. Failure to meet regularly with a faculty advisor can result in a delay in graduation if program requirements have not been met.

Students are encouraged to enrich their academic programs by participating in the college's visiting student programs, study abroad experiences, seminars, and student organizations. To enhance prospects for employment and obtaining 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 as student members of national, regional, and statewide professional organizations related to each major.

There are several special academic opportunities for exceptionally talented and highly motivated students. Students in each major may participate in the University's Honors Program, undergraduate research, and the Degree with Distinction program. The College's Dean's Scholar Program also provides qualified students with the opportunity to develop individualized programs of study.

## Major Degree Programs

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, Pediatrics or Fitness may be incorporated.

The Athletic Training major is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). This major prepares students for taking the NATABOC exam for certification as an Athletic Trainer (ATC.)

The Dietetics major leads to the attainment of certification as Registered Dietitian by the American Dietetic Association (ADA) and is currently granted continuing accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 216 W Jackson Blvd, Chicago IL 60606-6995, 312-899-5400. 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.

Concentrations within the Exercise Science major allow students to further specialize in Biomechanics, Exercise Physiology or Figure Skating Science. Graduates of the program in Biomechanics are prepared to work in Gait Analysis laboratories or to go on for further graduate or professional study in Physical Therapy. The Exercise Physiology concentration is designed primarily for students interested in going on to graduate school, Physical Therapy School, or a Medical School. Figure Skating Science is for students who are advanced figure skaters and plan to become
figure skating coaches. This unique program enables students to intern with the world class figure skating coaches in residence at the University of Delaware who are training many of the top competive figure skaters in the world

The Health and Physical Education program is accredited by the National Council for Accreditation of Teacher Education (NCATE). This comprehensive program prepares students to teach both health education and physical education in grades K-12. Students in this major begin regular exposure to teaching students in the schools early in the program.

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 Fitness Management curriculum prepares students for work in the health and fitness industry. Sport Mangement is for students interested in managerial or administrative positions in the sport industry or academics. Recreation and Park Administration prepares students for leadership positions in the recreation industry.

The Nutritional Sciences major is for 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

## 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.

## Honors Degrees In The Department Of Health, Nutrition, And Exercise Sciences

Students can earn an Honors Bachelor of Science Degree in Applied Nutrition, Athletic Training, Dietetics, Exercise Science, Health Behavior Management, Health and Physical Education, or Nutritional Sciences by completing the following requirements:

1. All requirements for the Bachelor of Science Degree in the respective major.
2. All of the University's generic requirements for the Honors Baccalaureate Degree (see page 49).

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

## Application Procedures

Entering freshmen and transfer students may be admitted directly into the majors in Applied Nutrition, Dietetics, and Nutritional Science. Freshmen seeking admission to the majors in Athletic Training, Exercise Science, Health and Physical Education, and Health Behavior Management are admitted to interest groups associated with each major. Freshmen participating in an interest group are eligible to apply for admission to one of these majors at the end of the freshman year.

The department reviews applications from University of Delaware students who wish to change majors twice a year, with applications due on December 15 th and June 1 st. Applications are available 30 days prior to each due date. Students are notified of admission decisions after semester grades are posted. Students not admitted to a major may apply again the following semester.

To be eligible for admission to a department major, students must have completed at least 12 credits at the University of Delaware with a minimum GPA of 2.50 and must have met the criteria for admission to each respective major. Some majors have more stringent GPA requirements and some majors are restricted due to enrollment limits.

Enrollment in HESC major courses is restricted to majors. Non-majors are allowed to register for 100- and 200level courses through the drop/add process if space is available. Non-majors are not normally permitted in 300- and 400-level courses.

## DEGREE REQUIREMENTS FOR MAJORS IN <br> ATHLETIC TRAINING, EXERCISE SCIENCE, HEALTH AND PHYSICAL EDUCATION, AND HEALTH BEHAVIOR MANAGEMENT

## GENERAL STUDIES REQUIREMENTS

## University Requirements (required for all programs) <br> ENGL 110 Critical Reading and Writing <br> (minimum grade C -) .3

Multicultural course:
Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see p. 66-71)
This course can be used in the Breadth Requirements, Major Requirements, or Electives.

## 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 (ENWC), 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

See University and Department requirements (page 219) 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

PSYC 201 General Psychology
3

BISC 106 Elementary Human Physiology
or
BISC 207
Introductory Biology I . . . . . . . . . . . . . . . 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 257 Athletic Training Practicum I . . . . . . . . . . . 3
HESC 258 Advanced Taping and Bracing Methods . . 1
HESC 305 Fundamentals of Athletic Training . . . . . . 3
HESC 320 Principles of Strength/Conditioning ..... 3
HESC $350 \quad$ 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 400 Research Methods . . . . . . . . . . . . . . . . . . . 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 425 Biomechanics of Human Movement . . . . . 4
or
HESC 426
Biomechanics I . . . . . . . . . . . . . . . . . . . . . 4
HESC 430 Physiology of Activity . . . . . . . . . . . . . . . . 3
HESC 431 Physiology of Activity Lab . . . . . . . . . . . . . . 1
HESC 440 Strategies for Athletic Peak Performance . 3
HESC 448 Organization \& Administration/Athletic

HESC 449
HESC 457
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

## Athletic Training: Admission Requirements and Application Procedure

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:

Freshman Year - Athletic Training Curriculum:


## Technical Standards For Admission

The Athletic Training Education Program at the University of Delaware is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the Athletic Training Education Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Allied Health Education Programs "CAAHEP"). The following abilities and expectations must be met by all students admitted to the Athletic Training Education Program. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted into the program.

Compliance with the program's technical standards does not guarantee a student's eligibility for the NATABOC certification exam.

Candidates for selection to the Athletic Training Education Program must demonstrate:

1. the mental capacity to assimilate, analyze, synthesize, integrate concepts and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm;
2. sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and accurately, safely, and efficiently use equipment and materials during the assessment and treatment of patients;
3. the ability to communicate effectively and sensitively with patients and colleagues, including individuals
from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with competent professional practice;
4. the ability to record the physical examination results and a treatment plan clearly and accurately;
5. the capacity to maintain composure and continue to
function well during periods of high stress;
6. the perseverance, diligence and commitment to complete the athletic training education program as outlined and sequenced;
7. flexibility and the ability to adjust to changing situations and uncertainty in clinical situations;
8. affective skills and appropriate demeanor and rapport that relate to professional education and quality patient care.

Candidates for selection to the athletic training education program will be required to verify they understand and meet these technical standards or that they believe that, with certain accommodations, they can meet the standards.

The Director or Affirmative Action and Multicultural Programs will evaluate a student who states he/she could meet the program's technical standards with accommodation and confirm that the stated condition qualifies as a disability under applicable laws.

If a student states he/she can meet the technical standards with accommodation, then the University will determine whether it agrees that the student can meet the technical standards with reasonable accommodation; this includes a review whether the accommodations requested are reasonable, taking into account whether accommodation would jeopardize clinician/patient safety, or the educational process of the student or the institution, including all coursework, clinical experiences and internships deemed essential to graduation.

Six criteria are evaluated as part of the admission process in accepting students into the Athletic Training Education Program:

1. Overall GPA
2. Prerequisite Courses GPA
3. Directed Observation Hours
4. Letters of Recommendation
5. Interview
6. Essay

In evaluating the criteria, different ranking scales (1-5, 110 , etc) are used. In each case the top student in each criteria would receive the lowest number awarded. For example, in ranking Prerequisite Courses GPA the student with the highest GPA would receive a score of (1) and would be considered the best candidate in that particular criteria.
The six criteria are evaluated in the following manner:
Overall GPA - the total number of candidates applying for admission to the program is divided by (10). For example, if twenty students apply, 20 is divided by 10 and the result is 2. We then rank the overall GPA of the 20 students from high to low. The top two students would receive a score of (1). The next two highest GPAs would receive a score of (2). We continue scoring the students until everyone receives a score.

Prerequisite Courses GPA - The candidates' GPAs are ranked from high to low. The person with the highest GPA receives a score of (1); this number is then multiplied by two ( $1 \times 2=2$ ) for a total score of two. We continue scoring the students until everyone receives a score. We believe the Prerequisite GPA is a very good predictor for success in our program so that is why we weight this criteria more heavily.

Directed Observation Hours - Students who obtain between 100-149 directed observation hours receive a score of three (3). Students who obtain between 150-199 directed observation hours receive a score of two (2). Students who obtain over 200 directed observation hours receive a score of one (1).

Letters of Recommendation - Letters of recommendation are evaluated using a ranking scale of (1-5). Each athletic training faculty member reads the three letters of recommendation and gives them a numerical score of between (1-5). A score of one would be considered excellent letters of recommendation. A score of five would be judged to be a poor letter of recommendation. All letters of recommendation are read independently. The scores from all the evaluators are added together and then divided by the total number of evaluators. The averaged score is then recorded on the admission ranking form.

Interview - Each candidate seeking admission to the ATEP is given a formal interview, conducted by the athletic training faculty. A standardized form, worth 100 points is used by each evaluator. At the end of the interview process the score for each candidate is totaled and then divided by the evaluators. The person with the lowest score receives a score of (1). This number is then multiplied by three (1 X 3 $=3$ ) for a total score of three. We continue scoring the students until everyone has a score. We believe the interview score is the best predictor for success in our program.

Essay - The essay criteria is scored using the same method as criteria number four (Letters of Recommendation).

When all the criteria have been scored/ranked, the six scores are added together, to make a grand total score. The candidate with the lowest grand total score is ranked as the first candidate who will be offered admission to the ATEP.

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 the spring semester. Acceptance/rejection letters will be mailed to each candidate by July 1.

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. Clinical education experiences are initiated in the first year of the student's program and are designed to provide the student with sufficient opportunity to develop specific competencies pertaining to the health care of the athlete and those involved in physical activity. The clinical experience provides the student with an opportunity for integration of psychomotor, cognitive and affective skills with in the context of direct patient care. The skills are identified within the psychomotor and clinical proficiencies aspects of each of the domains included in the document, "Athletic Training Education Competencies." The development of psychomotor skills represents a significant focus of the student's clinical experience; ample opportunity is also provided for development and demonstration of competencies within the cognitive and the affective aspects of each domain identified in the above document.

A minimum period of two academic years of clinical experience associated with course credit is required. The clinical setting shall include the athletic training room(s), athletic practices, and competitive events for a minimum of two academic years under the direct supervision of a Certified Athletic Trainer. The student will be exposed to upper extremity, lower extremity, equipment intensive, and
general medical experiences of both genders. 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. GPA of 2.0 ;
3. satisfactory clinical education evaluations;
4. meet the technical standards for admission.

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 Application

## Procedure

Incoming freshmen and transfer students interested in the Exercise Science major are admitted to "Exercise Science Interest." After the completion of the freshman year, students may apply for admission to the Exercise Science major and a concentration within the major. A faculty admission committee for each concentration will make decisions on acceptance based on the following criteria:

1. A competitive cumulative GPA. (Students admitted to the major in recent years have had GPAs of at least 3.0.)
2. Successful completion (minimum grade C-) of the following courses: HESC 210, HESC 214, HESC 220, and a BISC course with a lab.
3. Completion of the appropriate application form for the chosen concentration. Applications are accepted at the end of each Fall and Spring semester.
4. Each of the concentrations have additional requirements, as follows:
a. Biomechanics: Students must also have successfully completed (minimum grade of C-) MATH 241.
b. Exercise Physiology: Students must also have successfully completed (minimum grade of C-) BISC 208.
c. Figure Skating Science: 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

See University and Department requirements (page 219) 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 . 23Must include BISC 207, BISC 208, CHEM 103, CHEM 104,MATH 241, NTDT 200
Additional credits from Group A-D ..... 9
Major Requirenents (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 General Physiology ..... 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 electivecredits must be taken to meet the minimum creditsrequired 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 219)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 14Must include MATH 221, BISC 207, NTDT 200, and CHEM103.
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
(MINMUM GRADE C- IN EACH)
BISC 208 Introductory Biology II . . . . . . . . . . . . . . . . 4
BISC 276 Human Physiology
or
BISC 306 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 219)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 anotherdepartment.
Group D - Natural and Biological Sciences/Mathematics . 1Must include an approved 3 -credit MATH course at the100 -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 425 Biomechanics of Human Movement ..... 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 261 Leisure Service Programming ..... 3
HESC 300 Issues in Physical Activity and Sports ..... 3
HESC 305 Fundamentals of Athletic Training .....  3

Principles of Strength and Conditioning . . 3

HESC 324
Measurement and Evaluation3

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

## Health And Physical Education:

Admission Requirements And Application Procedure
Incoming freshmen and transfer students interested in the
Health and Physical Education teacher preparation program are admitted to "Health and Physical Education Interest." After the completion of the freshman year, students may apply for admission into the Health and Physical Education major. A faculty admission committee will make decisions on acceptance based on the following criteria:
Successful completion (minimum grade $C$-) of the following required Freshman year courses:

*BISC with lab and EDUC 419 are recommended during the first year in order for students to be able to complete the program in eight semesters, but are not required for admission to the program.

Minimum cumulative GPA of 2.5 and major GPA of 2.75 .
Submission of a satisfactory Introductory Professional Portfolio that demonstrates a commitment to teaching (See Program Director for Details).

Completion of the appropriate application form for the major. Applications are accepted at the end of each Fall and Spring semester.

## Requirements For Progression Through The

 ProgramCriteria For Admission to the Methods Block (HESC414, 370 , and 380 )

- Passing scores in Praxis I
- Minimum cumulative GPA of 2.50
- Minimum GPA of 2.75 in the major
- A grade of C - or better in all required courses within the major
- Completion of all required HESC courses (with the exception of HESC $426,430,431,465$ )
- Completion of all required EDUC courses (with the exception of EDUC 420, 430, and 400)
- Submission of a satisfactory Working Portfolio (See Program Director for Details)

Criteria for Admission to Student Teaching in Health and Physical Education

- Minimum cumulative GPA of 2.50
- Minimum GPA of 2.75 in the major
- A grade of C- or better in all required courses within the major.
- Completion of all required HESC courses (with the exception of HESC $426,430,431,465$ )
- Completion of all required EDUC courses (with the exception of EDUC 430 and 400)
- Submission of a satisfactory Presentation Portfolio (See Program Director for Details)


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

## CURRICULUM

CREDITS
See University and Department requirements (page 219) 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 $413 \quad \begin{aligned} & \text { Educational Psychology } \\ & \text { Social Aspects . . . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
EDUC $414 \quad \begin{aligned} & \text { Educational Psychology } \\ & \text { Cognitive Aspects . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
EDUC 419 Diversity in the Classroom . . . . . . . . . . . . . . 3
(fulfills University multicultural requirement)
EDUC 420 Reading in the Content Area . . . . . . . . . . . 1
EDUC 430 Classroom Management . . . . . . . . . . . . . . . 1
Students must have a minimum cumulative GPA of 2.500 , a GPA in the major of at least 2.750 , and must apply to student teach at least one semester in advance.

HESC 121 Water Safety Instruction
or
HESC 122
HESC 139
HESC 140
HESC 141
HESC 143
HESC 210
HESC 214
HESC 220
HESC 230
HESC 250
HESC 251
HESC 252
HESC 255
Lifeguard Training1-2
Curriculum in Physical Education ..... 3
Fundamental Skills Analysis ..... 3

Adventure Challenge and Outdoor Recreation1
Skills, Techniques and Knowledge of Stunts, Tumbling and Gymnastics
Safety, First Aid and Emergency Care ..... 3
Wellness: A Way of Life ..... 3
Anatomy and Physiology ..... 3
Group Facilitation Skills in Health
and Physical Education ..... 3
Motor Development ..... 3
Skills, Techniques and Knowledge of Rhythms and Dance ..... 1
Lifetime Leisure Activities ..... 1
Skills, Techniques and Knowledge of Racquet Sports ..... 1
HESC 275 Tactical Approach to Teaching Sports ..... 3
HESC 276
Physical Education and Recreation ..... 2
HESC 300 Issues in Physical Activity Studies
and Sports3
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 ..... 3HESC 332
Health Behavior Theory and Assessment
HESC 342 ..... 3
Education/Recreation3
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 425 Biomechanics of Human Movement ..... 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, andHESC 325 prior to enrolling in HESC 414.
In order to apply for Upper Division Clearance and enrollin methods courses, students must have completed all HESCand EDUC required courses except HESC 430, HESC 431,
HESC 426, EDUC 420, EDUC 430, EDUC 400 , and HESC 465.
Students must have a minimum GPA of 2.750 in the major
and 2.500 overall, and have completed PRAXIS I with a
passing score.CREDITS TO TOTAL A MINIMUM OF125
Health Behavior Management:

## Admission Requirements and application

## Procedure

Incoming freshmen and transfer students interested in the Health Behavior Management major are admitted to "Health Behavior Management Interest." After the completion of the freshman year, students may apply for admission to the Health Behavior Management major and a concentration within the major. A faculty admission committee for each concentration will make decisions on acceptance based on the following criteria:

1. Successful completion (minimum grade of C-) of General Studies PSYC and SOCI courses, HESC 155, HESC 210, ENGL 110 and a MATH course.
2. Successful completion (minimum grade of C-) of HESC 202 (For students applying for the Sport Management or Recreation and Park Administration concentrations.)
3. A competitive cumulative GPA.
4. Submission of a resume.
5. Completion of the appropriate application form for the chosen concentration, including an essay. Applications are accepted at the end of each Fall and Spring semester.

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

## CURRICULUM

See University and Department requirements (page 219) 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 and SOCI courses.
Group D - Natural and Biological Sciences/Mathematics ..... 13
Must include an approved 3 -credit MATH course at the100-level or higher, BISC with lab, NTDT 200 and STAT200.
Additional credits from Group 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 Organization and A ..... 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 electivecredits must be taken to meet the minimum creditsrequired for the degree.
CREDITS TO TOTAL A MINIMUM OF ..... 120
DEGREE: BACHELOR OF SCIENCE MAJOR: HEALTH BEHAVIOR MANAGEMENT CONCENTRATION: RECREATION AND PARK ADMINISTRATION
CURRICULUMCREDITS
See University and Department requirements (page 219)for additional degree requirements.
Breadth Requirements
Group A - Communication/Writing Skills ..... 6
Must include
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 . 10Must include an approved 3-credit MATH course at the100-level or higher and STAT 200.
Additional credits from Group 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 202 Practicum in Sport Management/Recreation I ..... 1
HESC 207 Introduction to Recreation and Sport Management ..... 3
HESC 261 Programming and Leadership ..... 3
HESC 302 Practicum in Sport
Management/Recreation II ..... 1
HESC 341 Principles of Outdoor Recreation ..... 3Plus, 18 credits reflecting a sub-discipline inrecreation/leisure chosen under the direction of the facultyadvisor and submitted for approval no later than thebeginning of the second semester of the junior year
ElectivesAfter required courses are completed, sufficient electivecredits must be taken to meet the minimum creditsrequired for the degree.
CREDITS TO TOTAL A MINIMUM OF ..... 120
DEGREE: BACHELOR OF SCIENCE MAJOR: HEALTH BEHAVIOR MANAGEMENT CONCENTRATION: SPORT MANAGEMENT
CURRICULUM ..... CREDITSSee University and Department requirements (page 219)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$100-l e v e l$ or higher and STAT 200.
Additional credits from Group A-D ..... 9
Major Requirements (minimum grade c- in each)
ACCT 200 Survey of Accounting ..... 4
BUAD 100 Introduction to Business ..... 3
$\begin{array}{ll}\text { HESC } 155 & \text { Personal Health Management: } \\ & \text { An Approach for a Lifetime } . . . . . . . . . . . . . . ~\end{array}$
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
HESC 342
HESC 354
HESC 400
HESC 422
HESC 464
Health and Aging . . . . . . . . . . . . . . . . . . . 3
Survey in Adaptive Physical Education . . . 3
Seminar in Fitness Management . . . . . . . . . 1
Research Methods . . . . . . . . . . . . . . . . . . . 3
$\begin{aligned} & \text { Organization and Administration } \\ & \text { of Leisure Services . . . . . . . . . . . . . . . . . } 3\end{aligned}$
or Leisure Services . . . . . . . . . . . . . . . . . . . . . . . 9
Internship . . . . . . . . . . . . . .
Concentration Requirements
(MINIMUM GRADE C- IN EACH)
ECON 100 Economic Issues and Policies . . . . . . . . . . . 3
FINC 200 Fundamentals of Finance . . . . . . . . . . . . . . 3
HESC $202 \quad \begin{aligned} & \text { Practicum in Sport } \\ & \text { Management/Recreation I . . . . . . . . . . . . . } 1\end{aligned}$
HESC 207 Introduction to Recreation and
HESC 261 Programming and Leadership . . . . . . . . . . 3
HESC $302 \quad \begin{aligned} & \text { Practicum in Sport } \\ & \text { Management/Recreation II . . . . . . . . . . . } 1\end{aligned}$
HESC 303 Practicum in Sport Management III . . . . . . 1
HESC 344 Financial Aspects of Sport Management . . 3
HESC 347 Legal Aspects of Sport Management . . . . . 3
HESC 437 Sport Marketing . . . . . . . . . . . . . . . . . . . . . 3
HESC 340 Management of Sport Information . . . . . . 3
HESC 344 Financial Aspects of Sport Management . . 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

## DEGREE REQUIREMENTS FOR MAJORS IN APPLIED NUTRITION, DIETETICS, AND NUTRITIONAL SCIENCES

## GENERAL EDUCATION COURSES

The following courses have been approved to fulfill humanities and social science electives for students in these majors.

## Humanities

Art, Art History, Communication, Comparative Literature, English, Foreign Language (including: 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 203, 205, 210, 216, 222, 318, $320,326,328,330,353,380,381,382,389,465,480$ ), Science and Culture (CSCC 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 $102,120,203,210,225,226,236,240,310,325,328$, 330), History, Individual and Family Studies (IFST 201, 221, 230, 329, 339, 403, 405, 422), Political Science, Psychology (except PSYC 309 and 314), Sociology, Women's Studies (WOMS 201, 202, 206, 207, 211, 212, 213, 233 , $240,291,298,299,300,305,323,333,350,363,407,413$, $415,430,436,460,498$ ), Science and Culture (CSCC 233 311, 355,382 ,).

## DEGREE: BACHELOR OF SCIENCE MAJOR: APPLIED NUTRITION

CURRICULUM CREDITS
University Requirements
ENGL $110 \quad$ Critical Reading and Writing (minimum grade C -) ..... 3
Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see p. 66-71) ..... 3
Major Requirements
Humanities electives ..... 6
CHEM 101/102 General Chemistryor
CHEM 103/104 General Chemistry ..... 8
CHEM 213 Elementary Organic Chemistry ..... 4
CHEM 214/216 Elementary Biochemistry with Lab ..... 4
BISC 104 Principles of Biologyor
BISC 207/208 Introductory Biology I and II ..... 4-8
BISC 106 Elementary Human Physiology .....  3
or
BISC 276 Human Physiology ..... 4
Students desiring207, 208 and 276.
ECON 100 Economic Issues and Policiesor
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 inMathematics administered by Department of MathematicalSciences.
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 beachieved)3
One of the following:
NTDT 305 Nutrition in the LifeSpan
NTDT $350 \quad$ Nutrition and Older Adults
NTDT 420 Maternal and Infant Nutrition
Electives
After required courses are completed, sufficient electivecredits must be taken to meet the minimum creditsrequired 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
CURRICULUMCREDITS
University Requirements
ENGL 110 Critical Reading and Writing (minimum grade C -) ..... 3
Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see p. 66-71) ..... 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 203 The Individual and Society
SOCI 204 Urban Communities
SOCI 209 Social Problems
SOCI 302 Social Deviance
SOCI 311 Sociology of Healthcare
SOCI 343 Society, Politics and HealthcarePSYC 303 Introduction to Social PsychologyBUAD 309 Management and OrganizationalBehavior 3
FOSC 305 Food Science (minimum grade C-) ..... 3
Statistics course selected from: STAT 200, PSYC 309, FREC4083
MATH 114 Elementary Mathematics and Statistics ..... 3
orSuccessful performance on the Proficiency Test in
Mathematics administered by Department of Mathematical
Sciences.
A minimum grade of C - must be achieved for credits tocount toward the fulfillment of 41 credits in NTDT; aminimum grade of C - in 200 -level courses must be achievedto proceed to upper-level courses; only 300-level coursesand a maximum of four credits of SpecialProblems/Independent Study (NTDT x66) may counttoward 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 LifeSpanNTDT $350 \quad$ Nutrition and Older AdultsNTDT 420 Maternal and Infant Nutrition
Electives
After required courses are completed, sufficient electivecredits must be taken to meet the minimum creditsrequired for the degree.
May include Military Science, Music, or Physical Education.
(Only two credits of activity-type Physical Education andfour credits of Music and four credits of 100-and 200-levelcourses in Military Science/Air Force may be countedtoward the degree.)
CREDITS TO TOTAL A MINIMUM OF ..... 120
DEGREE: BACHELOR OF SCIENCE MAJOR: NUTRITIONAL SCIENCES
CURRICULUMUniversity RequirementsENGL 110 Critical Reading and Writing(minimum grade C -)3
Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see p. 66-71) ..... 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
orECON 151 Introduction to Microeconomics:Prices and Markets
3
Social Science electives ..... 9
FOSC 305 Food Science (minimum grade C-) .....  3
FREC 408 Research Methods .....  3MATH 221/222 Calculus I and IIorMATH 241/242 Analytic Geometry andCalculus $A$ 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

## 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. Successtul 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
HESC 460 Coaching/Performance Practicum . . . . . . . 3

## DEGREE REQUIREMENTS FOR A 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 GPA 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.

## 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 425 Biomechanics of Human Movement . . . . . 4
or
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
NTDT 310 Nratrition in Strength and Conditioning.. 3

## Health Studies

This major provides a broad-based degree for students interested in a health-related career in any number of settings within the health services arena. Foundation courses from the sciences, humanities, and social sciences are combined with courses from departments in the College of Health and Nursing Sciences. Students in the Health Studies major can select a concentration area or an existing University minor outside the college in order to meet individual personal and career objectives and interests.

Telephone: (302) 831-8371

## DEGREE: BACHELOR OF SCIENCE MAJOR: HEALTH STUDIES

## CURRICULUM

CREDITS

| Univers | urements |
| :---: | :---: |
| ENGL 110 | Critical Reading and Writing <br> (minimum grade C-) ...... |

Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see p. 66-71)3

## Breadth Requirements

Creative Arts and Humanities . . . . . . . . . . . . . . . . . . . . . . . . 6 Includes all Arts and Science Group A courses as well as art courses and foreign language courses not used in the
Communication/Foreign Language requirement
Social Sciences ( 4 of the following 6 choices)
PSYC201, ECON100 or ECON151, SOCI201, IFST201
BUAD 309, Social Science/History Elective (as listed for Arts \& Science Group B or C

Sciences ( 3 of the following 4 choices; must include a biology course with lab)
BISC104 or 207, CHEM101 or CHEMiOB or CHEMiO5, iOO-
level or higher MATH, BISC208, and other natural science courses.

## Major Requirements <br> (MINIMUM GRADE OF C-IN EACH COURSE) <br> Second Writing Course <br> 3 <br> An approved course taken after completion of 45 credit <br> hours (listed as "Section satisfies A\&S writing requirement" in the registration booklet). <br> Communication or Foreign Language Course . . . . . . . . . . 3 <br> Statistics Course at the 200 level or above .................. 3 <br> CSCC/PHIL241 Ethical Issues in Healthcare . . . . . . . . . . 3 <br> BISC276 Human Physiology ...................... . . 4 <br> CNST404 (prerequisite required CNSTIOO) or HESC் $422 \ldots 3$ <br> MEDT100 <br> or <br> NURS100 Introductory Course . . . . . . . . . . . . . . . . . . 1 <br>  <br> or <br> HESC220 Anatomy and Physiology . . . . . . . . . . . . . . 3 <br> HESC155 Personal Health Management . . . . . . . . . . 3 <br> or <br> HESC 214 Wellness: A Way of Life . . . . . . . . . . . . . . . . 3 <br> NTDT 200 Nutrition Concepts . . . . . . . . . . . . . . . . . . . 3 <br> HESC 210 Safety, First Aid and Emergency Care . . . . 3 <br> MEDT $210 \quad$ Information Technologies and $\begin{aligned} & \text { Communication Skills . . . . . . . . . . . . . . } 2\end{aligned}$ <br> or <br> HESC $276 \quad \begin{aligned} & \text { Personal Computers in Health, Physical } \\ & \text { Education and Recreation . . . . . . . . . . . } 2\end{aligned}$ <br> NTDT305 Nutrition in the Lifespan . . . . . . . . . . . . . . . 3 <br> HESC 400 Research Methods . . . . . . . . . . . . . . . . . . 3 <br> MEDT375 Clinical Laboratory Principles <br> NURS411 Topics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

And, one course from each group:
HESC200 Issues in Health Behavior Management . . . 3
HESC300 Issues in Physical Activity Studies . . . . . . . 3
HESC329 Dynamics of Team Problem Solving . . . . . 3
NTDT255 Multicultural Food Habits . . . . . . . . . . . . . 3
NTDT310 Nutrition and Activity . . . . . . . . . . . . . . . . . 3
NTDT350 Nutrition and Older Adults . . . . . . . . . . . . 3
Additional HESC, MEDT, NTDT, or NURS ( 3 credits must be at the 400 level)

HESC495 Health Studies Practicum: Capstone Course:
Student will be required to complete a Service Learning
Experience

## Concentration Area (minimum grade of C- in each COURSE. COURSES CANNOT BE USED AS PART OF THE MAJOR REQUIREMENTS)

Minor outside College of Health
and Nursing Sciences
MINIMUM 15
or
Concentration ................................... (No more than 9 credits at the 100 and 200 level and 3 credits at the 400 level)

Family and Personal Health: (COMM200, FOSC102, HESC335, IFST329, IFST339, IFST401, IFST410, NTDT305, NTDT310, NTDT350, NTDT452, PSYC325, PSYC 334, SOCI418)
Health Ethics and Decision-Making: (CNST332, CSCC/HIST382, ECON 390 , HESC200 or HESC 300 (either can satisfy major requirements), HESC329, NTDT255,

NTDT452, PHIL/BAMS/WOMS327, PHIL/CSCC444,
POSC/SOCI/CSCC343, SOCI/CSCC311, WOMS/CSCC389, IFST405)

Science-Based Health Information: (BISC105,
BISC110, BISC152, BISC171/300, CHEM102 or CHEM104 or CHEM106, CHEM213, CHEM214 \& 216, HESC220, HESC350, HESC425 or HESC426, HESC430 \& HESC431, NTDT201, PHYS201, PHYS202, PSYC314)

## Electives

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

## CREDITS TO TOTAL A MINIMUM OF

## Medical Technology

The Department of Medical Technology offers a major in Medical Technology, as well as an Honors Degree and Honors courses. Medical Technology (Biomedical Sciences) 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 fouryear 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.

For exceptionally talented and highly motivated students, several special academic opportunities are available. Students may pursue the Honors Degree with Distinction, the Honors Degree, the Degree with Distinction, or undergraduate research through independent study.

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 GPA 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 GPA 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
www.udel.edu/medtech

## DEGREE: BACHELOR OF SCIENCE MAJOR: MEDICAL TECHNOLOGY

## CURRICULUM

CREDITS

## University Requirements <br> ENGL 110 Critical Reading and Writing (minimum grade $\mathrm{C}^{-}$)

Three credits in an approved course or courses stressing
multi-cultural, ethnic, and/or gender-related course
content (see p. 66-71)

## Major Requirements

Writing: (minimum grade C-)
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 100-102.)
One of the following 3-4
MATH $114 \quad$ 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 102-111.)

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 210 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 ..... 2
MEDT 461 Laboratory Practice and Leadership I . . . . . 1
MEDT 471 Laboratory Practice and Leadership II . . . . 1 ..... 1
MEDT 472Clinical Urinalysis and Serology
Practicum ..... 1
MEDT 473 Clinical Chemistry Practicum ..... 3
MEDT 475 Clinical Hematology Practicum ..... 3MEDT 477Clinical Microbiology Practicum
3MEDT 479
Clinical Immunohematology Practicum .....  3
BISC 207/208 Introductory Biology I and II ..... 8
BISC 276 Human Physiology ..... 4
BISC 300 Introduction to Microbiology ..... 4
CHEM 103/104 General Chemistry ..... 8
CHEM 213 Elementary Organic Chemistry
andCHEM 214/216 Elementary Biochemistry with Labor
CHEM 321/322 Organic Chemistry ..... 8
CREDITS TO TOTAL A MINIMUM OF ..... 123

## HONORS BACHELOR OF SCIENCE: MEDICAL TECHNOLOGY

The recipient must complete:

1. All requirements for the Bachelor of Science degree in Medical Technology.
2. All the University's generic requirements for the Honors Baccalaureate degree (see page 49).

## Nursing

The Department of Nursing offers a traditional 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 in a distance-learning format. In addition, the Department offers a master's program in nursing, with concentrations in Family Nurse Practitioner, Adult Nurse Practitioner, Health Services Administration, and Clinical Nurse Specialist.

## Traditional Bachelor Of Science In Nursing Program

The traditional Bachelor of Science in Nursing program is designed to develop the knowledge, understanding and skills 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 preliminary 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 1-800-6691656. 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, medicalsurgical, and community health nursing.

Nursing students are encouraged to participate in the Department chapter of the National Student Nurses' Association and the Black Student Nurses' Organization. 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 may participate in the University's Honors Program, undergraduate research, and the Degree with Distinction program. Research opportunities are available to all undergraduates.

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

## 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 distance learning 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, the fall semester, and concludes 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 or web, augmented by group 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.
For more information or to make an appointment to discuss the accelerated program, please contact the Department at 302-831-1253. A sample curriculum plan may be viewed at the Accelerated Degree Program website (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. Reference books on private financial aid sources are available in libraries or local academic institutions in your community.

## Policies

In order to meet degree requirements, nursing majors must have a minimum cumulative GPA 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. 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 advisor to ensure that all requirements are being met.

Students are required to meet all immunization, safety and CPR requirements prior to clinical coursework and direct patient care. Students are expected to provide their own transportation to all required clinical experiences.

## 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.

## HONORS DEGREE IN THE DEPARTMENT OF NURSING

Students can earn an Honors Bachelor of Science Degree in Nursing by completing the following requirements:

1. All requirements for the Bachelor of Science in Nursing Degree
2. All the University's generic requirements for the

Honors Baccalaureate Degree (see page 49)
3. Courses at the 600 level or higher may be taken for honors credits (with permission from the course instructor and academic advisor).

## DEGREE: BACHELOR OF SCIENCE IN NURSING (Traditional Program) <br> MAJOR: NURSING

CURRICULUM
CREDITS

## University Requirements <br> ENGL 110 Critical Reading and Writing <br> (minimum grade C -)

Three credits in an approved course or courses stressing
multi-cultural, ethnic, and/or gender-related course
content (see p. 66-71)
This course also can be used in the breadth requirements.

## Breadth Requirements

(see College of Arts and Science standards, p. 102-111)
Group A: Understanding and appreciation of the creative arts and humanities
(Foreign language requirement may be substituted for à Group A requirement)
Group B: The study of culture and institutions over time3

Group C: Empirically based study of human beings and
their environment ..... 3
Second Writing Course.(see list of courses approved for second writingrequirement, p. 100-102)3
Major Requirements
BISC 207 Introductory Biology ..... 4
BISC 276 Human Physiology (minimum grade C-) ..... 4
BISC 300 Introduction to Microbiology ..... 4
CHEM 105 General Chemistry ..... 4
CHEM 106 Elementary Bioorganic Chemistry ..... 5
NTDT 200 Nutrition Concepts ..... 3
STAT 200 Basic Statistical Practice ..... 3
HESC 155 Personal Health Management:
An Approach for a Lifetime ..... 3
PSYC 201 General Psychology ..... 3
IFST 201 Life Span Development ..... 3
NURS 100 New Student Connections ..... 1
NURS 101 Basic Human Anatomy ..... 2
NURS 220 Concepts of Nursing Practice ..... 3
NURS 222 Pharmacology ..... 3
NURS 230 Foundations of Nursing ..... 3
NURS 240 Scientific Basis for Nursing ..... 5
NURS 352 Nursing Care of Adults I ..... 2
NURS 353 Clinical Applications of Adult
Nursing Care I ..... 3
NURS 354 Psychosocial Nursing ..... 2
NURS 355 Clinical Application: ..... 3
NURS 356 Children and Families Nursing Care ..... 2
NURS 357 Clinical Application: Children and Family Nursing Care ..... 3

NURS 358
Childbearing Family Nursing Care . . . . . 2
NURS 359
Clinical Application: Child bearing
Family Nursing Care . . . . . . . . . . . . . . . . . . 3
NURS 362 Research Concepts in Health Care ...... 3
NURS 411 Topics in Health Care Delivery . . . . . . . . . 3
NURS 452 Adult Nursing Care II . . . . . . . . . . . . . . . . 3
NURS 453
Clinical Application of Adult
Nursing Care II
.3
NURS 454 Nursing of Populations . . . . . . . . . . . . . . . 2
NURS 455
Clinical Application: Nursing of
Populations
.4
NURS 474 Professional Practice in Health Care ...... 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.

## DEGREE: BACHELOR OF SCIENCE IN NURSING (Accelerated Degree Program) MAJOR: NURSING

## University Requirements <br> ENGL $110 \quad$ Critical Reading and Writing (minimum grade C -) <br> 3

Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course

content (see p. 66-71) ..... 3
This course also can be used in the breadth requirements.
Breadth Requirements(see College of Arts and Science standards, p. 102-111)
Group A: Understanding and appreciation of the creativearts and humanities3
(Foreign language req
Group A requirement)
Group B: The study of culture and institutions over time ..... 3
Group C: Empirically based study of human beings and
their environment .....  3
Second Writing Course.
(see list of courses approved for second writing requirement, p. 100-102) ..... 3
Support Courses
(To be completed through course work or transfer of creditbefore beginning the first Winter Session)
BISC 207 Introductory Biology I ..... 4
NURS 101 Basic Human Anatomy .....  2
BISC 276 Human Physiology (minimum grade C-) .....  4
BISC 300 Introduction to Microbiology ..... 4
CHEM 105 General Chemistry ..... 4
CHEM 106 Elementary Bioorganic Chemistry .....  5
IFST 201 Life Span Development ..... 3
NTDT 200 Nutrition Concepts .....  3
PSYC 201 General Psychology .....  3
STAT 200 Basic Statistical Practice ..... 3

Nursing Courses (60 credits)
NURS 220 Concepts of Nursing Practice . . . . . . . . . . . 3
NURS 222 Pharmacology . . . . . . . . . . . . . . . . . . . . . . . 3
NURS 230 Foundations of Nursing . . . . . . . . . . . . . . . . 3
NURS 240 Scientific Basis for Nursing . . . . . . . . . . . . 5
NURS 352 Nursing Care of Adults I .................. 2
NURS 353 Clinical Applications of Adult
NURS 354 Psychosocial Nursing . . . . . . . . . . . . . . . . . 2
NURS 355 Clinical Application:
Psychosocial Nursing . . . . . . . . . . . . . . . . . . 3
NURS 356 Children and Families Nursing Care . . . . 2
NURS 357 Clinical Application:
Children and Family Nursing Care . . . . . . 3
NURS 358 Childbearing Family Nursing Care . . . . . 2
NURS $359 \quad$ Clinical Application: Child bearing
NURS 362 Research Concepts in Health Care ...... . 3
NURS 411 Topics in Health Care Delivery . . . . . . . . . 3
NURS 452 Adult Nursing Care II . . . . . . . . . . . . . . . . 3
NURS $453 \quad \begin{aligned} & \text { Clinical Application of Adult } \\ & \text { Nursing Care II . . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
NURS 454 Nursing of Populations .................. 2
NURS 455 Clinical Application:
Nursing of Populations ................... . 4
NURS 474 Professional Practice in Health Care . . . . . 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

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. The Baccalaureate for the Registered Nurse (BRN) major is an innovative program designed to build on basic nursing knowledge, enhancing nursing practice in an increasingly complex society. The BRN major is offered in a distance learning format to maximize educational opportunities for registered nurses. Licensed registered nurses who are graduates of associate degree or diploma programs may apply for admission to this program. For the RN to MSN program, please see graduate nursing programs.

## Admission Requirements

A registered nurse who is a graduate of an associate degree or diploma nursing program may apply for admission to the College of Health and Nursing Sciences, Baccalaureate for the Registered Nurse Major. The applicant should request a distance learning application form or access the application online at http://wwwudel edu/dsp/BRN and submit the form with fee to the Division of Special Programs.

Materials requested are:

- Completed application form with application fee
- Official transcripts verifying college credits previously earned including verification of graduation.. A student who is transferring credit from other institutions must have a 2.5 cumulative grade point index (GPI) in all
previous college work. The University accepts credits only from those institutions that are fully accredited by the appropriate regional accrediting association. This determination is made only at the time of formal application to the University. You may wish to contact institutions you attended previously to ascertain their status during your period of enrollment.
- Current registered nurse license for those licensed in the United States
- Documentation of equivalent to a US RN license for international students plus a minimum score of 600 for the paper test and 250 for the computer based test required for the Test of English as a Foreign Language (TOEFL)


## Criteria for Enrollment in Baccalaureate

FOR THE REGISTERED NURSE (BRN) COURSES:
The BRN major is concentrated at the junior and senior levels and requires 120 credits for graduation. Before enrollment in any nursing courses, students must meet the following criteria:

- Official admission to the BRN major
- Completion of all science credits required for the degree. The remaining non-nursing credits can be taken at any time in the program; however students are strongly encouraged to complete non-nursing requirements prior to enrollment in nursing courses.
Submission and approval of:
- Clinical Competency Validation Form
- The process must be completed before enrollment in the student's first nursing course.
- Updated immunization record to Student Health and the Division of Special Programs
- Current RN license


## Academic Progression

The program is designed to facilitate timely progression for nurses who are continuing their education while employed full or part-time. There is no time limit for completion of prerequisite courses; however upon enrollment in the first nursing course, the program must be completed within a fiveyear period. It is possible to complete the required nursing courses in a 12-month period.

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

## CURRICULUM

CREDITS

## University Requirements <br> ENGL 110 Critical Reading and Writing (minimum grade C -) .3

Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content (see p. 66-71) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

## Major Requirements

24 credits, to include a minimum of one course in each of the following five categories: . . . . . . . . . . . . . . . . . . . . . . 24 (1) biology, (2) microbiology, (3) chemistry, (4) anatomy and physiology, and (5) nutrition.

STAT 200 Basic Statistical Practice ..................... 3
English course (second English composition course) .... 3
Psychology course
Sociology course
Lifespan development course -
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.
NUR 312 Pathophysiology . . . . . . . . . . . . . . . . . . . . . 4
NURS 335 BRN Orientation . . . . . . . . . . . . . . . . . . . . . 1
NURS 345 Conceptual Foundations for
Nursing Practice . . . . . . . .
NURS $350 \quad$ Nellness/Health Assessment . . . . . . . . . . . . . . . . 3
NURS 362 Research Concepts in Health Care . . . . . . . 3
NURS 411 Topics in Health Care Delivery ........... 3
NURS $435 \quad$ Leadership \& Management in Health
NURS 442 Community Health Nursing . . . . . . . . . . . . 3
NURS 443 BRN Role Practicum . . . . . . . . . . . . . . . . . . . 3
NURS 450 BRN Capstone . . . . . . . . . . . . . . . . . . . . . . . 1

## 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

