# COLLEGE 0f healith and nursing sciences <br> - Advisement <br> - Honors Opportunities and Dean's Scholar Program <br> - Biomechanics and Movement Science <br> - Health and Exercise Sciences <br> - Athletic Training <br> - Exercise and Sport Science <br> - Health and Physical Education <br> - Recreation and Park Administration <br> - Coaching Science Minor <br> - Medical Technology <br> - Nursing <br> - Nursing (BSN) <br> - Baccalaureate for the Registered Nurse (BRN) <br> - Nutrition and Dieterics <br> - Applied Nutrition <br> - Dietetics <br> - Nutritional Sciences 

The College of Health and Nursing Sciences includes the Departments of Health and Exercise Sciences, Medical Technology, Nursing, and Nutrition and Dietetics, and the Biomechanics and Movement Science Program. Undergraduate degree programs are offered in applied nutrition, athletic training, dietetics, exercise and sport science, health and physical education, medical technology, nursing, nutritional sciences, and recreation and parks administration In addition, there are graduate degree programs in biomechanics and movement science, exercise physiology, human nutrition, and nursing, and a post-baccalaureate internship program for registered dietitians.

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 toud.chns@udel.edt

## 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.

Students may also schedule appointments with the professional and administrative staff in the College's Advisement Resource Center. Advisement Resource Center staff will assist students with issues such as withdrawal due to illness or other difficulty, registration problems, and other special requests that require approval by the dean. The Advisement Resource Center at 343 McDowell Hall is open weekdays from $9 \mathrm{a} . \mathrm{m}$. to $4 \mathrm{p} . \mathrm{m}$.; for more information call (302) 831-2381 or visit the Center's website at http://www.udel.edu/shoes/ARC/arc.htm

## HONORS OPPORTUNITIES AND DEAN'S SCHOLAR PROGRAM

Students in all of the college's majors are eligible to participate in the University's Honors Program, undergraduate research, and Degree with Distinction. Honors Degrees are available to students in programs offered by the Department of Nutrition and Dietetics. Also, the college's Dean's Scholar Program provides qualified students in Health and Exercise Sciences or Nutrition and Dietetics with the opportunity to share the responsibility of developing an individualized program focusing on the student's academic interests. Additional information is available from the Advisement Resource Center:

## BIOMECHANICS AND MOVEMENT SCIENCE

The Biomechanics and Movement Science (BIOMS) program is a graduate level interdisciplinary program that combines faculty and physical resources from several different units including the Departments of Mechanical Engineering, Physical Therapy, Health and Exercise Sciences, and Computer and Information Sciences, as well as the Applied Sciences and Engineering Laboratory and the A.I. duPont Hospital for Children. By implementing an interdisciplinary approach involving faculty members with backgrounds in sport biomechanics, physical therapy, applied physiology, engineering, and computer science, students are afforded a diverse educational environment. In addition, the collective research laboratories of the participating units provide outstanding facilities. Programs of study are created to serve the interests of both the student and sponsoring faculty member, and may focus on topics in the areas of biomechanics, motor control, applied physiology, exercise physiology, and rehabilitation technology. Students enrolled in the graduate program come from a variety of undergraduate disciplines including all areas of engineering, computer science, physical therapy, biology, physics,
mathematics, and exercise science. Undergraduate students interested in pursuing graduate work in biomechanics should consider prerequisite undergraduate coursework in anatomy, physiology, linear algebra, calculus, and computer programming. For more information, contact Professor James G Richards, Program Director, Blue Ice Arena, telephone (302) 831-6796; or email jimr@udel.edu.

## HEALTH AND EXERCISE SCIENCES

The activities of the Department of Health and Exercise Science include elective lifetime activity courses, intramural sports, four degree programs, and a minor in Coaching Science

## LIFETIME ACTIVITIES PROGRAM

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

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

## DEGREE PROGRAMS

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

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

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

The Health and Physical Education (HPE) program is approved by the National Association of State Directors of Teacher Education and Certification (NASDTEC). Students who complete program requirements will receive a Bachelor of Science in Health and Physical Education and are eligible for teacher certification through the individual states in the NASDTEC agreement.

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

For more information, contact Professor David Barlow, Chair, 110 Carpenter Sports Building, telephone (302) 831-2265, or visit the department website at http://www.udel.edu/shoes/phys_ed/pefacts.html

## DEGREE REQUIREMENTS

## HEALTH AND EXERCISE SCIENCES MAJORS

UNIVERSITY REQUIREMENTS (required for all programs)
ENGL 110 Critical Reading and Writing (minimum grade C-).................... 3
Three credits in an approved course or courses stressing ..................................... multicultural, ethnic, and/or gender-related content. (see p. 22). This course may also fulfill requirements in the General Studies Area.

## DEPARTMENT GENERAL STUDIES REQUIREMENTS

## Second Writing Course

A writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. Appropriate writing courses are normally designated in the semester's Registration Booklet as "Satisfies Arts and Science Second Writing Course Requirement." (See list of courses approved for Arts and Science second writing requirement, page 69)

## BREADTH REQUIREMENTS

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

## Group A-Communication/Writing Skills

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

## Group B -Humonifies/Fine Arts

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

## Group C-History/Social Sciences

Courses from Accounting (ACCT 352), Anthropology (ANTH- all courses except 102, 104, 202, 404), Black American Studies (BAMS), Business Administration (BUAD 309), Cognitive Science (CGSC 270), Criminal Justice (CRJU), Economics (ECON), Educational Studies (EDST 304, 305), Food and Resource Economics (FREC), Geography (GEOG 102, 120,
$203,210,225,226,227,230,235,236,240,270,310,320,325$, $328,330,340,345,346,351,380,422425,428,430,438,440$,' 445, 448, 454, 455), History (HIST), Human Resources (HURE 4011, Individual and Family Studies (IFST), Jewish Studies (IWST), Legal Studies (LEST), Political Science and International Relations (POSC), Psychology (PSYC - all courses except $306,309,314,380,411,412,414,481$ ), Sociology (SOCI), and Women's Studies (WOMS)

## Grup D-Natural Sciences/Mathematics

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

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

CURRICULUM ..... CREDITS

See University and Department requirements (page 152) for additional degree requirements.

## BREADTH REQUIREMENTS

Group A-Communication/Writing Skills
Must include courses from two different departments.

Group B -Humanifies/Fine Arts

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

NTDT 200 Nutrition Concepts .................................................. 3
PSYC 201 General Psychology ................................................................ 3
BISC 106/116 Elementary Human Physiology and Lab
or
BISC 276 Human Physiology ............. ......................................... 4
STAT 200 Basic Statistical Practice.................................................. 3
CSCC 241 Ethical lssues in Health Care .............. .................................. 3
HPER 210 Safety, First Aid and Emergency Care ............................. 3
HPER 214 Wellness: A Way of Life ........ ........................................... 3
HPER 220 Anatomy and Physiology ... ............................................. 3
HPER 276 Personal Computers/HPER ............................................................ 2

HPER 320 Principles of Strength/Conditioning
HPER 350 Basic Concepts in Kinesiology ...... ........................................ 3
HPER 395 Sports Medicine Pharmacology .......................................... 3
HPER 405 Program Development/Athletic Injury Rehabilitation ............... 3
HPER 407 Prevention/Recognition/Athletic Injuries .......... .................. 3
HPER 409 Therapeutic Modalities ...................................................... 4

HPER 426 Biomechanics of Sports... ............................................... 4
HPER 430 Physiology of Activity ........................................................ 3
HPER 431 Physiology of Activity Lab ............................................ 1
HPER 448 Organization \& Administration/Athletic Training ........... 3
HPER 449 Advanced Topics in Sports Medicine.................................... 3
HPER 480 Practicum in Athletic Training I .................................................. . 3
HPER 481 Practicum in Athletic Training $\begin{array}{r}3 \\ . . \\ \hline\end{array}$

## 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

Incoming freshmen and transfer students interested in the athletic training major at the University of Delaware are admitted to "Athletic Training Interest." At the completion of the freshman year, students desiring admission into the athletic training major must have completed the following:
(1) Freshman Year - B.S.A.T Curriculum:

| BISC 106/116 (or BISC 207) .... 4 | ENGL 110 ....... ...................... 3 |
| :---: | :---: |
| HPER 210 .... ....... ................ | MATH |
| HPER 220 | HPER 305 ............................ 3 |
| HPER 276 ......................... 2 | HPER 214 ...................... 3 |
|  | General Studies ...................... 3 |
| 15 | - |

(2) Minimal overall cumulative index of 2.75
(3) Academic performance in the following courses will be evaluated for admission consideration into the B.S in Athletic Training:
BISC 106/116 (or BISC 207), ENGL 110, HPER 210,
HPER 220, HPER 276, HPER 305, HPER 214.
(4) Complete a minimum of 100 hours of direct observation in the University of Delaware training room under the supervision of qualified faculty/professionals.
(5) Three letters of recommendation; Students must obtain the University of Delaware Athletic Training Admission Recommendation Form from the program director:
(6) Completion of N.A.TA taping checksheet.
(7) Successful interview with the Athletic Training Program Director and faculty. During the interview, students will be evaluated by the Athletic Training Program faculty, a senior student trainer enrolled in the program and/or a certified athletic trainer working in the profession. All evaluators will use a standard evaluation form.
(8) Submission of a written essay
N.A.T.A guidelines state the student-clinical instructor ratio shall not exceed eight (8) students to one (1) clinical instructor during the course of an academic year. Acceptance into the program is based upon the stated criteria and the number of available openings in the program. Meeting the minimum admission requirements does not guarantee acceptance into the program. Offers of admission into the athletic training education program are presented on a competitive basis to those individuals who are most qualified. Students may apply for admission to the program at the end of each fall and spring semester (January 15th and June 15th). 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 Pre-Athletic Training 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 lowrisk 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, wrestling, basketball, volleyball and lacrosse. The Athletic Training Faculty formally evaluates each student's progress at the end of each semester.

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

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

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

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

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

## EXERCISE AND SPORT SCIENCE

## ADMISSION REQUIREMENTS AND GUIDELINES

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

1. Completion of at least 28 credits at the University of Delaware.
2. Successful completion of the following courses: ENGL 110; HPER 210; HPER 214; HPER 220; HPER 276; HPER 305; BISC course with lab, and a MATH course.
3. Completion of the appropriate application form for the chosen concentration. Applications are due by June 15th of each year for admission the following fall. Forms are available in and must be returned to the Advisement Resource Center, 343 McDowell Hall.
a Only students matriculated in the Department of Health and Exercise Sciences may apply for admission to the concentrations
b. Meeting the minimum admission requirements does not guarantee admission to the concentration Offers of admission to Exercise Physiology, Figure Skating Science, Fitness Management, and Strength and Conditioning are presented on a competitive basis to those individuals who are most qualified
4. Each of the concentrations have additional requirements, as follows:
a. Exercise Physiology: Admission will be based on cumulative and major GPA, as well as the criteris listed in 1-3 above, with selection on a competitive basis.
b. 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.
c. Fitness Management: Requires a minimum grade-point average of 2.00 . Students will be evaluated and offered admission based on the following criteria: Cumulative and major gradepoint averages; application; written essay; and interview (if necessary). Approximately 20 seats are available each year. Once admitted to the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review. Students must complete HPER 354 Fitness Management and all courses in the concentration before enrolling in HPER 464 Internship Experience.
d. Physical Education Studies: Upon completion of HPER 235 Professional Transitions and a conference with the faculty advisor, students must declare either two University-approved minors or one University-approved minor and one area of study, approved by the advisor.
e. Strength and Conditioning: Students desiring admission must have a minimum grade-point average of 2.00 and must have completed 100 hours of direct observation in the Chuck Hall Weight Room under the supervision of the Director of the program. Students will be evaluated and offered admission based on the following criteria: Cumulative and major grade-point averages; application; written essay; written log of direct observation hours; and interview (if necessary). Approximately 3 to 5 seats are available each year. Once admitted to the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review. A minimum of 300 hours of clinical experience must be obtained upon acceptance into the program. The hours must be accumulated over a minimum of three semesters ( 100 hours per semester) and students cannot participate in clinical experience for more than five semesters. Students must complete HPER 416 Practicum in Strength and Conditioning, the United States Weightlifting Federation Certification course, and the 300 hours of clinical experience before enrolling in HPER 464 Internship Experience

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

See University and Department requirements (page 152) 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
HPER 210 Safery, First Aid, \& Emergency Care ..... 3
HPER 214 Wellness: A Way of Life ..... 3
HPER 220 Anatomy and Physiology .....  3
HPER 276 Personal Computers in Health, ..... 2
HPER 300 Issues in Physical Activity Studies and Sports .....  3
HPER 305 Fundamentals of Athletic Training ..... 3
HPER 324 Measurement and Evaluation 3
HPER 342 Survey in Adaptive Physical Education/RecreationHPER 350 Basic Concepts in Kinesiology 3
HPER 430 Physiology of Activity . .....  3
HPER 431 Physiology of Activity Lab ..... 1
CONCENTRATION REQUIREMENTS
BISC 276 Human Physiology ..... or
BISC 306 General Physiology ..... 4
CHEM 104 General Chemistry ..... 4
PHYS 201/202 Introductory Physics I and II8
STAT 200 Basic Statistical Practice ..... 3
HPER 353 Seminar in Exercise Physiology ..... 3
HPER 420 Functional Human Anatomyor
BISC 442 Vertebrate Morphology ..... 4
HPER 426 Biomechanics of Sport ..... 4HPER 432 Basic Exercise Prescription
Or 4 EXER 434 Exercise Test Technology. ..... 3
ELECTIVESAfter required courses are completed, sufficient elective credits must betaken to meet the minimum credits required for the degree.CREDITS TO TOTAL A MINIMUM OF120
DEGREE: BACHELOR OF SCIENCE IN PHYSICAL EDUCATION STUDIES MAJOR: EXERCISE AND SPORT SCIENCECONCENTRATION: FIGURE SKATING SCIENCE
CURRICULUMCREDITSSee University and Department requirements (page 152) foradditional 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 orhigher, BISC course with lab, and NTDT 200

## MAJOR REQUIREMENTS

| NTDT 310 | Nutrition and Activity |
| :---: | :---: |
| HPER 210 | Safety, First Aid, and Emergency Care |
| HPER 214 | Wellness: A Way of Life ... . |
| HPER 220 | Anatomy and Physiology |
| HPER 276 | Personal Computers in Health, Physical Education and Recreation |
| HPER 300 | Issues in Physical Activity Studies and Sport |
| HPER 305 | Fundamentals of Athletic Training.. |
| HPER 324 | Measurement and Evaluation |
| HPER 342 | Survey in Adaptive Physical Education |
| HPER 350 | Basic Concepts in Kinesiology |
| HPER 430 | Physiology of Activity . |
| HPER 431 | Physiology of Activity Lab |
| CONCENTRATION REQUIREMENTS |  |
| HPER 250 | Motor Development |
| HPER 260 | Leisure Service Programming |
| HPER 270 | Recreation Leadership |
| HPER 320 | Principles of Strength \& Conditioning |
| HPER 355 | Figure Skating Practicum I |
| HPER 356 | Figure Skating Practicum II |
| HPER 360 | Psychology of Coaching |
| HPER 426 | Biomechanics of Sports. |
| HPER 440 | Strategies for Athletic Peak Performance |
| HPER 455 | Figure Skating Practicum III |
| HPER 456 | Figur |

## ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree
CREDITS TO TOTAL A MINIMUM OF ..... 120

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

CURRICULUM
See University and Department requirements (page 152) for additional degree requirements. The Second Writing requirement must be filled with ENGL 312.

## BREADTH REQUIREMENTS

Group A-Communication/Writing Skills.
Must include courses from two different departments
Group B -Humanities/Fine Arts
Group C-Hisfory/Social Sciences .............................................. 6
Must include a PSYC course and a SOCl course
Group D-Natural and Biological Sciences/Mathematics
Must include an approved 3-credit MATH course at the 100 -level or higher, BISC course with lab, and NTDT 200
Additional credits from Groups A-D ... 9

MAJOR REQUIREMENTS
BUAD 301
Introduction to Marketing (prerequisite: ECON 151)
or
BUAD 309 Management and Organizational Behavior .................... 3

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

HPER 220 Anatomy and Physiology .... ....................................... 3
HPER 276 Personal Computers in Health, Physical ......................... 2
HPER $300 \quad \begin{array}{ll}\text { Education and Recreation } \\ \text { Issues in Physical Activity Studies and Sports } \\ \ldots . . . . . . . . . . . . . . . . . . . . ~ & 3\end{array}$
HPER 305 Fundamentals of Athletic Training........................................... 3
HPER 324 Measurement and Evaluation 3
HPER 342 Survey in Adaptive Physical Education .......................................... 1
HPER 350 Basic Concepts in Kinesiology

HPER 431 Physiology of Activity Lab .............................................. 1

## CONCENTRATION REQUIREMENTS

HPER 263 Leadership Practicum....................................................................... 1
HPER 320 Principles Strength and Conditioning
HPER 332 Health Behavior Theory and Assessment ............................. 3

HPER 432 Individualized Physical Fitness 3
HPER 434 Exercise Test Technology ....................... ............................. 3
HPER 445 Concepts of Physical Fitness Testing ....................................... 3
HPER 452 Principles of Fitness Management ................................ 3
HPER 464 Internship in Fitness Management .............................. 9
HPER 490 Development of Health Promotion Programs .............................. 3
Students must register for HPER 354 two semesters before registering for
HPER 464 and must complete all the courses listed under "Major
Requirements" before registering for HPER 464
ELECTIVES
After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.
CREDITS TO TOTAL A MINIMUM OF .................................... 120

## DEGREE: BACHELOR OF SCIENCE IN PHYSICAL EDUCATION STUDIES <br> MAJOR: EXERCISE AND SPORT SCIENCE CONCENTRATION: PHYSICAL EDUCATION STUDIES

CURRICULUM

CREDITS
See University and Department requirements (page 152) for additional degree requirements.

BREADTH REQUIREMENTS
Group A-Communication/Writing Skills ...................................... 6
Must include courses from two different departments.
Group B -Humanities/Fine Arts3
Group C-History/Social Sciences ..... 6Group D-Natural and Biological Sciences/Mathematics14

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
rgency Care .....  3HPER 214 Wellness: A Way of Life
HPER 220 Anatomy and Physiology3
HPER 276 Personal Computers in Health, ..... 2
HPER 300 Issues in Physical Activity Studies and Sports3
3
HPER 30.5 Fundamentals of Athletic TrainingHPER 324 Measurement and Evaluation
HPER 342 Survey in Adaptive Physical Education/Recreation.
HPER 350 Basic Concepts in KinesiologyHPER 430 Physiology of ActivityHPER 431 Physiology of Activity Lab3
3CONCENTRATION REQUIREMENTS
HPER 235 Professional Transitions ..... 3
Option 1 ..... minimum 30

Minor I (15 credits) and Minor II (15 credits) or
Option II ..... minimum 30
Minor 1 ( 15 credits) and Area of Study ( 15 credits)with course work in the Area of Study to be developed with a depart-ment academic advisor and approved by the Chair of the Health \& Exer-cise Sciences Department.
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credits required for the degree
CREDITS TO TOTAL A MINIMUM OF ..... 120

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

CURRICULUM
CREDITS
See University and Department requirements (page 152) 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 orhigher, BISC 106/116, NTDT 200, and a CHEM course with lab
Additional credits from Groups A-D ..... 9
MAJOR REQUIREMENIS ..... 3
HPER 210 Safery, First Aid, and Emergency Care .....  3
Wellness: A Way of Life ..... 3
HPER 220 Anatomy and Physiology$\begin{array}{r}3 \\ -3 \\ \hline\end{array}$
HPER 300 Issues in Physical Activity Studies and Sports .....  3
HPER 305 Fundamentals of Athletic Training ..... $\begin{array}{r}3 \\ \hline\end{array}$HPER 324 Measurement and Evaluation
HPER 342 Survey in Adaptive Physical Education
HPER 350 Basic Concepts in Kinesiology$\begin{array}{r}+ \\ \hline\end{array}$
HPER 430 Physiology of Activity HPER 431 Physiology of Activity Lab ..... 3
CONCENTRATION REQUIREMENTS
HPER 320 Principles in Strength and Conditioning ..... 3
HPER 321 Advanced Principles in Strength and Conditioning ..... 4
HPER 322 Weight Room Safety and Design
3
HPER 323 Theories and Applications of Program Design ..... 1
HPER 354 Seminar .....  3
Principles of Coaching3
3
3
HPER 426 Biomechanics of Sport ..... - 3
HPER 440 Strategies of Peak Athletic Performance ..... 3
9
Students must register for HPER 354 two semesters before registering forHPER 464 and must complete all the courses listed under "MajorRequirements" and "Concentration Requirements" before registering forHPER 464

## ELECTIVES

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

CREDITS TO TOTAL A MINIMUM OF120
DEGREE: BACHELOR OF SCIENCE IN HEALTH AND PHYSICAL EDUCATION
MAJOR: HEALTH AND PHYSICAL EDUCATION
CURRICULUMCREDITS
See University and Department requirements (page 152) foradditional degree requirements.
BREADTH REQUIREMENTS
Group A-Communication/Writing Skills ..... 3
Group B -Humanities/Fine Arts ..... 3
Group C-History/Social Sciences ..... 6
Must include PSYC 201 and IFST 401
Group D-Natural and Biological Sciences/Mathematics10
Must include an approved 3-credif MATH cours
Additional credits from Groups A-D3

## MAJOR REQUIREMENTS

C- or better required in all courses except EDST
EDST 201 Diversity in the Classroom
EDST 304 (Fulfills University multicultural requirement)
Educational Psychology - Social Aspects .................................. 3
EDST 305 Educational Psychology - Cognitive Aspects .......................... 3
EDDV 400 Student Teaching
Students must have a minimum cumulative g.p.a of 2500 , a g.p.a in the major of at least 2.750 , and must apply to student teach at least one semester in advance.

HPER 140 Fundamental Skills Analysis...... ............................................. 2

HPER 210 Safery, First Aid and Emergency Care ........................................... 3
HPER 214 Wellness: A Way of life ...................................................... 3


HPER 276 Personal Computers in Health, ................................................... 2
Physical Education and Recreation
HPER 300 Issues in Physical Activity Studies and Sports ......................... 3
HPER 315 Methods and Materials in Drug Education
HPER 324 Measurement and Evaluation..................................................... 3
HPER 325 Human Sexuality; Methods and Materials . .................................. 3

HPER 332 Health Behavior Theory and Assessment ................................. 3
HPER 342 Survey in Adaptive Physical Education/Recreation ...................... 3
HPER 360 Psychology of Coaching ...................................................... 1
HPER 414 Methods and Materials in Health Education ............................ 3
HPER 426 Biomechanics of Sports ..... ......................................... ........ 4
HPER 430 Physiology of Activity ............................................................... 3
HPER 431 Physiology of Activity Lab
HPER 141, 142, 143, 144, 242, 243, 244, 251, 252, 253, ...................... 11 and 255 Skills Courses
HPER 370 Practicum in Methods of Elementary Physical Education ............... 3
HPER 380 Practicum in Methods of Secondary Physical Education … ... 3
HPER 465 Teaching Seminar in Health/Physical Education ........................ 3
Students must have completed HPER 214, HPER 315, HPER 325, and IFST 401 prior to enrolling in HPER 414
Students must apply for Upper Division Clearance prior to enrolling in HPER 325, HPER 370, HPER 380, and HPER 414 In order to apply, students must have completed the eleven HPER Skills Courses and HPER 140 and must have attained ag.p a of at least 2.750 in the major and a 2.500 overall.

## ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.
CREDITS TO TOTAL A MINIMUM OF ..... 128

DEGREE: BACHELOR OF SCIENCE IN RECREATION
AND PARK ADMINISTRATION

MAJOR: RECREATION AND PARK ADMINISTRATION CONCENTRATION: PARKS
CURRICULUM
CREDITS
See University and Department requirements (page 152) for additional degree requirements.

BREADTH REQUIREMENTS

Group A-Communication/Writing Skills. ..... 6
Group B -Humanifies/Fine Arts ..... 6
Group C-History/Social Sciences ..... 6
Must include courses from two different departments.
Group D-Natural and Biological Sciences/Mathematics ..... 10
Must include an approved 3-credit MATH course at the 100 -level orhigher.
Additional credits from Groups A-D ..... 9
MAJOR REQUIREMENTS

Requires a grade of C - or better in each course
FREC 201 Records and Accounts.3
HPER 105 Foundations of Recreation and Leisure Skills. ..... 3
HPER 164 Practicum in Recreation and ParksHPER 210 Safety, First Aid and Emergency CareHPER 214 Wellness: A Way of Life
HPER 260 He Service Prer
HPER 270 Recreation Leadership ..... 33
3

HPER 276
Personal Computers in Health, Physical 2 Education and Recreation
HPER 318
Special Recreation3
HPER 341 Principles of Outdoor Recreation3
HPER 354 Seminar in Recreation ..... 1HPER 404 Organization, Administration, Recreation and Leisure Service
HPER 450 Facility and Park Management3
HPER 464 Internship in Recrection ..... 9
Students must register for HPER 354 two semesters before registering forHPER 464, and must complete all courses in the "Major Requirements"before enrolling in HPER 464
POSC 220 Introduction to Public Policy ..... 3
GEOG 428 Land Use and Environmental Planning ..... 3
GEOG 235 Conservation of Natural Resources
or
PHIL 448 Environmental Ethics ..... 3
6 credits from Plant Science, Engineering Technology, or
Entomology \& Applied Ecology with approval of advisor. ..... 6
6 credits from Communication, Criminal Justice, Geography,
Philosophy, or Political Science with approval of advisor. ..... 6
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credits required for the degree
CREDITS TO TOTAL A MINIMUM OF ..... 120
DEGREE: BACHELOR OF SCIENCE IN RECREATION AND PARK ADMINISTRATION
MAJOR: RECREATION AND PARK ADMINISTRATIONCONCENTRATION: PROGRAMMING AND LEADERSHIP
CURRICULUMCREDITS
See University and Department requirements (page 152) for additional degree requirements.
BREADTH REQUIREMENTS
Group A-Communication/Writing Skills ..... 6
Group B -Humanities/Fine Arts ..... 6
Group C-Hisfory/Social Sciences ..... 6
Must include courses from two different departments
Group D-Natural and Biological Sciences/Mathematics ..... 10
Must include an approved 3-credit MATH course at the 100 -level or higher ..... 9
MAJOR REQUIREMENTS
Requires a grade of C - or better in each course
FREC 201 Records and Accounts .....  3
HPER 105 Foundations of Recreation and Leisure Skills .....  3
HPER 164 Practicum in Recreation and Parks ..... 3
HPER 210 Safety, Firsi Aid and Emergency Care .....  3
HPER 214 Wellness: A Way of Life ..... $\begin{array}{r}3 \\ 3 \\ \hline\end{array}$
HPER 260 Leisure Service Programming$\begin{array}{r}3 \\ - \\ \hline\end{array}$
HPER 270 Recreation Leadership ..... 3
HPER 276 Personal Computers in Health, Physical ..... 2
HPER 318 Special Recreation ..... 3
HPER 341 Principles of Outdoor Recreation ..... 3
HPER 3.54 Seminar in RecreationHPER 404 Organization, Administration, Recreation and Leisure Service$\begin{array}{r}1 \\ \\ \hline\end{array}$
HPER 450 Facility and Park Management3
3
9
HPER 464 Internship in Recreation
Students must register for HPER 354 two semesters before registering forHPER 464, and must complete all courses in the "Major Requirements"before enrolling in HPER 464Programming and Leadership Courses reflecting a ............ ............................ 21sub-discipline of recreation/leisure chosen under the direction of fac-ulty advisor and submitted for approval to the advisor and RecreationCurriculum Coordinator no later than the beginning of the secondsemester of the junior year
ELECTIVESAfter required courses are completed, sufficient elective credits must betaken to meet the minimum credits required for the degree.120

## COACHING SCIENCE MINOR

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

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

This minor requires the following courses:
HPER 210 Safety, First Aid, and Emergency Care ............................ 3
HPER 220 Anatomy and Physiology ............................................. 3
HPER 320 Strength and Conditioning .............................................. 3
HPER 390 Principles of Coaching ....................................................... 3
HPER 360 Psychology of Coaching ............................................... 1
HPER 460 Coaching/Performance Practicum ....................................... 2
Sport Specific Electives in Skills/Coaching ............................................... 3
A total of twenty-six elective options exist to meet the 3 credits of Skills/Coaching requirement Selection will be made with minor advisor's approval

## MEDICAL TECHNOLOGY

Medical Technology is clinical laboratory science related to the prevention, diagnosis and therapy of disease. The Medical Technology major is accredited by the National Accrediting Agency for Clinical Laboratory Sciences ( 8410 West Bryn Mawr Ave, Suite 670, Chicago, IL 60631-3415; telephone 773-714-8880). The 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.

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, 371, and CHEM 103, 104, 213, and 214-216.
3. Completion of at least 60 credits, including the courses listed above.
4. Within the pool of eligible students, admission to the major courses will be determined by academic achievement. All applicants will be evaluated by the Medical Technology Undergraduate Program Committee
The following course sequence is recommended. These courses may be subject to change, so it is essential that students meet regularly with their faculty advisors. A minimal grade of C - is required in each MEDT course in the Medical Technology major In order to meet degree requirements, medical technology majors must have a minimum cumulative grade point average of 2.0 to progress in the medical technology sequence A student who earns a grade lower than C - in a medical technology course must repeat the course and achieve a grade of at least C-before enrolling in any medical technology course which has the prior course as a prerequisite Students are not permitted to repeat any medical technology course more than once. Further, students who earn a grade lower than C- in more than one medical technology course will not be permitted to continue in the major

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> Telephone: (302) 831-2849
> Website: http://www udel edu/diehman $/ \mathrm{mt} \mathrm{htm}$

## DEGREE: BACHELOR OF SCIENCE MAJOR: MEDICAL TECHNOLOGY

CURRICULUM
CREDITS

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) ..................... 3
Three credits in an approved course or courses stressing .......................... 3
mulficultural, ethnic, and/or gender-related content (see p. 22).

## MAJOR REQUIREMENTS

Writing: (minimum grade $C$-)
A second wrifing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 69.)
One of the following ..... 3-4
MATH 114 College Mathematics and Statistics(for students who do not intend to continue the study of mathematics)MATH 115 Pre-Calculus
(for students who intend
MATH 221 Calculus 1
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 70.1
Group A: Understanding and appreciation of the creative arts and humanities ..... 6
Group B: The study of culture and institutions over time ..... ..... 6
Group C: Empirically based study of human beings and their environment ..... 6
(minimum grade of $C$ - required in all MEDT courses)
MEDT 100 Introduction to Medical Technology ..... 1MEDT 370 Phlebotomy Practicum.1
$-\quad 1$
$\times 1$
MEDT 372 Diagnostic Parasitology.
MEDT 374 Introduction to Clinical Chemistry ..... 1
2
MEDT 376 Clinical Virology and Immunology2
2
MEDT 378 Clinical Laboratory Computer Applications'. 2
MEDT 400 Urinalysis and Body Fluids. ..... 2
MEDT 401 Clinical Physiological Chemistry I .... .....  3
MEDT 411 Clinical Physiological Chemistry I Laboratory2
2
2
MEDT 404 Hematology2
2
1
MEDT 414 Hematology I Laboratory ..... 1
MEDT 406 Medical Microbiology3
MEDT 416 Medical Microbiology Laboratory.1
2
1
MEDT 410 Principles of Medical Technology Education ..... 1
MEDT 403 Clinical Physiological Chemistry II .....

MEDT 418 Medical Technology Senior Seminar....................................... 0

MEDT 415 Hematology II Laboratory ...................................................... 2
MEDT 409 Immunohematology
MEDT 419 Immunohematology Laboratory ...........................................................

MEDT 421 Immunohematology II Laboratory ..........................................
MEDT 430 Diagnostic Bacteriology and Medical Mycology .............................. 2
MEDT 431 Diagnostic Bacteriology and Medical Mycology Laboratory … 2
MEDT 461 Management Topics in Medical Technology ................................. 1
MEDT 471 Seminar: Medical Technology Laboratory Management
MEDT 472 Clinical Urinalysis and Serology Practicum...

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 .............................................................. 4
BISC 371 Introduction to Microbiology ................................................. 4

CHEM 103/104 General Chemistry ......................................................... 8
CHEM 213 Elementary Organic Chemistry and
CHEM 214/216 Elementary Biochemistry with Lab or
CHEM 321/322 Organic Chemistry
CREDITS TO TOTAL A MINIMUM OF .................................... 123

## NURSING

The Department of Nursing offers a four-year baccalaureate degree program in nussing 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 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 Nusse Specialist/Specialty Nurse Practitioner option.

The four-year Bachelor of Science in Nursing program is designed to develop the knowledge, understanding and skill essential for the practice of professional nursing and to provide the basis for graduate education. The program is accredited by the National League for Nursing and information on program requirements is available from the League at 350 Hudson St., New York, NY, 10014; telephone 1-800-669-1656. The first two years of the program include foundation courses in the natural, social, and behavioral sciences, liberal atts, and three introductory nursing courses. The third and fourth years of study include clinical and nonclinical nursing courses as well as elective courses. The Department of Nursing uses many health care agencies in the Wilmington-Newark and nearby areas for clinical teaching.

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

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

## POLICIES

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

Students are not permitted to repeat any nursing course more than once. Further, students who earn a grade lower than $C$ - in more than one nursing course will not be permitted to continue in the program. Program policies are currently under review, and all students must 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

Craduates are eligible for registered nurse licensure in Delaware or other states 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.

> Janice A. Selekman, Chair, Professor. Office: 357 McDowell Hall Telephone: (302) $831-2193$
> Website: http://www.udel edu/nursing/udnursing html

## ACCELERATED NURSING DEGREE PROGRAM

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

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

Eligibility for this course of study includes the following:

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

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

If you have further questions, please contact The Department of Nursing, 302-831-2193; e-mail: ud-chns@udel edu.

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

CURRICULUM CREDITS

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) $\ldots \ldots \ldots \ldots . . . . . . . . . . . . . . . . .3$
Three credits in an approved course or courses stressing .... ............................. 3
multicultural, ethnic, and/or gender-related content (see p 22)
MAJOR REQUIREMENTS
BISC 207/208 Introductory Biology I and II .................................................. 8
BISC 276 Human Physiology ..........................................................................
BISC 371 Introduction to Microbiology ...................................................... 4
CHEM 105 General Chemisiry

NTDT 200 Nutrition Concepts ................................................................. 3
STAT 200 Basic Statistical Practice .........................................................................
ENGL 301 Expository Writing ............................................................................. 3
Literature course 200-level or above .................................................................. 3
Philosophy course .... .......................................................................................... 3
Restricted Humanities course chosen from among ........................................ 3
Art, Art History, Ancient Literature, Comparative Literature, Foreign
Languages and Literatures, Modern Literature, History, Philosophy,
Music, Theatre
PSYC 201 General Psychology ............................................................ 3
IFST 201 Life Span Development

Anthropology course 100-level or above ................................................. 3
Restricted Social Science course chosen from among ........................................ 3
History, Political Science, Economics, Black American Studies,
Women's Studies, Psychology, Sociology.
NURS 205 Societal Context of Nursing ...................................................... 3
NURS 212 Concepts in Pathophysiology ............................................ 3

NURS 306 Determinants of Wellness
NURS 308 Restorative Nursing Practice 1
NURS 315 Practicum 1.
NURS 312 Pathophysiology
NURS 314 Psychopathology ....................................................... 2

NURS 318 Practicum III
or
NURS 319 Practicum IV ... ........................................................................ 3
NURS 332 Pharmacological Nursing Responsibility .............................. 3


NURS 409 Professionalism in Nursing Practice ................................... .... 2
NURS 411 Topics in Health Care Delivery …...................................... 3

NURS 418 Practicum VI
or
NURS 419 Practicum VII ............................................................................ 3
NURS 420 Practicum VIII ........................................................................ 6

## ELECTIVES

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

## CREDITS TO TOTAL A MINIMUM OF

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

## BACCALAUREATE FOR THE REGISTERED NURSE (BRN)

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

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

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

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

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C) … ........ 3
Three credits in an approved course or courses stressing ......................$\begin{array}{r}3 \\ \hline\end{array}$
multicultural, ethnic, and/or gender-related content (see p 22)

## MAJOR REQUIREMENTS

24 credits, to include a minimum of one course in each of the 24
following five categories: (1) biology, (2) microbiology, (3) chemistry, (4) anatomy and physiology, and (5) nutrition
STAT 200 Basic Statistical Practice
English course (second English composition course) ................ 3
Literature course3
Philosophy course ..... 3
Psychology course ..... 3
Sociology course ..... 3
Lifespan development course
3
Restricted elective chosen from the following ..... 3
Art, Art History, History, Philosophy, Music, Theatre, Comparative Literature, Black American Studies, Economics, Political Science, Women'sStudies, Foreign Languages and Literatures, Linguistics, and English.
NURS 312 Pathophysiology ..... 4
NURS 314 Psychopathology ..... 3
NURS 340 Current Perspectives in Professional Nursing$\begin{array}{r}-\quad 3 \\ - \\ \hline\end{array}$
NURS 342 Nursing Informatics ..... 2
NURS 343 Transition to Baccalaureate Nursing Education2
.1
.2
NURS 344 Wellness/Health Assessment2
NURS 405 Introduction to Nursing Research ..... 2
NURS 411 Topics in Health Care Delivery3
.1
Learning Lab: Health Assessment3
NURS 442 Community Health Nursing ..... 3
NURS 445 Nursing Research Applications ..... 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

## NUTRITION AND DIETETICS

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

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

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

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

The Nutritional Sciences major meets the needs of students who want to focus strongly on the science aspects of human nutrition. As a premedical program, it prepares students for careers in dentistry, veterinary and human medicine, laboratory research in nutrition, or positions with companies or agencies requiring the extensive use of a strong science and human nutrition background. It provides students with a strong foundation for graduate work in human nutrition and related fields (e.g., physical therapy) and as such may be considered primarily as a preprofessional degree. Students planning on careerrelated employment upon graduation are encouraged to plan their electives in a concentrated area of interest such as journalism, dietetics, food science, child development, chemistry, biological sciences, or other related fields.

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

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

There are several special academic opportunities for exceptionally talented and highly motivated students Students in each Nuttition 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

$$
\begin{array}{r}
\text { Jack Smith, Chair Office: } 238 \text { Alison Hall } \\
\text { Telephone: (302) 831-8729 } \\
\text { Website: http://napa ntdt ude edu/index html }
\end{array}
$$

## 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

American Studies, 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 27 of this catalog)

## DEGREE: BACHELOR OF SCIENCE MAJOR: APPLIED NUTRITION



## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)
multicultural, ethnic, and/or gender-related content (see p 22).

## MAJOR REQUIREMENTS

Humanities electives
CHEM 101/102 General Chemistry
or
CHEM 103/104 General Chemistry .8
CHEM 213 Elementary Organic Chemistry ..... 4
CHEM 214/216 Elementary Biochemistry with Lab ..... $-4$
BISC $103 / 113$ General Biology with Lab
BISC 207/208 Introductory Biology I and II ..... 4.8
BISC 106/116 Elementary Human Physiology with Lab
or
BISC 276 Human Physiology ..... 4
Students desiring to fulfill a Biology minor should take BISC. 207, 208and 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
social Science elective
3
FOSC. 305/306 Food Science with Lab (minimum grade of C. ..... 3
or
Successful performance on the Proficiency Test in Mathematics adminis-tered by Department of Mathematical Sciences
3
IFST course ..... 3A minimum grade of C - must be achieved for credits to count toward thefulfillment of 28 credits in NTDT; a minimum grade of C - in 200 -levelcourses must be achieved to proceed to upper-level courses; only 300 -level courses and a maximum of four credits of Special Problems/Inde-pendent Study (NTDT $\times 66$ ) may count toward the fulfillment of thisrequirement.
NTDT 103 Introduction to Nutrition Professions ..... 1
NTDT 200 Nutrition Concepts ..... 3
NTDT 201 Food Principles.NTDT 211 Food Principles LaboratoryNTDT 400 MacronutrientsNTDT 401 Micronutrients3
NTDT 445 Nutrition Education ..... 3NTDT courses (300 level or higher)
NIDT courses (300-level or higher)3
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credits required for the degreeMay include Military Science, Music, or Physical Education. (Only twocredits of activity-type Physical Education and four credits of Music andfour credits of 100 - and 200 -level courses in Military Science/Air Forcemay be counted toward the degree.)
CREDITS TO TOTAL A MINIMUM OF ..... 120
DEGREE: BACHELOR OF SCIENCE MAJOR: DIETETICSCURRICULUMCREDITS
UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing (minimum grade C-) ..... 3
Three credits in an approved course or courses stressing ..... 3
multicultural, ethnic, and/or gender-related content (see p. 22).
MAJOR REQUIREMENTS
Humanities electives ..... 9
CHEM 101/102 General Chemistry
CHEM 103/104 General Chemistry ..... 8
CHEM 213 Elementary Organic Chemistry ..... 4
CHEM 214/216 Elementary Biochemistry with Lab ..... 4
BISC 103/113 General Biology with Lab
BISC 207/208 Introductory Biology I and II4.8
BISC 106/116 Elementary Human Physiology with Lab
or 276 Human Physiology ..... 4
BISC 371 Introduction to Microbiology ..... 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
PSYC 201 General Psychology .......... .................... ................................ 3
One of the following courses ... ............. ......... ... ...................................... . 3
SOCl 201 introduction to Society
SOCI 202 Social Deviance
SOCI 203 The Individual and Society
SOCl 204 Urban Communities
SOCl 209 Social Problems
SOCI 210 Population Problems
SOCl 242 Society and the Health Professions
SOCl 243 Society, Polifics and Health Care
PSYC 303 Introduction to Social Psychology
SOCI 310 Sociology of Healthcare
BUAD 309 Management and Organizational Behavior .................................. 3
Social Science elective ........................ ......... .... ........................................... 3
FOSC 305/306 Food Science with Lab (minimum grade C-) ........ 3
Statistics course selected from: STAT 200, PSYC 309, FREC 408
MATH 114 Elementary Mathematics and Statistics.......................................... 3
or
Successful performance on the Proficiency Test in Mathematics admin-
istered by Department of Mathematical Sciences.
IFST course.
A minimum grade of C - must be achieved for credits to count toward the fulfillment of 39 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.
Admission into Dietetics requires the completion of most courses in the first three semesters of Applied Nutrition A cumulative grade point average of 2.5 is required for admission.
NTDT 103 Introduction to Nutrition Professions ............ .............................. 1
NTDT 200 Nutrition Concepts ........................................................................ 3
NTDT 201 Food Principles .............................................................. 2
NTDT 211 Food Principles Laboratory .............................................. 1
NTDT 240 Introduction to Clinical Dietetics ............................................ 3

NTDT 322 Management of Food and Nutrition Services........................... 3
NTDT 325 Laboratory in Quantity Food Production and Service. ............... 1
NTDT 328 Foodservice Facility Design ................................................. 1
NTDT 330 Nutrition Counseling ... .............. . . ............................................... 3


NTDT 403 Dietetics Seminar ................................................................ 1
NTDT 421 Nutrition Assessment Methods ...... .............................................. 2
NTDT 440 Nutrition and Disease ................................................................. 3
NTDT 445 Nutrition Education .. .................................................................. 3
NTDT 460 Community Nutrition ............................................................. 3

## ELECTIVES

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

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: NUTRITIONAL SCIENCES

CURRICUIUM CREDITS
UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing (minimum grade C-) ........... 3
Three credits in an approved course or courses stressing ............................... 3
multicultural, ethnic, and/or gender-related content (see p. 22)

## MAJOR REQUIREMENTS

Humanities electives . .......................................... ................................... 9
CHEM 103/104 General Chemistry ..... ............................................. 8
CHEM 214/216 Elementary Biochemistry with Lab
CHEM 220/221 Quanfative Analysis I with Lab .......................................... 4
CHEM 321/322 Organic Chemistry
BISC 207/208 Introductory Biology I and II .............................................. 8
BISC 276 Human Physiology .................................................................. 4
BISC 371 Introduction to Microbiology …….............................................. 4

ECON 100 Economic Issues and Policies
ECON 151 Introduction to Microeconomics: Prices and Markets
Social Science electives ..... 12
FOSC 305/306 Food Science with Lab (minimum grade C-) .....  3
FREC 408 Research Methods ..... 3
MATH 221/222 Calculus I and IIMATH 241/242 Analytic Geometry and Calculus A and B6-8
A minimum grade of $C$ - must be achieved for credits to count toward thefulfillment of 29 credits in NTDT; a minimum grade of C - in 200 -level cours-es must be achieved to proceed to upper-level courses; only 300 -levelcourses and a maximum of four credits of Special Problems/IndependentStudy (NTDT x66) may count toward the fuffillment of this requirement.
NTDT 200 Nutrition Concepts ..... 3
NTDT 201 Food Principles. ..... 2
NTDT 211 Food Principles LaboratoryNTDT 400 Macronutrients
NTDT 401 Micronutrients
NTDT 421 Nutrition Assessment Methods ..... 2$\begin{array}{r}. . . \\ \hline\end{array}$NTDT 440 Nutrition and Disease
NTDT courses ( 300 -level or higher) ..... $\begin{array}{r}3 \\ \cdots \\ \hline\end{array}$
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

## MINOR IN NUTRITION

Requirements for a minor in nutrition requires NTDT 200, NTDT 400 , NTDT 401 plus 6 credits in Nutrition and Dietetics at the 300level 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.

