

COLLEGE OF HEALTH AND NURSING SCIENCES

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 - Nursing (BSN)
 - Baccalaureate for the Registered Nurse (BRN)
- Nutrition and Dietetics
 - Applied Nutrition
 - Dietetics
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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 to ud.chns@udel.edu.

ADVISEMENT

5 tudents 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 a.m. to 4 p.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 arts base and opportunities for in-depth study in a specialty field. Internships or clinical experiences are available in each degree option.

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

Students interested in the exercise and sport science major, with concentrations in 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-) 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 —Humanities/Fine Arts

Group B —Humanities/Fine Arts
Courses from Art (ART), Art History (ARTH), Arts and Science (ARSC 125, 126, 127, 130, 295, 296, 360), Art Conservation (ARTC), Science and Culture (CSCC 206, 229, 241, 246, 250, 330, 365, 368, 369, 444), Comparative Literature (CMLT), Consumer Studies (CNST 114, 213, 214, 221, 225, 233), English (ENGL literature courses), Foreign Languages and Literature (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). 442, 465, 471, 480)

Group C-History/Social Sciences

Courses from Accounting (ACCT 352), Anthropology (ANTH- all courses except 102, 104, 202, 404), Black American Studies (BAMS), Business Administration (BUAD 309), Cognitive Science (CGSC 270), Criminal Justice (CRJU), Economics (ECON), Educational Studies (EDST 304, 305), Food and Resource Economics (FREC), Geography (GEOG 102, 120, 203, 210, 225, 226, 227, 230, 235, 236, 240, 270, 310, 320, 325, 328, 330, 340, 345, 346, 351, 380, 422 425, 428, 430, 438, 440, 445, 448, 454, 455), History (HIST), Human Resources (HURE 401), Individual and Family Studies (IEST), Lewish Studies (IWST), Legal Studies vidual and Family Studies (IFST), Jewish Studies (JWST), Legal Studies (LEST), Political Science and International Relations (POSC), Psychology PSYC - all courses except 306, 309, 314, 380, 411, 412, 414, 481), Sociology (SOCI), and Women's Studies (WOMS).

Grup D—Natural Sciences/Mathematics

Must include an approved 3-credit mathematics course at the 100-level or Must include an approved 3-credit mathematics course at the 10U-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 (MEEGI). Entomology and Applied Ecology (ENTC). Food Science dis Science (MASC), Mechanics (MECH), and Mechanical Engineering (MEEG)], Entomology and Applied Ecology (ENTO), Food Science (FOSC), Geography (GEOG 101, 152, 206, 220, 250, 255, 272, 330, 342, 343, 351, 357, 370, 372, 412, 420, 423, 450, 451, 452, 453, 470, 472, 505), Geology (GEOL), Marine Studies (MAST), Mathematics (MATH - all courses except 251, 252, 253, 379, 380, 381), Medical Technology (MEDT), Nutrition and Dietetics (NTDT), Physics and Astronomy (PHYS), Plant and Soil Sciences (PLSC), Psychology(PSYC 306, 309, 314, 380, 411, 412, 414, 481), Science (SCEN), and Statistics (STAT)

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

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 —Humanities/Fine Arts

Must include Group D— Must include	History/Social Sciences courses from two different departments. Natural and Biological Sciences/Mathematics can approved 3-credit MATH course at the 100-level or additional courses from two different departments and at ts of BISC.		
MAJOR R	MAJOR REQUIREMENTS		
NTDT 200 PSYC 201	Nutrition Concepts General Psychology	3 3	
BISC 106/1	16 Elementary Human Physiology and Lab		
or	· · · · · · · · · · · · · · · · · · ·		
BISC 276	Human Physiology		
STAT 200	Basic Statistical Practice.		
CSCC 241	Ethical Issues in Health Care	3	
HPER 210 HPER 214 HPER 220 HPER 376 HPER 305 HPER 305 HPER 350 HPER 405 HPER 407 HPER 409 HPER 420 HPER 420 HPER 430 HPER 431 HPER 448	Safety, First Aid and Emergency Care Wellness: A Way of Life Anatomy and Physiology Personal Computers/HPER Fundamentals of Athletic Training Principles of Strength/Conditioning Basic Concepts in Kinesiology Sports Medicine Pharmacology Program Development/Athletic Injury Rehabilitation Prevention/Recognition/Athletic Injuries Therapeutic Modalities Functional Human Anatomy Biomechanics of Sports Physiology of Activity Physiology of Activity Lab Organization & Administration/Athletic Training	333233333444313	
HPER 449	Advanced Topics in Sports Medicine	3	
HPER 480	Practicum in Athletic Training I	3	
HPER 481	Practicum in Athletic Training II	3	
ELECTIVE After required	ES d courses are completed, sufficient elective credits must be		

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:

CREDITS TO TOTAL A MINIMUM OF 120

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

taken to meet the minimum credits required for the degree

BISC 106/116 (or BISC 207) 4	ENGL 110
HPER 210	MATH
HPER 220 3	HPER 305 3
HPER 276	HPER 214
Elective 3	General Studies 3
15	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.T.A. taping checksheet.
- (7) Successful interview with the Athletic Training Program Director and faculty. During the interview, students will be evaluated by the Athletic Training Program faculty, a senior student trainer enrolled in the program and/or a certified athletic trainer working in the profession. All evaluators will use a standard evaluation form.
- (8) Submission of a written essay.

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

MAJOR: E	BACHELOR OF SCIENCE N PHYSICAL EDUCATION STUDIES XERCISE AND SPORT SCIENCE RATION: EXERCISE PHYSIOLOGY
CURRICULUA	
See Univers	ity and Department requirements (page 152) for legree requirements.
BREADTH	REQUIREMENTS
	Communication/Writing Skills 6
	courses from two different departments
•	Humanities/Fine Arts
Group C—I	distory/Social Sciences 6
Group D-I	PSYC 201 and either PSYC 325 or PSYC 334. Natural and Biological Sciences/Mathematics
	credits from Group A-D
	EQUIREMENTS
HPER 210	Safety, First Aid, & Emergency Care
HPER 214	Wellness: A Way of Life
HPER 220 HPER 276	Anatomy and Physiology
THER Z/O	Physical Education and Recreation
HPER 300	Issues in Physical Activity Studies and Sports
HPER 305 HPER 324	Fundamentals of Athletic Training 3 Measurement and Evaluation 3
HPER 342	Survey in Adaptive Physical Education/Recreation 3
HPER 350	Basic Concepts in Kinesiology 3
HPER 430 HPER 431	Physiology of Activity
BISC 208	RATION REQUIREMENTS Introductory Biology II
BISC 276	Human Physiology
BISC 306	General Physiology 4
CHEM 104	General Chemistry 4
PHYS 201/2: STAT 200	02 Introductory Physics I and II 8 Basic Statistical Practice 3
HPER 353 HPER 420 or	Seminar in Exercise Physiology
BISC 442	Vertebrate Morphology 4
HPER 426	Biomechanics of Sport
HPER 432 or	Basic Exercise Prescription
HPER 434	Exercise Test Technology 3
ELECTIVE	
After required	l courses are completed, sufficient elective credits must be the minimum credits required for the degree.
CREDITS T	O TOTAL A MINIMUM OF 120
DEGREE: B	ACHELOR OF SCIENCE
	N PHYSICAL EDUCATION STUDIES
	XERCISE AND SPORT SCIENCE
CONCENT	RATION: FIGURE SKATING SCIENCE
CURRICULUM	CREDITS
See Universi	ity and Department requirements (page 152) for
additional d	egree requirements.
	REQUIREMENTS
	Communication/Writing Skills 6 courses from two different departments
	Humanities/Fine Arts
•	listory/Social Sciences 6
	PSYC 201 and one course from another department.
	Natural and Biological Sciences/Mathematics
	an approved 3-credit MATH course at the 100-level or
higher, BISC o	course with lab, and NTDT 200
Additional	credits from Groups A-D 9

	EQUIREMENTS	CONCENTRATION REQUIREMENTS
HPER 210 HPER 214 HPER 220 HPER 276	Nutrition and Activity 3 Safety, First Aid, and Emergency Care 3 Wellness: A Way of Life 3 Anatomy and Physiology 3 Personal Computers in Health, Physical 2 Education and Recreation	HPER 263Leadership Practicum1HPER 320Principles Strength and Conditioning3HPER 332Health Behavior Theory and Assessment3HPER 354Seminar in Fitness Management1HPER 432Individualized Physical Fitness3HPER 434Exercise Test Technology3HPER 445Concepts of Physical Fitness Testing3
HPER 300 HPER 305 HPER 324 HPER 342 HPER 350 HPER 430 HPER 431	Issues in Physical Activity Studies and Sport 3 Fundamentals of Athletic Training 3 Measurement and Evaluation 3 Survey in Adaptive Physical Education 3 Basic Concepts in Kinesiology 3 Physiology of Activity 3 Physiology of Activity Lab 1	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
HPER 250 HPER 260 HPER 270 HPER 320 HPER 355 HPER 356	AATION REQUIREMENTS Motor Development 3 Leisure Service Programming 3 Recreation Leadership 3 Principles of Strength & Conditioning 3 Figure Skating Practicum I 3 Figure Skating Practicum II 3	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
HPER 360 HPER 426 HPER 440 HPER 455 HPER 456	Psychology of Coaching	DEGREE: BACHELOR OF SCIENCE IN PHYSICAL EDUCATION STUDIES MAJOR: EXERCISE AND SPORT SCIENCE CONTRACTION: PHYSICAL EDUCATION STUDIES
ELECTIVE		CURRICULUM CREDITS
taken to mee	d courses are completed, sufficient elective credits must be the minimum credits required for the degree	See University and Department requirements (page 152) for additional degree requirements.
CREDITS T	O TOTAL A MINIMUM OF 120	BREADTH REQUIREMENTS
		Group A—Communication/Writing Skills 6
DEGREE: E	BACHELOR OF SCIENCE	Must include courses from two different departments.
MAJOR: E	N PHYSICAL EDUCATION STUDIES XERCISE AND SPORT SCIENCE RATION: FITNESS MANAGEMENT	Group B —Humanities/Fine Arts 3 Group C—History/Social Sciences 6 Must include PSYC 201 and a course from another department
CURRICULUA	A CREDITS	Group D—Natural and Biological Sciences/Mathematics
	ity and Department requirements (page 152) for legree requirements. The Second Writing require-	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
	pe filled with ENGL 312.	MAJOR REQUIREMENTS
BREADTH	REQUIREMENTS	HPER 210 Safety, First Aid, and Emergency Care
Group A—	Communication/Writing Skills 6 courses from two different departments	HPER 214Wellness: A Way of Life3HPER 220Anatomy and Physiology3HPER 276Personal Computers in Health,2
Group B	Humanities/Fine Arts3	Physical Education and Recreation
Must include Group D—I Must include higher, BISC	Alistory/Social Sciences 6 a PSYC course and a SOCI course. Natural and Biological Sciences/Mathematics 14 an approved 3-credit MATH course at the 100-level or course with lab, and NTDT 200.	HPER 300Issues in Physical Activity Studies and Sports3HPER 305Fundamentals of Athletic Training3HPER 324Measurement and Evaluation3HPER 342Survey in Adaptive Physical Education/Recreation3HPER 350Basic Concepts in Kinesiology3HPER 430Physiology of Activity3HPER 431Physiology of Activity Lab1
	credits from Groups A-D	CONCENTRATION REQUIREMENTS
BUAD 301	EQUIREMENTS Introduction to Marketing (prerequisite: ECON 151)	HPER 235 Professional Transitions 3 Option I minimum 30
or BUAD 309 FREC 201	Management and Organizational Behavior 3 Records and Accounts 3	Minor I (15 credits) and Minor II (15 credits) or
HPER 210 HPER 214 HPER 220 HPER 276	Safety, First Aid, and Emergency Care 3 Wellness: A Way of Life 3 Anatomy and Physiology 3 Personal Computers in Health, Physical 2 Education and Recreation	Option II
HPER 300	Issues in Physical Activity Studies and Sports 3	ELECTIVES
HPER 305 HPER 324	Fundamentals of Athletic Training 3 Measurement and Evaluation 3	After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.
HPER 342 HPER 350 HPER 430 HPER 431	Survey in Adaptive Physical Education	CREDITS TO TOTAL A MINIMUM OF 120

DECDEE, RACHELOD OF CCIENCE	MAJOR REQUIREMENTS
DEGREE: BACHELOR OF SCIENCE IN PHYSICAL EDUCATION STUDIES	C- or better required in all courses except EDST EDST 201 Diversity in the Classroom
MAJOR: EXERCISE AND SPORT SCIENCE	(fulfills University multicultural requirement)
CONCENTRATION: STRENGTH AND CONDITIONING	EDST 304 Educational Psychology – Social Aspects 3
CURRICULUM CREDITS	EDST 305 Educational Psychology – Cognitive Aspects 3 EDDV 400 Student Teaching 9
See University and Department requirements (page 152) for additional degree requirements.	Students must have a minimum cumulative g p.a of 2 500, a g.p.a in the major of at least 2.750, and must apply to student teach at least one
BREADTH REQUIREMENTS	semester in advance.
Group A—Communication/Writing Skills 6	HPER 140 Fundamental Skills Analysis
Must include courses from two different departments	HPER 150 Movement Education for Children 3 HPER 210 Safety, First Aid and Emergency Care 3
Group B —Humanities/Fine Arts 3	HPER 210 Safety, First Aid and Emergency Care
Group C—History/Social Sciences 6	HPER 220 Anatomy and Physiology 3
Must include PSYC 201 and a course from another department.	HPER 250 Motor Development 3 HPER 276 Personal Computers in Health, 2
Group D—Natural and Biological Sciences/Mathematics 14	Physical Education and Recreation
Must include an approved 3-credit MATH course at the 100-level or	HPER 300 Issues in Physical Activity Studies and Sports 3
higher, BISC 106/116, NTDT 200, and a CHEM course with lab	HPER 315 Methods and Materials in Drug Education 3 HPER 324 Measurement and Evaluation 3
Additional credits from Groups A-D	HPER 325 Human Sexuality: Methods and Materials 3
MAJOR REQUIREMENTS	HPER 330 Mental Health
NTDT 310 Nutrition & Activity	HPER 332 Health Behavior Theory and Assessment 3 HPER 342 Survey in Adaptive Physical Education/Recreation 3
HPER 210 Safety, First Aid, and Emergency Care	HPER 360 Psychology of Coaching
HPER 214 Wellness: A Way of Life 3	HPER 414 Methods and Materials in Health Education 3
HPER 220 Anatomy and Physiology 3	HPER 426 Biomechanics of Sports 4
HPER 276 Personal Computers in Health, Physical 2 Education and Recreation	HPER 430 Physiology of Activity 3 HPER 431 Physiology of Activity Lab 1
HPER 300 Issues in Physical Activity Studies and Sports 3	HPER 141, 142, 143, 144, 242, 243, 244, 251, 252, 253,
HPER 305 Fundamentals of Athletic Training	and 255 Skills Courses
HPER 324 Measurement and Evaluation 3 HPER 342 Survey in Adaptive Physical Education 3	HPER 370 Practicum in Methods of Elementary Physical Education 3
HPER 350 Basic Concepts in Kinesiology 3	HPER 380 Practicum in Methods of Secondary Physical Education 3 HPER 465 Teaching Seminar in Health/Physical Education 3
HPER 430 Physiology of Activity 3	Students must have completed HPER 214, HPER 315, HPER 325, and IFST
HPER 431 Physiology of Activity Lab	401 prior to enrolling in HPER 414.
CONCENTRATION REQUIREMENTS	Students must apply for Upper Division Clearance prior to enrolling in HPER
HPER 320 Principles in Strength and Conditioning 3	325, HPER 370, HPER 380, and HPER 414. In order to apply, students must
HPER 321 Advanced Principles in Strength and Conditioning 4 HPER 322 Weight Room Safety and Design 1	have completed the eleven HPER Skills Courses and HPER 140 and must have attained a g.p a. of at least 2.750 in the major and a 2 500 overall
HPER 323 Theories and Applications of Program Design	ELECTIVES
HPER 354 Seminar 1	After required courses are completed, sufficient elective credits must be
HPER 390 Principles of Coaching	taken to meet the minimum credits required for the degree.
HPER 426 Biomechanics of Sport	CREDITS TO TOTAL A MINIMUM OF 128
HPER 440 Strategies of Peak Athletic Performance 3	CREDITS TO TOTAL A MINIMUM OF 128
HPER 464 Internship 9	
Students must register for HPER 354 two semesters before registering for HPER 464 and must complete all the courses listed under "Major Requirements" and "Concentration Requirements" before registering for	DEGREE: BACHELOR OF SCIENCE IN RECREATION AND PARK ADMINISTRATION AND PROPERTION AND PARK ADMINISTRATION
HPER 464	MAJOR: RECREATION AND PARK ADMINISTRATION CONCENTRATION: PARKS
ELECTIVES	CURRICULUM CREDITS
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	See University and Department requirements (page 152) for additional degree requirements.
	BREADTH REQUIREMENTS
DEGREE: BACHELOR OF SCIENCE IN	Group A—Communication/Writing Skills 6
HEALTH AND PHYSICAL EDUCATION	Group B —Humanities/Fine Arts
MAJOR: HEALTH AND PHYSICAL EDUCATION	Group C—History/Social Sciences
CURRICULUM CREDITS	Must include courses from two different departments.
See University and Department requirements (page 152) for	Group D—Natural and Biological Sciences/Mathematics 10
additional degree requirements.	Must include an approved 3-credit MATH course at the 100-level or higher.
BREADTH REQUIREMENTS	Additional credits from Groups A-D
Group A—Communication/Writing Skills 3	MAJOR REQUIREMENTS
Group B —Humanities/Fine Arts	Requires a grade of C- or better in each course.
Group C—History/Social Sciences 6	FREC 201 Records and Accounts
Must include PSYC 201 and IFST 401	HPER 105 Foundations of Recreation and Leisure Skills 3 HPER 164 Practicum in Recreation and Parks 3
Group D—Natural and Biological Sciences/Mathematics 10	HPER 210 Safety, First Aid and Emergency Care 3
Must include an approved 3-credit MATH course at the 100-level or nigher, a BISC course with lab, and NTDT 200	HPER 214 Wellness: A Way of Life 3
Additional credits from Groups A-D 3	HPER 260 Leisure Service Programming 3 HPER 270 Recreation Leadership 3
radinonal deans non eloops A-D	THER 270 Recieding Leadership

HPER 276	Personal Computers in Health, Physical 2
HPER 318	Education and Recreation Special Recreation
HPER 341	Principles of Outdoor Recreation 3
HPER 354	Seminar in Recreation 1
HPER 404 HPER 450	Organization, Administration, Recreation and Leisure Service 3
HPER 464	Facility and Park Management 3 Internship in Recreation 9
	register for HPER 354 two semesters before registering for
HPER 464, an	d must complete all courses in the "Major Requirements"
before enrollin	g in HPER 464
POSC 220	Introduction to Public Policy
GEOG 428	Land Use and Environmental Planning
GEOG 235 or	Conservation of Natural Resources
PHIL 448	Environmental Ethics
6 credits from	Plant Science, Engineering Technology, or
	Applied Ecology with approval of advisor 6
6 credits from	Communication, Criminal Justice, Geography,
	Political Science with approval of advisor.
ELECTIVES	
	courses are completed, sufficient elective credits must be the minimum credits required for the degree
CREDITS TO	TOTAL A MINIMUM OF 120
	ACHELOR OF SCIENCE IN RECREATION
	ND PARK ADMINISTRATION
	ECREATION AND PARK ADMINISTRATION RATION: PROGRAMMING AND LEADERSHIP
CURRICULUM	CREDITS
	ty and Department requirements (page 152) for
additional de	gree requirements.
	REQUIREMENTS
Group A-C	ommunication/Writing Skills 6
Group B —H	lumanities/Fine Arts 6
Group C—H	istory/Social Sciences 6
	ourses from two different departments.
	atural and Biological Sciences/Mathematics 10
Must include a	n approved 3-credit MATH course at the 100-level or higher.
Additional c	redits from Groups A-D
MAJOR RE	QUIREMENTS
	de of C- or better in each course
	de of C- of belief in edicir course.
FREC 201	Records and Accounts
	Records and Accounts
HPER 105 HPER 164	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3
HPER 105 HPER 164 HPER 210	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3
HPER 105 HPER 164 HPER 210 HPER 214	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3 Recreation Leadership 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270 HPER 276	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270 HPER 276 HPER 318	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3 Recreation Leadership 3 Personal Computers in Health, Physical 2 Education and Recreation 3 Special Recreation 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270 HPER 276 HPER 318 HPER 341	Records and Accounts Foundations of Recreation and Leisure Skills Practicum in Recreation and Parks. Safety, First Aid and Emergency Care Wellness: A Way of Life Jaisure Service Programming Recreation Leadership Personal Computers in Health, Physical Education and Recreation Special Recreation Special Recreation 3 Principles of Outdoor Recreation 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270 HPER 276 HPER 318 HPER 341 HPER 354	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3 Recreation Leadership 3 Personal Computers in Health, Physical 2 Education and Recreation 3 Principles of Outdoor Recreation 3 Seminar in Recreation 1
HPER 105 HPER 164 HPER 210 HPER 214 HPER 250 HPER 270 HPER 276 HPER 318 HPER 341 HPER 354 HPER 404	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3 Recreation Leadership 3 Personal Computers in Health, Physical 2 Education and Recreation 3 Special Recreation 3 Special Recreation 3 Seminar in Recreation 1 Organization, Administration, Recreation and Leisure Service 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270 HPER 276 HPER 318 HPER 341 HPER 354 HPER 404 HPER 450	Records and Accounts 3 Foundations of Recreation and Leisure Skills 3 Practicum in Recreation and Parks 3 Safety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3 Recreation Leadership 3 Personal Computers in Health, Physical 2 Education and Recreation 3 Special Recreation 3 Principles of Outdoor Recreation 3 Seminar in Recreation 1 Organization, Administration, Recreation and Leisure Service 3 Facility and Park Management 3
HPER 105 HPER 164 HPER 210 HPER 214 HPER 260 HPER 270 HPER 276 HPER 318 HPER 341 HPER 354 HPER 404 HPER 404 HPER 450 HPER 464	Records and Accounts Foundations of Recreation and Leisure Skills Practicum in Recreation and Parks Sofety, First Aid and Emergency Care Wellness: A Way of Life Jeisure Service Programming Recreation Leadership Personal Computers in Health, Physical Education and Recreation Special Recreation Special Recreation Seminar in Recreation Organization, Administration, Recreation and Leisure Service Tacility and Park Management Internship in Recreation Princeples of Outdoor Recreation Seminar in Recreation Organization, Administration, Recreation and Leisure Service All Internship in Recreation Principles of Outdoor Recreation Seminar in Recreation Organization, Administration, Recreation and Leisure Service All Internship in Recreation
HPER 105 HPER 164 HPER 210 HPER 214 HPER 270 HPER 276 HPER 376 HPER 341 HPER 354 HPER 354 HPER 404 HPER 450 HPER 464, and	Records and Accounts Foundations of Recreation and Leisure Skills Practicum in Recreation and Parks Sofety, First Aid and Emergency Care 3 Wellness: A Way of Life Leisure Service Programming Recreation Leadership Personal Computers in Health, Physical Education and Recreation Special Recreation 3 Principles of Outdoor Recreation Seminar in Recreation 1 Organization, Administration, Recreation and Leisure Service 3 Facility and Park Management 1 Internship in Recreation 9 Legister for HPER 354 two semesters before registering for must complete all courses in the "Major Requirements"
HPER 105 HPER 164 HPER 210 HPER 214 HPER 270 HPER 276 HPER 376 HPER 341 HPER 354 HPER 354 HPER 404 HPER 450 HPER 464, and	Records and Accounts Foundations of Recreation and Leisure Skills Practicum in Recreation and Parks Sofety, First Aid and Emergency Care Wellness: A Way of Life Jeisure Service Programming Recreation Leadership Personal Computers in Health, Physical Education and Recreation Special Recreation Special Recreation Special Recreation Organization, Administration, Recreation and Leisure Service Facility and Park Management Internship in Recreation Pringiples of Outdoor Recreation and Leisure Service Recreation Principles of Outdoor Recreation Seminar in Recreation 1 Organization, Administration, Recreation and Leisure Service Recreation 9 egister for HPER 354 two semesters before registering for
HPER 105 HPER 164 HPER 210 HPER 214 HPER 240 HPER 276 HPER 318 HPER 341 HPER 354 HPER 404 HPER 450 HPER 464, and before enrolling	Records and Accounts Foundations of Recreation and Leisure Skills Practicum in Recreation and Parks Sofety, First Aid and Emergency Care 3 Wellness: A Way of Life 3 Leisure Service Programming 3 Recreation Leadership 3 Personal Computers in Health, Physical 2 Education and Recreation Special Recreation Special Recreation 3 Principles of Outdoor Recreation 3 Seminar in Recreation 1 Organization, Administration, Recreation and Leisure Service 3 Facility and Park Management 1 Internship in Recreation 9 register for HPER 354 two semesters before registering for must complete all courses in the "Major Requirements" g in HPER 464 2 and Leadership Courses reflecting a 21
HPER 105 HPER 164 HPER 210 HPER 214 HPER 250 HPER 276 HPER 318 HPER 341 HPER 354 HPER 404 HPER 450 HPER 464 Students must r HPER 464, and before enrollin Programming a sub-disciplir	Records and Accounts Foundations of Recreation and Leisure Skills Practicum in Recreation and Parks Sofety, First Aid and Emergency Care 3 Wellness: A Way of Life Leisure Service Programming Recreation Leadership 3 Recreation Leadership 3 Personal Computers in Health, Physical Education and Recreation Special Recreation Special Recreation 3 Principles of Outdoor Recreation Seminar in Recreation 1 Organization, Administration, Recreation and Leisure Service 3 Facility and Park Management Internship in Recreation 9 register for HPER 354 two semesters before registering for d must complete all courses in the "Major Requirements" g in HPER 464.

semester of the junior year.

After required courses are completed, sufficient elective credits must be

CREDITS TO TOTAL A MINIMUM OF 120

taken to meet the minimum credits required for the degree

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:

	CREDITS
HPER 210	Safety, First Aid, and Emergency Care 3
HPER 220	Anatomy and Physiology
HPER 320	Strength and Conditioning
HPER 390	Principles of Coaching 3
HPER 360	Psychology of Coaching
HPER 460	Coaching/Performance Practicum 2
A total of	c Electives in Skills/Coaching

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.

Anna P. Ciulla, *Chair, Associate Professor* Office: 050 McKinly Laboratory Telephone: (302) 831-2849 Website: http://www.udel.edu/diehman/mt.html

DEGREE: BACHELOR OF SCIENCE MAJOR: MEDICAL TECHNOLOGY

MAJOR:	MEDICAL TECHNOLOGY
CURRICULU	M CREDITS
UNIVERS	ITY REQUIREMENTS
Three credits	Critical Reading and Writing (minimum grade C)
MAJOR R	EQUIREMENTS
A second wr two papers v extended face must be take courses are	nimum grade C-)
MATH 114 (for studer MATH 115 (for studer MATH 221 MATH 241	collowing
Breadth Re	equirements
•	ge of Arts and Science standards, see page 70.)
Group A: Un	derstanding and appreciation of the creative arts and humanities 6
Group B: The	e study of culture and institutions over time
Group C: Em	pirically based study of human beings and their environment 6
(minimum gro	ade of C- required in all MEDT courses)
MEDT 100	Introduction to Medical Technology
MEDT 370	Phlebotomy Practicum
MEDT 372 MEDT 374	Diagnostic Parasitology
MEDT 376	Clinical Virology and Immunology 2
MEDT 378	Clinical Laboratory Computer Applications 2
MEDT 400 MEDT 401	Urinalysis and Body Fluids 2 Clinical Physiological Chemistry I 3
MEDT 411	Clinical Physiological Chemistry I Laboratory 2
MEDT 404	Hematology I
MEDT 414 MEDT 406	Hematology Laboratory
MEDT 416	Medical Microbiology Laboratory
MEDT 410	Principles of Medical Technology Education
MEDT 403	Clinical Physiological Chemistry II
MEDT 413	Clinical Physiological Chemistry II Laboratory 2

MEDI 418	Medical lechnology Senior Seminar
MEDT 405	Hematology II
MEDT 415	Hematology II Laboratory
MEDT 409	Immunohematology
MEDT 419	Immunohematology Laboratory
MEDT 420	Immunohematology II .
MEDT 421	Immunohematology II Laboratory
MEDT 430	Diagnostic Bacteriology and Medical Mycology
MEDT 431	Diagnostic Bacteriology and Medical Mycology Laboratory
MEDT 461	Management Topics in Medical Technology
MEDT 471	Seminar: Medical Technology Laboratory Management
MEDT 472	Clinical Urinalysis and Serology Practicum
MEDT 473	Clinical Chemistry Practicum
MEDT 475	Clinical Chemistry Practicum Clinical Hematology Practicum
MEDT 477	Clinical Microbiology Practicum
MEDT 479	Clinical Immunohematology Practicum
BISC 207/20	8 Introductory Biology I and II
BISC 276	Human Physiology
BISC 371	Introduction to Microbiology
BISC 471	Introductory Immunology 3
CHEM 103/1	04 General Chemistry 8
	Elementary Organic Chemistry
and	
CHEM 214/2 or	16 Elementary Biochemistry with Lab
CHEM 321/3	22 Organic Chemistry 8
CREDITS TO	TOTAL A MINIMUM OF 123

NURSING

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

The four-year Bachelor of Science in Nursing program is designed to develop the knowledge, understanding and skill essential for the practice of professional nursing and to provide the basis for graduate education. The program is accredited by 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 arts, and three introductory nursing courses. The third and fourth years of study include clinical and nonclinical nursing courses as well as elective courses. The Department of Nursing uses many 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.

CREDITS

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

Graduates 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

CURRICUIUM

CURRICULUM	1	REDITS
ENGL 110 Three credits	TY REQUIREMENTS Critical Reading and Writing (minimum grade C-) in an approved course or courses stressing al, ethnic, and/or gender-related content (see p. 22).	3 3
	EQUIREMENTS	
BISC 207/20 BISC 276 BISC 371 CHEM 105 CHEM 106 NTDT 200 STAT 200		4 4 5 5 3
Philosophy co Restricted Hur Art, Art His	rse 200-level or above purse manities course chosen from among story, Ancient Literature, Comparative Literature, Foreign c and Literatures, Modern Literature, History, Philosophy,	3
Anthropology Restricted Soc History, Po	General Psychology Life Span Development urse 200-level or above course 100-level or above cial Science course chosen from among litical Science, Economics, Black American Studies, Studies, Psychology, Sociology	3
NURS 205 NURS 212 NURS 215 NURS 306 NURS 308 NURS 315 NURS 312 NURS 314 NURS 317 NURS 318	Societal Context of Nursing Concepts in Pathophysiology Basic Nursing Practice Skills Determinants of Wellness Restorative Nursing Practice I Practicum I Pathophysiology Psychopathology Practicum II Practicum III	3 1 4 4 3
or NURS 319 NURS 332 NURS 405 NURS 408 NURS 409 NURS 411 NURS 417 NURS 418	Practicum IV Pharmacological Nursing Responsibility Introduction to Research Restorative Nursing Practice II Professionalism in Nursing Practice Topics in Health Care Delivery Practicum V Practicum VI	3
NURS 419 NURS 420 ELECTIVE	Practicum VIII S S	
Attor required	courses are completed sufficient elective credits must be	

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

CREDITS TO TOTAL A MINIMUM OF 126

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

BACCALAUREATE 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 Nursing (NLN) accredited associate degree programs may directly transfer up to 30 credits in nursing as evidence of their basic nursing knowledge. Graduates of diploma schools of nursing and graduates of non-NLN accredited associate degree programs must complete validation examinations. Upon successful completion of these examinations, the student will be awarded 30 credits for basic nursing knowledge. Before enrollment in any nursing courses, students must meet the following criteria:

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

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

Madeline Lambrecht, *Director, Division of Special Programs*.

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

CURRICULUM	CRED	ITS
ENGL 110 Three credits in	Y REQUIREMENTS Critical Reading and Writing (minimum grade C-) n an approved course or courses stressing l, ethnic, and/or gender-related content (see p. 22)	3
MAJOR RE	QUIREMENTS	
following fi	include a minimum of one course in each of the	4
STAT 200	Basic Statistical Practice	3
Literature cour Philosophy cou	(second English composition course) se	3
Sociology cou	urse	3
Art, Art His ature, Black	tive chosen from the following tory, History, Philosophy, Music, Theatre, Comparative Liter- c American Studies, Economics, Political Science, Women's reign Languages and Literatures, Linguistics, and English	3
NURS 314 NURS 340 NURS 342 NURS 343 NURS 344 NURS 405 NURS 411 NURS 441 NURS 442 NURS 443 NURS 445 NURS 446	Pathophysiology Psychopathology Current Perspectives in Professional Nursing Nursing Informatics Transition to Baccalaureate Nursing Education Wellness/Health Assessment Introduction to Nursing Research Topics in Health Care Delivery Learning Lab: Health Assessment Community Health Nursing BRN Role Practicum Nursing Research Applications Leadership/Organizational Behavior	3 2 2 1 2 2 3 1 3 3 1
ELECTIVES		

After required courses are completed, sufficient elective credits must be

CREDITS TO TOTAL A MINIMUM OF 125

taken to meet the minimum credits required for the degree

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 career-related employment upon graduation are encouraged to plan their electives in a concentrated area of interest such as journalism, dietetics, food science, child development, chemistry, biological sciences, or other related fields.

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

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

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

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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

NECDEE, DACHELOD OF COLNICE

CHEM 103/104 General Chemistry

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).

MAJOR: APPLIED NUTRITION	
CURRICULUM CRE	DITS
UNIVERSITY REQUIREMENTS ENGL 110 Critical Reading and Writing (minimum grade C-) Three credits in an approved course or courses stressing	
MAJOR REQUIREMENTS Humanities electives	9
CHEM 101/102 General Chemistry	

CHEM 213 Elementary Organic Chemistry CHEM 214/216 Elementary Biochemistry with Lab BISC 103/113 General Biology with Lab	4
or	
BISC 207/208 Introductory Biology I and II	4-8
or BISC 276 Human Physiology Students desiring to fulfill a Biology minor should take BISC 207, 208 and 276	4
ECON 100 Economic Issues and Policies	
or ECON 151 Introduction to Microeconomics: Prices and Markets PSYC 201 General Psychology Sociology course BUAD 309 Management and Organizational Behavior Social Science elective	
FOSC 305/306 Food Science with Lab (minimum grade of C-)	
MATH 114 Elementary Mathematics and Statistics	
or	
Successful performance on the Proficiency Test in Mathematics administered by Department of Mathematical Sciences. IFST course	
IFST, NTDT, HRIM, courses	
A minimum grade of C- must be achieved for credits to count toward the fulfillment of 28 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 NTDT 200 Nutrition Concepts NTDT 201 Food Principles NTDT 211 Food Principles Laboratory NTDT 400 Macronutrients NTDT 401 Micronutrients NTDT 401 Nutrition Education NTDT courses (300-level or higher) NTDT courses	3 2 1 3 3
ELECTIVES After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music and four credits of 100- and 200-level courses in Military Science/Air Force may be counted toward the degree.) CREDITS TO TOTAL A MINIMUM OF	120
DEGREE: BACHELOR OF SCIENCE MAJOR: DIETETICS	
CURRICULUM	CREDITS
UNIVERSITY REQUIREMENTS	
ENGL 110 Critical Reading and Writing (minimum grade C.) Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 22).	3
MAJOR REQUIREMENTS Humanities electives	0
CHEM 101/102 General Chemistry	
or CHEM 103/104 General Chemistry	Ω
CHEM 213 Elementary Organic Chemistry	
CHEM 214/216 Elementary Biochemistry with Lab	4
BISC 103/113 General Biology with Lab	
or BISC 207/208 Introductory Biology I and II BISC 106/116 Elementary Human Physiology with Lab	4-8
or BISC 276 Human Physiology	4

Introduction to Microbiology

BISC 371

Students designed and 276	ring to fulfill a Biology minor should take BISC 207, 208	
ECON 100 or	Economic Issues and Policies	
ECON 151 PSYC 201	Introduction to Microeconomics: Prices and Markets General Psychology	
One of the fo SOCI 201 SOCI 202 SOCI 203 SOCI 204 SOCI 209 SOCI 210 SOCI 242 SOCI 243 PSYC 303 SOCI 310 BUAD 309	Illowing courses Introduction to Society Social Deviance The Individual and Society Urban Communities Social Problems Population Problems Society and the Health Professions Society, Politics and Health Care Introduction to Social Psychology Sociology of Healthcare Management and Organizational Behavior	. 3
Social Science FOSC 305/3	e elective	3
•	rse selected from: STAT 200, PSYC 309, FREC 408	
MATH 114	Elementary Mathematics and Statistics	
istered by De _l	rformance on the Proficiency Test in Mathematics admin- partment of Mathematical Sciences	
fulfillment of 3 courses must I level courses opendent Study requirement. Admission into first three sem	rade of C- must be achieved for credits to count toward the 39 credits in NTDT; a minimum grade of C- in 200-level be achieved to proceed to upper-level courses; only 300-and a maximum of four credits of Special Problems/Inde-y (NTDT x66) may count toward the fulfillment of this o Dietetics requires the completion of most courses in the lesters of Applied Nutrition A cumulative grade point aver-required for admission.	
NTDT 103 NTDT 200 NTDT 201 NTDT 211 NTDT 240 NTDT 321 NTDT 325 NTDT 325 NTDT 328 NTDT 330 NTDT 400 NTDT 401 NTDT 401 NTDT 403 NTDT 421 NTDT 440 NTDT 440 NTDT 440 NTDT 440 NTDT 440	Introduction to Nutrition Professions Nutrition Concepts Food Principles Food Principles Laboratory Introduction to Clinical Dietetics Quantity Food Production and Service Management of Food and Nutrition Services Laboratory in Quantity Food Production and Service Foodservice Facility Design Nutrition Counseling Macronutrients Micronutrients Dietetics Seminar Nutrition Assessment Methods Nutrition and Disease Nutrition Education Community Nutrition	3213331233
ELECTIVE		
May include A credits of active four credits of	courses are completed, sufficient elective credits must be the minimum credits required for the degree. Willitary Science, Music, or Physical Education. (Only two with-type Physical Education and four credits of Music and 100- and 200-level courses in Military Science/Air Force ed toward the degree)	

CREDITS TO TOTAL A MINIMUM OF 126

DEGREE: BACHELOR OF SCIENCE MAJOR: NUTRITIONAL SCIENCES
CURRICULUM CREDITS
UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing (minimum grade C-) 3 Three credits in an approved course or courses stressing 3 multicultural, ethnic, and/or gender-related content (see p. 22).
MAJOR REQUIREMENTS
Humanities electives
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 371 Introduction to Microbiology 4 PHYS 201 Introductory Physics I 4
ECON 100 Economic Issues and Policies
or ECON 151 Introduction to Microeconomics: Prices and Markets
FOSC 305/306 Food Science with Lab (minimum grade C-)
FREC 408 Research Methods 3
MATH 221/222 Calculus I and II
or MATH 241/242 Analytic Geometry and Calculus A and B
A minimum grade of C- must be achieved for credits to count toward the fulfillment of 29 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 Principles 2 NTDT 211 Food Principles 12 NTDT 400 Macronutrients 3 NTDT 401 Micronutrients 3 NTDT 401 Nutrition Assessment Methods 2 NTDT 440 Nutrition and Disease 3 NTDT courses (300-level or higher) 9 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)

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 300-level or higher. A 2.0 grade point average is required for admission; a minimum grade of C- is required in all courses in the minor. Note that CHEM 214 and CHEM 216 are necessary prerequisites for NTDT 400 and NTDT 401.

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