



COLLEGE OF HEALTH AND NURSING SCIENCES

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- Health and Exercise Sciences
 - Athletic Training
 - Exercise and Sport Science
 - Health and Physical Education
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 - B.S.N.
 - B.R.N.
- Nutrition and Dietetics
 - Applied Nutrition
 - Dietetics
 - Nutritional Sciences

The College of Health and Nursing Sciences includes the Departments of Health and Exercise Sciences, Medical Technology, Nursing, and Nutrition and Dietetics, and the Biomechanics and Movement Science Program. Undergraduate 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 park administration. In addition, there are graduate degree programs in biomechanics and movement science, human nutrition, nursing, and physical education, 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.

ADVISEMENT

Students are assigned a faculty advisor in their major department, who will 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 professional advisors in the College's Advisement Resource Center, located in McDowell Hall. 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 is open weekdays from 9 a.m. to 4 p.m.; for more information call (302) 831-2381.

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.

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 featuring more than twenty different offerings each semester is available to all students on a credit basis. Courses are provided for all levels of ability and interests including beginners, intermediate, and advanced.

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 physical education program with four Bachelor of Science degree options: health and physical education, physical education studies, athletic training, and recreation and park administration, as well as a minor in coaching science. Each curriculum features a liberal arts base and opportunities for in-depth study in a specialty field. Internships or clinical experiences are available in each degree option.

The 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 are eligible for teacher certification through the individual states in the NASDTEC agreement.

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 the program leading to a Bachelor of Science in Physical Education Studies.

The athletic training education 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 preparing for careers in the 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.

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

CURRICULUM

CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content. (see p. 20).	3

SKILL REQUIREMENTS

Second Writing Course 3

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.

Mathematics	3
BREADTH REQUIREMENTS	21

Area A—Communication Skills 6

A minimum of 6 credits with at least two departments represented; courses may be selected from the following departments: English (writing/composition courses), Foreign Languages and Literatures (language/communication courses), Communication, Linguistics and Speech classes (sign language courses).

Area B—Humanities and Fine Arts 3

A minimum of 3 credits; course(s) may be selected from: Art, Art History, Comparative Literature, English (literature), Music, Philosophy, Theatre and approved courses from Textiles, Design and Consumer Economics.

Area C—Biological Sciences 3

Area D—History and Social Science 6

A minimum of 6 credits with at least two departments represented: Anthropology (except physical and biological), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Legal Studies, Political Science and International Relations, Psychology, Sociology, Women's Studies, and specific courses from Individual and Family Studies.

Area E—Natural Science and Mathematics 3

A minimum of 3 credits; course(s) may be selected from: Anthropology (physical and biological), Chemistry, Computer and Information Science, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science courses), Mathematics (excluding MATH 251 & 252), Medical Technology, Physics, Plant Science, Science, Statistics, and specific courses from the Department of Nutrition and Dietetics, the College of Engineering and the College of Marine Studies.

MAJOR REQUIREMENTS

Professional Studies

NTDT 200 Nutrition Concepts	3
PSYC 201 General Psychology	3
BISC 106/116 Elementary Human Physiology and Lab	4
or	
BISC 276 Human Physiology	4
STAT 201 Introduction to Statistics I	3
CSCC 241 Ethical Issues in Health Care	3

Academic Studies

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 305 Fundamentals of Athletic Training	3
HPER 320 Principles of Strength/Conditioning	3
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 420 Functional Human Anatomy	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 II	3

ELECTIVES 17

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree. Students are encouraged to select advanced and/or specialized courses in the core subject matter areas and courses in biology, chemistry, physics, research methods, etc. Students interested in pursuing advanced degrees in allied health care professions should select the appropriate required courses for admission.

CREDITS TO TOTAL A MINIMUM OF 120

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

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

BISC 106/116	4	ENGL 110	3
HPER 310	3	MATH	3
HPER 220	3	HPER 305	3
HPER 276	3	HPER 214	3
Elective	3	General Studies	3
	<u>16</u>		<u>15</u>

- (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, 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 Education Program Admission Recommendation Form from the program director.
- (6) Completion of N.A.T.A. taping checksheet;
- (7) Successful interview with the Athletic Training Education Program Director and faculty. During the interview, students will be evaluated by the Athletic Training Education 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.

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, another College at the University of Delaware or another major within the Department of Health and Exercise Science 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 University of Delaware Athletic Training Education Program meet with the Program Director to plan the clinical education experience. Students are required to gain clinical experience in the training room and at practices and home and away games in the men's and women's athletic program. The clinical experience is structured so the student trainer gains progressive development of technical skills and knowledge: Once students are admitted to the program, they are required to work five weeks in the training room. When this requirement is completed, they begin working with individual teams. Students are required to work with at least one men's high-risk sport, one men's low-risk sport, one women's high-risk sport and one women's low-risk sport, for a minimum of five weeks with each of the sports selected. Once this requirement is completed, the student, in consultation with the Program Director, is allowed to select specific sports for future assignments until completion of their clinical education experience. In addition, all candidates for NATA Certification must verify that at least 25% of their clinical hours credited in fulfilling the NATA Certification Requirements were attained in actual (on location/site) practice and/or games coverage with one or more of the following sports: football, soccer, hockey, 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 Education 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 Skating Science, Fitness Management, Physical Education Studies, or Strength and Conditioning. Admission to and completion of the major and the concentrations requires that students fulfill the following requirements:

1. Completion of at least 28 credits at the University of Delaware.
2. Successful completion of the following courses: HPER 210 (3 credits); HPER 214 (3 credits); HPER 220 (3 credits); HPER 276 (3 credits); HPER 305 (3 credits); and Biological Sciences (BISC) course with lab (4 credits).
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 Physical Education Advisement Center, 112A Carpenter Sports Building.
 - a. Only students matriculated in the College of Health and Nursing Sciences may apply for admission to the concentrations.
 - b. Meeting the minimum admission requirements does not guarantee admission to the concentration. Offers of admission, particularly in Figure Skating Science, Fitness Management, and Strength and Conditioning are presented on a competitive basis to those individuals who are most qualified.
4. Four of the concentrations have additional requirements, as follows:
 - a. 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.
 - b. 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.

- c. 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.
- d. 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**

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)		3

SKILL REQUIREMENTS

Writing Course 3

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 at "Satisfies Arts and Science second writing course."

Mathematics Course

MATH 221	Calculus I	3
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BREADTH REQUIREMENTS 35

Students must complete a total of 35 credits in areas A through E, with a minimum of 6 credits from Area A, 3 credits from Area B, 4 credits from Area C, 6 credits from Area D, and 7 credits from Area E. The remaining 9 of the 35 credits may be taken in any of the five areas.

Area A—Communication Skills 6

Six credits from at least two of the following departments: English (writing/composition courses), Communication and Foreign Languages and Literatures (language/communication), Linguistics, and Manual Communication (sign language).

Area B—Humanities and Fine Arts 3

A minimum of three credits from at least two of the following departments: Art, Art History, Comparative Literature, English (literature), Foreign Languages and Literatures (literature), Music, Philosophy and Theatre. Specific courses from the Department of Consumer Studies.

Area C—Biological Sciences 4

BISC 207	Introductory Biology I	4
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Area D—History and Social Science 6

PSYC 201	General Psychology	3
PSYC 325, 334, or 350		3

Additional credits from the following departments: Anthropology (except physical and biological), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Political Science and International Relations, Psychology, Sociology, and Women's Studies. Specific courses from Individual and Family Studies.

Area E—Natural Science and Mathematics 7

NTDT 200	Nutrition Concepts	3
CHEM 103	General Chemistry	4

Additional credits from: 6

Anthropology (physical and biological), Chemistry, Engineering, Entomology, Geography, (physical and meteorology), Geology, Health Sciences (natural science area), Mathematics (except MATH 251, 252), Physics (including Astronomy), Physical Science, Plant Science, Psychology (physiological), Soil Science, Statistics and Computer Science. Specific courses from the Department of Nutrition and Dietetics and the College of Marine Studies.

MAJOR REQUIREMENTS

Academic Studies

HPER 210	Safety, 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, Physical Education and Recreation	2
HPER 290	Physiology of Activity	3
HPER 291	Physiology of Activity Lab	1
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/Recreation	3
HPER 350	Basic Concepts in Kinesiology	3

CONCENTRATION AREA

External to the College

BISC 208	Introductory Biology II	4
BISC 276	Human Physiology	4
or		
BISC 306	General Physiology	4
CHEM 104	General Chemistry	4
PHYS 201	Introductory Physics I	4
PHYS 202	Introductory Physics II	4
STAT 201	Introductory Statistics I	3

Within the Department

HPER 353	Seminar in Exercise Physiology	3
HPER 420	Functional Human Anatomy	4
or		
HPER 442	Vertebrate Morphology	4
HPER 426	Biomechanics of Sport	4
HPER 432	Basic Exercise Prescription	3
or		
HPER 434	Exercise Test Technology	3

General Electives 11

CREDITS TO TOTAL A MINIMUM OF 120

**DEGREE: BACHELOR OF SCIENCE
MAJOR: EXERCISE AND SPORT SCIENCE
CONCENTRATION: FIGURE SKATING SCIENCE**

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)		3

SKILL REQUIREMENTS

Writing Course 3

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 at "Satisfies Arts and Science second writing course."

Mathematics Course 3

Must be an approved course at the 100-level or higher.

BREADTH REQUIREMENTS 35

Students must complete a total of 35 credits in areas A through E, with a minimum of 6 credits from Area A, 3 credits from Area B, 4 credits from Area C, 6 credits from Area D, and 7 credits from Area E. The remaining 9 of the 35 credits may be taken in any of the five areas.

Area A—Communication Skills 6

A minimum of six credits from at least two of the following departments: English (writing/composition courses), Communication and Foreign Languages and Literatures (language/communication), Linguistics, and Manual Communication (sign language).

Area B—Humanities and Fine Arts 3

A minimum of three credits from the following departments: Art, Art History, Comparative Literature, English (literature), Foreign Languages and Literatures (literature), Music, Philosophy and Theatre, and specific courses from Consumer Studies.

Area C—Biological Sciences 4

Minimum of 4 credits of Biological Sciences (BISC) courses with lab.

Area D—History and Social Science 6

PSYC 201 General Psychology 3
A minimum of three additional credits from the following departments: Anthropology (except physical), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Political Science and International Relations, Psychology (except physiological), Sociology and Women's Studies, as well as specific courses from the Individual and Family Studies.

Area E—Natural Science and Mathematics 7

NTDT 200 Nutrition Concepts 3
Science course with Lab chosen from the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography, (physical and meteorology), Geology, Health Sciences (natural science area), Mathematics (except MATH 251, 252), Physics (including Astronomy), Physical Science, Plant Science, Psychology (physiological), Soil Science, Statistics, as well as specific courses from the Department of Nutrition and Dietetics and the College of Marine Studies.

MAJOR REQUIREMENTS**External to the College**

NTDT 310 Nutrition and Activity 3

Academic Studies

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 in Health, Physical Education and Recreation 2
HPER 290 Physiology of Activity 3
HPER 291 Physiology of Activity Lab 1
HPER 300 Issues in Physical Activity Studies and Sport 3
HPER 305 Fundamentals of Athletic Training 3
HPER 324 Measurement and Evaluation 3
HPER 342 Survey in Adaptive Physical Education 3
HPER 350 Basic Concepts in Kinesiology 3

CONCENTRATION AREA

HPER 250 Motor Development 3
HPER 260 Leisure Service Programming 3
HPER 270 Recreation Leadership 3
HPER 320 Principles of Strength & Conditioning 3
HPER 355 Figure Skating Practicum I 3
HPER 356 Figure Skating Practicum II 3
HPER 360 Psychology of Coaching 1
HPER 426 Biomechanics of Sports 4
HPER 440 Strategies for Athletic Peak Performance 3
HPER 455 Figure Skating Practicum III 3
HPER 456 Figure Skating Practicum IV 3

ELECTIVES 11

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

CREDITS TO TOTAL A MINIMUM OF 120

Students entering this concentration must have achieved a level of skating proficiency certified by the Director of the Ice Skating Program.

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

ENGL 110 Critical Reading and Writing (minimum grade C-) 3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20).

SKILL REQUIREMENTS

Writing Course 3
ENGL 312 Written Communications in Business 3

Mathematics Course 3

Must be an approved course at the 100-level or higher.

BREADTH REQUIREMENTS 35

Students must complete a total of 35 credits in areas A through E, with a minimum of 6 credits from Area A, 3 credits from Area B, 4 credits from Area C, 6 credits from Area D, and 7 credits from Area E. The remaining 9 of the 35 credits may be taken in any of the five areas.

Area A—Communication Skills 6

Six credits from at least two of the following areas: English (writing/ composition courses), Communication, Foreign Languages and Literatures (language/communication), Linguistics, and Manual Communication (sign language).

Area B—Humanities and Fine Arts 3

At least three credits from the following departments: Art, Art History, Comparative Literature, English (literature), Foreign Languages and Literatures (literature), Music, Philosophy and Theatre, and specific courses from the Department of Consumer Studies.

Area C—Biological Sciences 4

Minimum of 4 credits of Biological Sciences (BISC) courses with lab.

Area D—History and Social Science 6

PSYC 201 General Psychology 3
SOCI 201 Introduction to Sociology 3
Additional credits from any of the following departments: Anthropology (except physical and biological), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Political Science and International Relations, Psychology (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.

Area E—Natural Science and Mathematics 7

NTDT 200 Nutrition Concepts 3
Science course with Lab chosen from the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography, (physical and meteorology), Geology, Health Sciences (natural science area), Mathematics (except MATH 251, 252), Physics (including Astronomy), Physical Science, Plant Science, Psychology (physiological), Soil Science, Statistics, as well as specific courses from the Department of Nutrition and Dietetics and the College of Marine Studies.

MAJOR REQUIREMENTS**External to the College**

BUAD 301 Introduction to Marketing 3
or
BUAD 309 Management and Organizational Behavior 3
FREC 201 Records and Accounts 3

Academic Studies

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 in Health, Physical Education and Recreation 2
HPER 290 Physiology of Activity 3
HPER 291 Physiology of Activity Lab 1
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 1
HPER 350 Basic Concepts in Kinesiology 3

CONCENTRATION AREA

HPER 320 Principles Strength and Conditioning 3
HPER 332 Health Behavior Theory and Assessment 3
HPER 354 Seminar in Fitness Management 1
HPER 401 Leadership Practicum 1
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

ELECTIVES

Electives 8

CREDITS TO TOTAL A MINIMUM OF 120

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

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)	3

SKILL REQUIREMENTS

Writing Course 3

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 at "Satisfies Arts and Science second writing course."

Mathematics Course 3

Must be an approved course at the 100-level or higher.

BREADTH REQUIREMENTS 35

Students must complete a total of 35 credits in areas A through E, with a minimum of 6 credits from Area A, 3 credits from Area B, 4 credits from Area C, 6 credits from Area D, and 7 credits from Area E. The remaining 9 of the 35 credits may be taken in any of the five areas.

Area A—Communication Skills 6

Six credits from at least two of the following areas: English (writing/composition courses), Communication, Foreign Languages and Literatures (language/communication), Linguistics, and Manual Communication (sign language).

Area B—Humanities and Fine Arts 3

At least three credits from the following departments: Art, Art History, Comparative Literature, English (literature), Foreign Languages and Literatures (literature), Music, Philosophy and Theatre, and specific courses from the Department of Consumer Studies.

Area C—Biological Sciences 4

Minimum of 4 credits of Biological Sciences (BISC) courses with lab.

Area D—History and Social Science 6

PSYC 201 General Psychology 3
A minimum of three additional credits from any of the following departments: Anthropology (except physical and biological), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Political Science and International Relations, Psychology (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.

Area E—Natural Science and Mathematics 7

NTDT 200 Nutrition Concepts 3
Science course with lab chosen from the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science area), Mathematics (except MATH 251, 252), Physics (including Astronomy), Physical Science, Plant Science, Psychology (physiological), Soil Science, Statistics, as well as specific courses from the Department of Nutrition and Dietetics and the College of Marine Studies.

MAJOR REQUIREMENTS

Academic Studies

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 in Health, Physical Education and Recreation	2
HPER 290 Physiology of Activity	3
HPER 291 Physiology of Activity Lab	1
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/Recreation	3
HPER 350 Basic Concepts in Kinesiology	3

CONCENTRATION AREA

HPER 235 Professional Transitions	3
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Option I 30

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

Option II 30

Minor I (15 credits) and Area of Study (15 credits) with course work in the Area of Study to be developed with a department academic advisor and approved by the Chair of the Health & Exercise Sciences Department.

General Electives 16

Sufficient elective credits must be taken to meet the minimum credit requirement 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

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)	3

SKILL REQUIREMENTS

Writing Course 3

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 at "Satisfies Arts and Science second writing course."

Mathematics Course 3

Must be an approved course at the 100-level or higher.

BREADTH REQUIREMENTS 35

Students must complete a total of 35 credits in areas A through E, with a minimum of 6 credits from Area A, 3 credits from Area B, 4 credits from Area C, 6 credits from Area D, and 7 credits from Area E. The remaining 9 of the 35 credits may be taken in any of the five areas.

Area A—Communication Skills 6

Six credits from at least two of the following areas: English (writing/composition courses), Communication, Foreign Languages and Literatures (language/communication), Linguistics, and Manual Communication (sign language).

Area B—Humanities and Fine Arts 3

At least three additional credits from the following departments: Art, Art History, Comparative Literature, English (literature), Foreign Languages and Literatures (literature), Music, Philosophy and Theatre, and specific courses from the Department of Consumer Studies.

Area C—Biological Sciences 4

BISC 106/116 Elementary Human Physiology and Lab 4

Area D—History and Social Science 6

PSYC 201 General Psychology 3
A minimum of three additional credits from any of the following departments: Anthropology (except physical and biological), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Political Science and International Relations, Psychology (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.

Area E—Natural Science and Mathematics 7

NTDT 200 Nutrition Concepts 3
Chemistry course with Lab 4

A minimum of three credits from any of the following departments: Anthropology (physical and biological), Chemistry, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science area), Mathematics (except MATH 251, 252), Physics (including Astronomy), Physical Science, Plant Science, Psychology (physiological), Soil Science, Statistics and Computer Science. Specific courses from Nutrition and Dietetics and the College of Marine Studies.

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HPER 220	Anatomy and Physiology	3
HPER 276	Personal Computers in Health, Physical Education and Recreation	2
HPER 290	Physiology of Activity	3
HPER 291	Physiology of Activity Lab	1
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	3
HPER 350	Basic Concepts in Kinesiology	3

CONCENTRATION AREA

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

ELECTIVES

Electives	11
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CREDITS TO TOTAL A MINIMUM OF 120

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

CURRICULUM **CREDITS**

Superior figures indicate year or years in which the course is normally taken, i.e., ¹freshman year, ²sophomore year, etc.

UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3 ¹
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)		3 ¹⁻⁴

COLLEGE REQUIREMENTS (Minimum number of credit hours required.)

Writing Course	3, 4
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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 at "Satisfies Arts and Science second writing course."

Group Dynamics Course

A course chosen from the following:

COMM 356	Small Group Communication	3
EDDV 373	Psychology of Human Relationships	3

Area A—Communication Skills 3¹⁻³

Three credits from one of the following departments: English (writing/composition courses), Communication and Foreign Languages and Literatures.

Area B—Humanities and Fine Arts 3²⁻⁴

Three credits from the following departments: Art, Art History, English (literature), Music, Philosophy and Theatre. Specific courses from the College of Human Resources (Department of Textiles, Design and Consumer Economics).

Area C—Biological Sciences 4¹

Four credits taken in the Department of Biological Sciences

Area D—History and Social Science

PSYC 201	General Psychology	3 ¹
IFST 401	Foundations of Human Sexuality	3

Three additional credits from one of the following departments:

Anthropology (except physical), Black American Studies, Criminal Justice, Economics, Geography (except physical and meteorology), History, Political Science and International Relations, Psychology and Sociology. Specific courses from the College of Human Resources (Department of Individual and Family Studies)

Area E—Natural Science and Mathematics

NTDT 200	Nutrition Concepts	3 ²
Mathematics course		3 ¹

MAJOR REQUIREMENTS**External to the College**

EDST 201	Education in a Multicultural Society	3 ¹
EDST 304	Educational Psychology – Social Aspects	3 ^{2,3}
EDST 305	Educational Psychology – Cognitive Aspects	3 ^{2,3}
EDDV 400	Student Teaching	9 ⁴

Students must have a minimum cumulative g.p.a. of 2.50, a g.p.a. in the major of at least 2.75, and have completed all required HPER courses except for HPER 360, HPER 426, HPER 430, and HPER 431 to register for EDDV 400.

Within the College

Students may take a maximum of two beginning-level HPER 120 activity courses prior to enrolling in a similar activity within the major skill blocks; e.g., if the student feels a weakness in tennis, that person might wish to do a HPER 120 Tennis I course before enrolling in the major block tennis activity. After having completed a particular skill in the major program, students must register for the advanced-level course if desiring to do the same skill in the nonmajors (HPER 120) curriculum; e.g., Tennis II, Self Defense II, etc. Major students are permitted four credits of Physical Education (HPER 120) work under the above guidelines that may be counted toward graduation credit.

HPER 140	Fundamental Skills Analysis (minimum grade C-)	2
HPER 150	Movement Education for Children (minimum grade C-)	3 ¹
HPER 214	Wellness: A Way of Life (minimum grade C-)	3 ¹
HPER 220	Anatomy and Physiology (minimum grade C-)	3 ²
HPER 250	Motor Development (minimum grade C-)	3 ²
HPER 276	Personal Computers in Health, Physical Education and Recreation (minimum grade C-)	2 ¹
HPER 300	Issues in Physical Activity Studies and Sports (minimum grade C-)	3 ³
HPER 310	Safety, First Aid and Emergency Care (minimum grade C-)	3
HPER 314	Methods and Materials in Health Education (minimum grade C-)	3 ³
HPER 315	Methods and Materials in Drug Education (minimum grade C-)	3 ²
HPER 324	Measurement and Evaluation (minimum grade C-)	3 ³
HPER 325	Human Sexuality: Methods and Materials (minimum grade C-)	3 ³
HPER 330	Mental Health (minimum grade C-)	3 ³
HPER 342	Survey in Adaptive Physical Education/Recreation (minimum grade C-)	3 ³
HPER 360	Psychology of Coaching (minimum grade C-)	1 ³
HPER 426	Biomechanics of Sports (minimum grade C-)	4 ⁴
HPER 430	Physiology of Activity (minimum grade C-)	3 ⁴
HPER 431	Physiology of Activity Lab (minimum grade C-)	1 ⁴
Skill courses (minimum grade C-)		11 ¹⁻³
HPER 370	Practicum in Methods of Elementary Physical Education (minimum grade C-)	3 ³
HPER 380	Practicum in Methods of Secondary Physical Education (minimum grade C-)	3 ³
HPER 465	Teaching Seminar in Health/Physical Education (minimum grade C-)	3 ⁴

Students must have a minimum cumulative g.p.a. of 2.50, a g.p.a. in the major of at least 2.75, and have completed HPER 214, HPER 315, HPER 325, and IFST 401 prior to enrolling in HPER 314.

Students must have a minimum cumulative g.p.a. of 2.5, a g.p.a. in the major of at least 2.75, and have completed all skills courses prior to enrolling in HPER 370 and HPER 380.

ELECTIVES

Electives	4
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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**

UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)		3

SKILL REQUIREMENTS

Writing Course	3
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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"

Mathematics Course 3

BREADTH REQUIREMENTS 34

Students must complete a total of 34 credits in areas A through D, with a minimum of 6 credits from Area A, 6 credits from Area B, 6 credits from Area C, and 7 credits from Area D. The remaining 9 of the 34 credits may be taken in any of the four areas

Area A—Communication Skills 6

Six credits from the following departments: English (except literature), Speech/Communication, Foreign Languages and Literatures (except literature) and EDST 521.

Area B—Humanities and Fine Arts 6

A minimum of six credits from the following departments: Art, Art History, English (literature), Languages and Literature (literature), Music, Philosophy and Theatre. Specific courses from the College of Human Resources (Department of Textiles, Design and Consumer Economics) may be selected upon approval of the advisor.

Area C—History and Social Science 6

A minimum of six credits from at least two of the following: Anthropology (except physical), Black American Studies, Criminal Justice, Economics, History, Political Science, Psychology, Sociology and Women's Studies. In addition, courses from the College of Human Resources in Individual Family Studies may be selected.

Area D—Mathematics, Natural and Biological Sciences 7

A minimum of seven credits from the following departments: Anthropology (physical), Biology, Chemistry, Engineering, Entomology, Food Science, Nutrition and Dietetics, Geography (physical and meteorology), Geology, Health Sciences (natural science area), Marine Studies, Mathematics (except MATH 251, 252, 253), Physics, Physical Science, Psychology (physiological), Statistics and Computer Science.

MAJOR REQUIREMENTS

Each course within the Academic Studies Core and Concentration Area requires a grade of C- or better.

Academic Studies

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, First Aid and Emergency Care	3
HPER 214	Wellness: A Way of Life	3
HPER 260	Leisure Service Programming	3
HPER 270	Recreation Leadership	3
HPER 276	Personal Computers in Health, Physical Education and Recreation	2
HPER 318	Special Recreation	3
HPER 341	Principles of Outdoor Recreation	3
HPER 354	Seminar in Recreation	1
HPER 404	Organization, Administration, Recreation and Leisure Service	3
HPER 450	Facility and Park Management	3
HPER 464	Internship in Recreation	9

Parks Concentration

Twenty-one credit hours selected from the following:		21
POSC 220	Introduction to Public Policy	3
GEOG 428	Land Use and Environmental Planning	3
GEOG 235	Conservation of Natural Resources	3

or
PHIL 448 Environmental Ethics 3

An additional 6 credits from Plant Science, Engineering Technology, or Entomology & Applied Ecology. Plus, an additional 6 credits from Communication, Criminal Justice, Geography, Philosophy, or Political Science.

ELECTIVES

Electives	14
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CREDITS TO TOTAL A MINIMUM OF 120

DEGREE: BACHELOR OF SCIENCE IN RECREATION AND PARK ADMINISTRATION

MAJOR: RECREATION AND PARK ADMINISTRATION CONCENTRATION: PROGRAMMING AND LEADERSHIP

CURRICULUM

CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20).		3

SKILL REQUIREMENTS

Writing Course 3

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"

Mathematics Course 3

BREADTH REQUIREMENTS 34

Students must complete a total of 34 credits in areas A through D, with a minimum of 6 credits from Area A, 6 credits from Area B, 6 credits from Area C, and 7 credits from Area D. The remaining 9 of the 34 credits may be taken in any of the four areas.

Area A—Communication Skills 6

A minimum of six credits from the following departments: English (except literature), Speech/Communication, Foreign Languages and Literatures (except literature) and EDST 521.

Area B—Humanities and Fine Arts 6

A minimum of six credits from the following departments: Art, Art History, English (literature), Languages and Literature (literature), Music, Philosophy and Theatre. Specific courses from the College of Human Resources (Department of Textiles, Design and Consumer Economics) may be selected upon approval of the advisor.

Area C—History and Social Science 6

A minimum of six credits from at least two of the following departments: Anthropology (except physical), Black American Studies, Criminal Justice, Economics, History, Political Science and International Relations, Psychology, Sociology and Women's Studies. In addition, courses from the College of Human Resources in Individual Family Studies may be selected.

Area D—Mathematics, Natural and Biological Sciences 7

A minimum of seven credits from at least two of the following departments: Anthropology (physical), Biology, Chemistry, Engineering, Entomology, Food Science, Nutrition and Dietetics, Geography (physical and meteorology), Geology, Health Sciences (natural science area), Marine Studies, Mathematics (except MATH 251, 252, 253), Physics, Physical Science, Psychology (physiological), Statistics and Computer Science.

*Indicates minimum number of credits; additional nine credits may be taken in any group(s)

MAJOR REQUIREMENTS

Each course within the Academic Studies Core and Concentration Area requires a grade of C- or better.

Academic Studies

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

Programming and Leadership Concentration 21

Courses reflecting a sub-discipline of recreation/leisure chosen under the direction of faculty advisor and submitted for approval to the faculty advisor and the Recreation sub-committee no later than the beginning of the second semester of the junior year

ELECTIVES

Electives	14
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CREDITS TO TOTAL A MINIMUM OF 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:

	CREDITS
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. The four-year B.S. degree curriculum offers an undergraduate professional education designed to prepare students for career entry positions in hospital clinical laboratories and industry as well as graduate study in medical technology and related areas.

During the first two years at the University, students interested in medical technology should take courses in the basic sciences and liberal arts, including prerequisite courses in biology and chemistry. The professional and clinical courses in the third and fourth years include a final period of supervised clinical education in the Medical Center of Delaware 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, first four semesters
2. Minimal index computed from specified courses in biological sciences and chemistry, including laboratories: BISC 207, 208, 276, 371, and CHEM 103, 104, 213, and 214-216. Grade-point index in these courses 2.0
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.

Anna P. Ciulla, Chair, Associate Professor. Office: 050 McKinly Laboratory
Telephone: (302) 831-2849

DEGREE: BACHELOR OF SCIENCE MAJOR: MEDICAL TECHNOLOGY

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)	3

MAJOR REQUIREMENTS

Outside the Department

Skill Requirements

Writing: (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 59.)

Mathematics:

MATH 114 College Mathematics and Statistics	3
(designed for students who do not intend to continue the study of mathematics)	

or	
MATH 115 Pre-Calculus	3
(designed for students who intend to continue the study of mathematics)	

or	
One of the following:	
MATH 221 Calculus I	3
MATH 241 Analytic Geometry and Calculus A	4

Successful performance on the college proficiency exam.

Breadth Requirements

(follow College of Arts and Science standards, see page 60.)

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

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

MEDT 100 Introduction to Medical Technology	1
MEDT 370 Phlebotomy Practicum	1
MEDT 372 Diagnostic Parasitology	2
MEDT 374 Introduction to Clinical Chemistry	1
MEDT 376 Clinical Virology and Immunology	2
MEDT 378 Clinical Laboratory Computer Applications	2
MEDT 400 Urinalysis and Body Fluids	2
MEDT 401 Clinical Physiological Chemistry I	3
MEDT 411 Clinical Physiological Chemistry I Laboratory	2
MEDT 404 Hematology I	2
MEDT 414 Hematology I Laboratory	1
MEDT 406 Medical Microbiology	3
MEDT 416 Medical Microbiology Laboratory	2
MEDT 410 Principles of Medical Technology Education	1
MEDT 403 Clinical Physiological Chemistry II	4
MEDT 413 Clinical Physiological Chemistry II Laboratory	2
MEDT 418 Medical Technology Senior Seminar	0
MEDT 405 Hematology II	2
MEDT 415 Hematology II Laboratory	2
MEDT 409 Immunohematology	1
MEDT 419 Immunohematology Laboratory	1
MEDT 420 Immunohematology II	1
MEDT 421 Immunohematology II Laboratory	1
MEDT 430 Diagnostic Bacteriology and Medical Mycology	2
MEDT 431 Diagnostic Bacteriology and Medical Mycology Laboratory	2
MEDT 461 Management Topics in Medical Technology	1

MEDT 471	Seminar: Medical Technology Laboratory Management	1
MEDT 472	Clinical Urine and Serology Practicum	1
MEDT 473	Clinical Chemistry Practicum	3
MEDT 475	Clinical Hematology Practicum	3
MEDT 477	Clinical Microbiology Practicum	3
MEDT 479	Clinical Immunohematology Practicum	3

Related Work

BISC 207	Introductory Biology I	4
BISC 208	Introductory Biology II	4
BISC 276	Human Physiology	4
BISC 371	Introduction to Microbiology	4
BISC 471	Introductory Immunology	3
CHEM 103	General Chemistry	4
CHEM 104	General Chemistry	4
CHEM 213	Elementary Organic Chemistry	4
CHEM 214	Elementary Biochemistry	3
CHEM 216	Elementary Biochemistry Laboratory	1
or		
CHEM 321	Organic Chemistry	4
CHEM 322	Organic Chemistry	4

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 program for those who are already 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. 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 College of Nursing uses many health care agencies in the Wilmington-Newark and nearby areas for clinical teaching.

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.

A minimum cumulative grade-point index of 2.0 is required to enroll in all nursing courses.

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.

DEGREE: BACHELOR OF SCIENCE IN NURSING**MAJOR: NURSING****CURRICULUM****CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)		3

BREADTH REQUIREMENTS**Natural Science**

BISC 207	Introductory Biology I	4
BISC 208	Introductory Biology II	4
BISC 276	Human Physiology	4
BISC 371	Introduction to Microbiology	4
CHEM 105	General Chemistry	5
CHEM 106	Elementary Bioorganic Chemistry	5
STAT 200	Basic Statistical Practice	3

Humanities

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		

Social Sciences

PSYC 201	General Psychology	3
IFST 201	Life Span Development	3
Sociology course 200-level or above		3
Anthropology course 100-level or above		3
Restricted Social Science course chosen from among		3
History, Political Science, Economics, Black American Studies, Women's Studies, Psychology, Sociology		

Other

NTDT 200	Nutrition Concepts	3
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MAJOR REQUIREMENTS

NURS 205	Societal Context of Nursing	3
NURS 212	Concepts in Pathophysiology	3
NURS 215	Basic Nursing Practice Skills	1
NURS 306	Determinants of Wellness	5
NURS 315	Practicum I	4
NURS 312	Pathophysiology	3
NURS 314	Psychopathology	2
NURS 308	Restorative Nursing Practice I	4
NURS 317	Practicum II	3
NURS 318	Practicum III	3
or		
NURS 319	Practicum IV	3
NURS 332	Pharmacological Nursing Responsibility	3
NURS 405	Introduction to Research	3
NURS 408	Restorative Nursing Practice II	4
NURS 417	Practicum V	3
NURS 418	Practicum VI	3
or		
NURS 419	Practicum VII	3
NURS 409	Professionalism in Nursing Practice	2
NURS 420	Practicum VIII	6
NURS 411	Topics in Health Care Delivery	3

ELECTIVES

<i>Electives</i>	6
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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) format. Many of the support courses are also available in video format.

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

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-).....	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20).....	3

BREADTH REQUIREMENTS**Natural Science**

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

English course (second English composition course).....	3
Literature course.....	3
Philosophy course.....	3

Social Sciences

Psychology course.....	3
Sociology course.....	3
Lifespan development course.....	3

Other

STAT 201 Introduction to Statistics I.....	3
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Electives

Restricted elective chosen from the following: Art, Art History, History, Philosophy, Music, Theatre, Comparative Literature, Black American Studies, Economics, Political Science, Women's Studies, Foreign Languages and Literatures, Linguistics, and English.....	3
Free Electives.....	15

MAJOR REQUIREMENTS

NURS 312 Pathophysiology.....	4
NURS 314 Psychopathology.....	3
NURS 340 Current Perspectives in Professional Nursing.....	2
NURS 342 Nursing Informatics.....	2
NURS 343 Transition to Baccalaureate Nursing Education.....	1
NURS 344 Wellness/Health Assessment.....	2
NURS 405 Introduction to Nursing Research.....	2
NURS 411 Topics in Health Care Delivery.....	3
NURS 441 Learning Lab: Health Assessment.....	1
NURS 442 Community Health Nursing.....	3
NURS 443 BRN Role Practicum.....	3
NURS 445 Nursing Research Applications.....	1
NURS 446 Leadership/Organizational Behavior.....	2

CREDITS TO TOTAL A MINIMUM OF 125

NUTRITION AND DIETETICS

Programs in the Department of Nutrition and Dietetics 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 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.

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), Center for 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), Center for 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 30 of this catalog).

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.

DEGREE: BACHELOR OF SCIENCE IN HUMAN RESOURCES MAJOR: APPLIED NUTRITION

CURRICULUM

CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20).	3

MAJOR REQUIREMENTS

External to the College

Humanities electives 9

Sciences

CHEM 101 General Chemistry	4
or	
CHEM 103 General Chemistry	4
CHEM 102 General Chemistry	4
or	
CHEM 104 General Chemistry	4
CHEM 213 Elementary Organic Chemistry	4
CHEM 214 Elementary Biochemistry	3
CHEM 216 Elementary Biochemistry Laboratory	1
BISC 103 General Biology	3
BISC 113 General Biology Laboratory	1
or	
BISC 207 Introductory Biology I	4
and	
BISC 208 Introductory Biology II	4
BISC 106 Elementary Human Physiology	3
and	
BISC 116 Elementary Human Physiology Lab	1
or	
BISC 276 Human Physiology	4
Students desiring to fulfill a Biology minor should take BISC 207, 208 and 276	

Social Sciences

ECON 100 Economic Issues and Policies	3
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

Food Science

Requires a minimum grade of C- and a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses.

FOSC 201 Food Principles	2
FOSC 211 Food Principles Laboratory	1
FOSC 305 Food Science	2
FOSC 306 Food Science Laboratory	1

Other

MATH 114 Elementary Mathematics and Statistics	3
or	
Successful performance on the Proficiency Test in Mathematics administered by Department of Mathematical Sciences.	
IFST course	3
CNST course	3
IFST, NTDT, CNST, HRIM, HURE courses	5

Within the Department

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 25 credits in NTDT; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses; only 300-level courses and a maximum of four credits of Special Problems/Independent Study (NTDT x66) may count toward the fulfillment of this requirement

NTDT 103 Introduction to Nutrition Professions	1
NTDT 200 Nutrition Concepts	3
NTDT 400 Macronutrients	3
NTDT 401 Micronutrients	3
NTDT 445 Nutrition Education	3
NTDT courses (300-level or higher)	9
NTDT courses	3

ELECTIVES

Electives 25-29

May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music organization credits 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 125

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

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20)		3

MAJOR REQUIREMENTS
External to the College

Humanities electives	9
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Sciences

CHEM 101	General Chemistry	4
or		
CHEM 103	General Chemistry	4
CHEM 102	General Chemistry	4
or		
CHEM 104	General Chemistry	4
CHEM 213	Elementary Organic Chemistry	4
CHEM 214	Elementary Biochemistry	3
CHEM 216	Elementary Biochemistry Laboratory	1
BISC 103	General Biology	3
BISC 113	General Biology Laboratory	1
or		
BISC 207	Introductory Biology I	4
and		
BISC 208	Introductory Biology II	4
BISC 106	Elementary Human Physiology	3
and		
BISC 116	Elementary Physiology Laboratory	1
or		
BISC 276	Human Physiology	4
BISC 371	Introduction to Microbiology	4
Students desiring to fulfill a Biology minor should take BISC 207, 208 and 276.		

Social Sciences

ECON 100	Economic Issues and Policies	3
or		
ECON 151	Introduction to Microeconomics: Prices and Markets	3
PSYC 201	General Psychology	3
SOCIOLOGY (Three credits chosen from the following courses:)		3
SOCI 201	Introduction to Society	
SOCI 202	Social Deviance	
SOCI 203	The Individual and Society	
SOCI 204	Urban Communities	
SOCI 209	Social Problems	
SOCI 210	Population Problems	
SOCI 242	Society and the Health Professions	
SOCI 243	Society, Politics and Health Care	
PSYC 303	Introduction to Social Psychology	
SOCI 310	Sociology of Healthcare	
BUAD 309	Management and Organizational Behavior	3
Social Science elective		3

Food Science

Requires a minimum grade of C-; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses.

FOSC 201	Food Principles	2
FOSC 211	Food Principles Laboratory	1
FOSC 305	Food Science	2
FOSC 306	Food Science Laboratory	1

Other

Statistics course selected from: STAT 200, PSYC 309, FREC 408		3
MATH 114	Elementary Mathematics and Statistics	3
or		
Successful performance on the Proficiency Test in Mathematics administered by Department of Mathematical Sciences.		
IFST course		3
CNST course		3

Within the Department

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 35 credits in NTDI; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses; only 300-level courses and a maximum of four credits of Special Problems/Independent Study (NTDI x66) may count toward the fulfillment of this requirement.

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

NTDT 103	Introduction to Nutrition Professions	1
NTDT 200	Nutrition Concepts	3
NTDT 240	Introduction to Clinical Dietetics	3
NTDT 321	Quantity Food Production and Service	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 400	Macronutrients	3
NTDT 401	Micronutrients	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

Electives	16-20
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May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music organization credits 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 129

DEGREE: BACHELOR OF SCIENCE IN HUMAN RESOURCES
MAJOR: NUTRITIONAL SCIENCES
CURRICULUM CREDITS
UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20).		3

MAJOR REQUIREMENTS
External to the College

Humanities electives	9
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Sciences

CHEM 103	General Chemistry	4
CHEM 104	General Chemistry	4
CHEM 214	Elementary Biochemistry	3
CHEM 216	Elementary Biochemistry Laboratory	1
CHEM 220	Quantitative Analysis I	3
CHEM 221	Quantitative Analysis Laboratory	1
CHEM 321	Organic Chemistry	4
CHEM 322	Organic Chemistry	4
BISC 207	Introductory Biology I	4
BISC 208	Introductory Biology II	4
BISC 276	Human Physiology	4
BISC 371	Introduction to Microbiology	4
PHYS 201	Introductory Physics I	4

Social Sciences

ECON 100	Economic Issues and Policies	3
or		
ECON 151	Introduction to Microeconomics: Prices and Markets	3
Social Science electives		12

Food Science

Requires a minimum grade of C-, and a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses.

FOSC 201	Food Principles	2
FOSC 211	Food Principles Laboratory	1
FOSC 305	Food Science	2
FOSC 306	Food Science Laboratory	1

Other

FREC 408	Research Methods	3
MATH 221	Calculus I	3
or		
MATH 241	Analytic Geometry and Calculus A	4
MATH 222	Calculus II	3
or		
MATH 242	Analytic Geometry and Calculus B	4

Within the Department

A minimum grade of C- must be achieved for credits to count toward the fulfillment of 26 credits in NTD; a minimum grade of C- in 200-level courses must be achieved to proceed to upper-level courses; only 300-level courses and a maximum of four credits of Special Problems/Independent Study (NTDT x66) may count toward the fulfillment of this requirement.

NTDT 200	Nutrition Concepts	3
NTDT 400	Macronutrients	3
NTDT 401	Micronutrients	3
NTDT 421	Nutrition Assessment Methods	2
NTDT 440	Nutrition and Disease	3
NTDT courses (300-level or higher)	9
NTDT course	3

ELECTIVES

Electives 6-8

May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and four credits of Music organization credits 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