

**UNIVERSITY FACULTY SENATE**

**SUMMARY OF AGENDA**

**FEBRUARY 10, 1997**

- I. ADOPTION OF THE AGENDA**
- II. APPROVAL OF THE MINUTES:** December 2, 1996
- III. REMARKS BY PROVOST SCHIAVELLI**
- IV. ANNOUNCEMENTS:** Senate President Palley

**ANNOUNCEMENTS FOR CHALLENGE:**

- 1. Revision of the B.A.S. in Agricultural Engineering Technology and retitling of the major to Bioresources Engineering Technology
- 2. New minor in Engineering Technology
- 3. Revision of the major in Agricultural Education
- 4. Revision of the major in Entomology: Wildlife Conservation
- 5. Revision of the major in Plant Science--Deletion of the following concentrations:
  - a. Ornamental Horticulture
  - b. Agronomy
  - c. Plant Pathology
- 6. Revision of the Bachelor of Chemical Engineering
- 7. Change in name of the Department of Electrical Engineering to the Department of Electrical and Computer Engineering
- 8. Revision of the Ph.D. and M.Ch.E. in Chemical Engineering
- 9. Change in name of the Department of Textiles, Design and Consumer Economics to the Department of Consumer Studies
- 10. Creation of a Specialization in Educational Technology in the Ed.D. in Leadership in Curriculum and Instruction
- 11. Revision of the B.S. in Human Resources:
  - a. Apparel Design
  - b. Merchandising to include a new title: Fashion Merchandising
  - c. Consumer Economics
- 12. Revision of the B.S. in Human Resources:
  - a. Applied Nutrition
  - b. Dietetics
  - c. Hotel, Restaurant and Institutional Management

13. Revision of the B.S. in Human Resources: Early Childhood Development and Education
14. New minor in Disabilities Studies
15. Revision to the B.A. in Women's Studies
16. Revision of the major in Exercise and Sports Science--to include the addition of the following concentrations:
  - a. Exercise Physiology
  - b. Strength and Conditioning

V. **OLD BUSINESS** - None

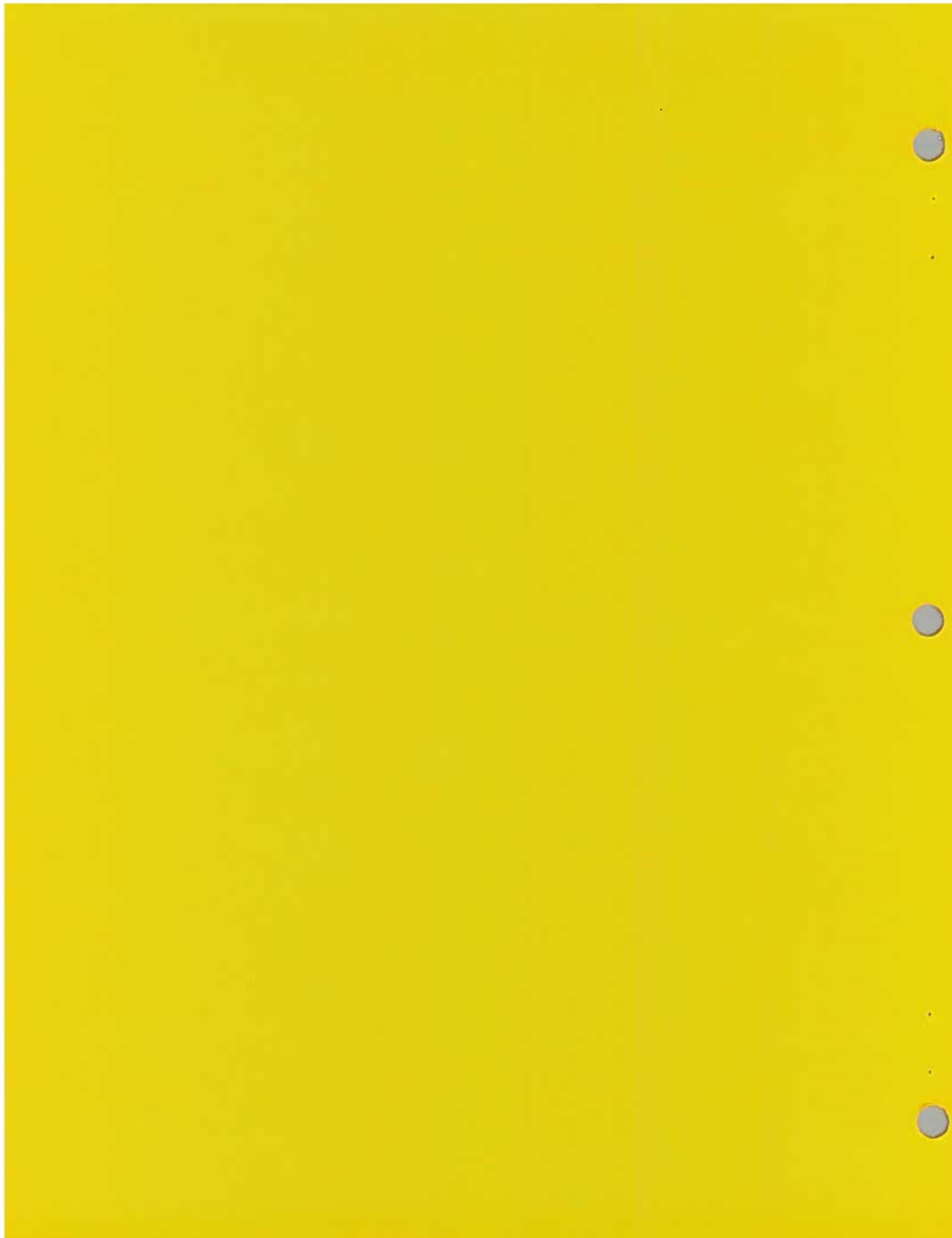
VI. **NEW BUSINESS**

- A. Recommendation for the establishment of a new major in Plant Biology leading to the B.S. degree in Agriculture
- B. Recommendation for the establishment of a new major in Landscape Horticulture leading to the B.S. degree in Agriculture
- C. Recommendation for the establishment of a new Honors Degree leading to the Honors B.A. in Communication
- D. Recommendation for the establishment of a new Honors Degree leading to the Honors B.A. in Mathematical Sciences
- E. Recommendation for the establishment of a new Honors Degree leading to the Honors B.S. in Mathematical Sciences
- F. Recommendation for the establishment of a new Honors Degree leading to the Honors B.A. in Mathematical Sciences Education
- G. Recommendation for the establishment of a new Honors Degree leading to the Honors B.A. in Women's Studies
- H. Recommendation for the disestablishment of the B.S. in Human Resources: Coordinated Undergraduate Dietetics
- I. Recommendation on amending the Faculty Handbook relative to the Minutes of the Faculty Senate Meetings
- J. Recommendation on amending the Faculty Handbook relative to the addition of two non-elected voting senators

Summary of Agenda

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- K. Recommendation on amending the Faculty Handbook relative to the University Policy Against Sexual Harassment
- L. Introduction of new business





UNIVERSITY FACULTY SENATE

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January 21, 1997

TO: All Faculty Members

FROM: Joann Browning, Vice President  
University Faculty Senate

SUBJECT: Regular Faculty Senate Meeting, February 10, 1997

In accordance with Section IV, paragraph 6 of the Constitution, the regular meeting of the University Faculty Senate will be held on Monday, February 10, 1997 at 4:00 p.m. in room 110 Memorial Hall. The agenda will be as follows:

AGENDA

- I. Adoption of the Agenda.
- II. Approval of the minutes of the Senate meeting of December 2, 1996.
- III. Remarks by Provost Schiavelli.
- IV. Announcements: Senate President Palley

Announcements for Challenge

**[Note: To save expenses, attachments do not always include the complete information and supporting materials available to the committee(s). A copy of all background information is being held for review in the Faculty Senate Office, 205 Hullihen.]**

1. Revision of the B.A.S. in Agricultural Engineering Technology and retitling of the major to Bioresources Engineering Technology (Attachment 1)
2. New minor in Engineering Technology (Attachment 2)
3. Revision of the major in Agricultural Education (Attachment 3)



4. Revision of the major in Entomology: Wildlife Conservation (Attachment 4)
5. Revision of the major in Plant Science--Deletion of the following concentrations: (Attachment 5)
  - a. Ornamental Horticulture
  - b. Agronomy
  - c. Plant Pathology
6. Revision of the Bachelor of Chemical Engineering (Attachment 6)
7. Change in name of the Department of Electrical Engineering to the Department of Electrical and Computer Engineering (Attachment 7)
8. Revision of the Ph.D. and M.Ch.E. in Chemical Engineering (Attachment 8)
9. Change in name of the Department of Textiles, Design and Consumer Economics to the Department of Consumer Studies (Attachment 9)
10. Creation of a Specialization in Educational Technology in the Ed.D. in Leadership in Curriculum and Instruction (Attachment 10)
11. Revision of the B.S. in Human Resources: (Attachment 11)
  - a. Apparel Design
  - b. Merchandising to include a new title: Fashion Merchandising
  - c. Consumer Economics
12. Revision of the B.S. in Human Resources: (Attachment 12)
  - a. Applied Nutrition
  - b. Dietetics
  - c. Hotel, Restaurant and Institutional Management
13. Revision of the B.S. in Human Resources: Early Childhood Development and Education (Attachment 13)
14. New minor in Disabilities Studies (Attachment 14)
15. Revision to the B.A. in Women's Studies (Attachment 15)
16. Revision of the major in Exercise and Sports Science--to include the addition of the following concentrations: Exercise Physiology and Strength and Conditioning (Attachment 16)

V. Old Business - None

VI. New Business

- A. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new major in Plant Biology leading to the B.S. degree in Agriculture. (Attachment 17)

RESOLVED, that the Faculty Senate approves provisionally, for four years, the establishment of a new major in Plant Biology leading to the B.S. degree in Agriculture, effective September 1, 1997.

- B. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new major in Landscape Horticulture leading to the B.S. degree in Agriculture. (Attachment 18)

RESOLVED, that the Faculty Senate approves provisionally, for four years, the establishment of a new major in Landscape Horticulture leading to the B.S. degree in Agriculture, effective September 1, 1997.

- C. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new Honors Degree leading to the Honors B.A. in Communication. (Attachment 19)

RESOLVED, that the Faculty Senate approves the establishment of a new Honors Degree leading to the Honors B.A. in Communication.

- D. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new Honors Degree leading to the Honors B.A. in Mathematical Sciences. (Attachment 20)



RESOLVED, that the Faculty Senate approves the establishment of a new Honors Degree leading to the Honors B.A. in Mathematical Sciences.

- E. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new Honors Degree leading to the Honors B.S. in Mathematical Sciences. (Attachment 21)

RESOLVED, that the Faculty Senate approves the establishment of a new Honors Degree leading to the Honors B.S. in Mathematical Sciences.

- F. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new Honors Degree leading to the Honors B.A. in Mathematical Sciences Education. (Attachment 22)

RESOLVED, that the Faculty Senate approves the establishment of a new Honors Degree leading to the Honors B.A. in Mathematical Sciences Education.

- G. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the establishment of a new Honors Degree leading to the Honors B.A. in Women's Studies. (Attachment 23).

RESOLVED, that the Faculty Senate approves the establishment of a new Honors Degree leading to the Honors B.A. in Women's Studies.

- H. Recommendation from the Committee on Undergraduate Studies (R. Taggart, Chairperson), with the concurrence of the Coordinating Committee on Education (R. Carroll, Chairperson), for the disestablishment of the B.S. in Human Resources: Coordinated Undergraduate Dietetics. (Attachment 24)

WHEREAS, the major in Coordinated Undergraduate Dietetics is now being offered through the post-baccalaureate dietetic internship offered by the

Department of Nutrition and Dietetics in collaboration with the Delaware Department of Public Health, and

WHEREAS, there are currently no students enrolled in this major, be it therefore

RESOLVED, that the Faculty Senate approves the disestablishment of the major in Coordinated Undergraduate Dietetics, B.S. in Human Resources, effective immediately.

- I. Recommendation from the Committee on Rules (F. Dilley, Chairperson), on amending the Faculty Handbook relative to the Minutes of the Faculty Senate Meetings.

RESOLVED, that the Faculty Handbook, page I-8, Section L, "Responsibilities and Powers of Officers, seventh paragraph, second sentence, be amended as follows: [New wording is in bold type and deleted material is in brackets.]

[The minutes will not contain a record of the debate except by order of the Senate either prior to or immediately after the debate.] **The minutes will contain a record of relevant items in the discussion which preceded Senate actions.**

- J. Recommendation from the Faculty Senate Executive Committee to add the Vice Provost for Undergraduate Instruction and the Vice Provost for Research as voting non-elected members of the Faculty Senate, effective September 1, 1997.

WHEREAS, the number of non-elected senators will be reduced due to the reorganization of the colleges, and

WHEREAS, the Committee on Undergraduate Studies and the Committee on Research have recommended the addition of the Vice Provost for Undergraduate Instruction and the Vice Provost for Research, respectively, as voting non-elected senators, be it therefore

RESOLVED, that the Faculty Handbook, page I-2, Section IV, paragraph 1., be amended as follows: [Addition in bold type]

The Senate shall consist of the President of the University, the University Provost, the Vice President for Student Life, the **Vice Provost for Undergraduate Instruction, the Vice Provost for Research**, the Deans of the Colleges, the Associate Provost for Graduate Studies, the elected Senate officers, the elected faculty senators of the Units, and four student senators of the University. Each member of the Senate (hereinafter called a senator) shall have the right to vote. In no case shall the number of non-elected senators exceed twenty percent of the Senate.

- K. Recommendation from the Committee on Faculty Welfare and Privileges (J. McLaughlin, Chairperson), on amending the Faculty Handbook regarding "University Policy Against Sexual Harassment," page III-6, Section B.2. [Deletions in *italics*, additions in bold and underlined]

## B.2 UNIVERSITY POLICY AGAINST SEXUAL HARASSMENT

### II. Complaint Procedures

#### B. Informal Procedures

WHEREAS, the existing wording of the following section does not make it clear that our policy is that a faculty member accused of sexual harassment should be strongly encouraged to consult with the AAUP before any meetings with administrators, be it therefore

RESOLVED, that Section II B be reworded as follows:

Upon receipt of a written allegation of sexual harassment, the Vice President for Employee Relations will meet with the individual against whom the complaint has been made, his/her department chairperson or immediate supervisor;

college dean or unit head. The director of OWA or OAA will be in attendance also, as appropriate.

The AAUP will be notified if the complaint involves a faculty member(s) in any way. If the accused is a faculty member, the AAUP will be notified in time to allow consultation with the accused prior to the meeting. The Vice-President for Employee Relations will advise the accused that it is in his/her best interest to seek out the appropriate AAUP officer for consultation prior to any meetings.

WHEREAS, the existing policy does not mention any temporal constraints on the conduct of the investigation, and

WHEREAS, undue delays could cause harm to either the complainant or the accused, and

WHEREAS, specific time-frames could distort the conduct of the investigation, be it therefore

RESOLVED, that the sentence shown below in bold and underlined be added to the following paragraph:

Where indicated, the Vice President for Employee Relations may interview other individuals to ascertain the validity of the complaint. **However, the investigation will proceed in a timely manner.**

C. Formal Redress

WHEREAS, the existing wording is vague concerning avenues open to complainants, be it therefore

RESOLVED, that the words in bold and underlined be added to the following paragraph:

A more formal means of redress from sexual harassment may also be sought through grievance procedures. For faculty, a complainant may [be brought] **appeal the results of the informal**

procedures to the Faculty Senate Committee on Faculty Welfare and Privileges [or]. Upon review of a written appeal, the committee may elect to pursue the matter and make additional recommendations to the University Provost. A grievance may be commenced under the collective bargaining agreement if the informal procedures set forth above have not been properly followed. For hourly employees, the grievance procedures are found in their collective bargaining agreements. For professional and salaried staff, the grievance procedures are found in the Personnel Policy & Procedures Manual for Professional & Salaried Staff. For students, the grievance procedures are found in the Official Student Handbook. (Rev. 6/5/89; updated 11/15/93; revised Office of Employee Relations, 2/96)

- L. Such items as may come before the Senate. (No motion introduced under new business, except a motion to refer to committee, shall be acted upon until the next meeting of the Senate.)

JB/rg

Attachments: Committee Activities Report

1. Revision of the B.A.S. in Agricultural Engineering Technology
2. New minor in Engineering Technology
3. Revision of the major in Agricultural Education
4. Revision of the major in Entomology: Wildlife Conservation
5. Revision of the major in Plant Science
6. Revision of the Bachelor of Chemical Engineering
7. Change in name of the Department of Electrical Engineering
8. Revision of the Ph.D. and M.Ch.E. in Chemical Engineering
9. Change in name of the Department of Textiles, Design and Consumer Ec.
10. Creation of a Specialization in Educational Technology
11. Revision of the B.S. in Human Resources: Apparel Design, Merchandising, and Consumer Economics
12. Revision of the B.S. in Human Resources: Applied Nutrition, Dietetics & Hotel, Restaurant and Institutional Management
13. Revision of the B.S. in Human Resources: Early Childhood Development & Education
14. New minor in Disabilities Studies
15. Revision to the B.A. in Women's Studies
16. Revision of the major in Exercise and Sports Science to include the addition

of concentrations

17. New major in Plant Biology
18. New major in Landscape Horticulture
19. Honors B.A. in Communication
20. Honors B.A. in Mathematical Sciences
21. Honors B.S. in Mathematical Sciences
22. Honors B.A. in Mathematical Sciences Education
23. Honors B.A. in Women's Studies
24. Disestablishment of the major in Coordinated Undergraduate Dietetics

# **COMMITTEE ACTIVITIES REPORT**

**FEBRUARY 1997**

## **ACADEMIC PRIORITIES REVIEW CTE. (John McLaughlin)**

Discussing several long-range priorities, including the library

## **COMMITTEES AND NOMINATIONS, CTE. ON (Carol Denson)**

Filled vacancies on Senate Committees

Established an ad hoc committee to review the general education requirements for all students at the University of Delaware. Professor Carol Hoffeecker, Richards Professor of History, will serve as chair.

## **COORDINATING COMMITTEE ON EDUCATION, CTE. ON (Robert Carroll)**

Completed numerous announcements for challenge and resolutions which are included on the February Senate Agenda

## **FACULTY WELFARE AND PRIVILEGES, CTE. ON (John McLaughlin)**

Continued consideration of policies on sexual harassment

Revised Copy, October 31, 1996

Revision and Retitling of the Agricultural Engineering  
Technology Curriculum to

Bioresources Engineering Technology

The Department of Agricultural Engineering has begun the process of renaming itself the Department of Bioresources Engineering to reflect the broader scope of its interests and expertise. Trends within the profession, especially in this region of the country, have enlarged the discipline's breadth beyond engineering for production agriculture. We have become involved with a wider range of engineering problems that are best described as pertaining to biological and natural resources.

Research within the department deals with issues related to the environment and to biological systems. Human interaction with and engineering of various ecosystems, both natural and cultivated, are central concerns of our work. Some specific examples of research include work related to land disposal of wastes, water quality in hydrologic systems, storm-water management, and improved methods of fertilizer and pesticide application.

In light of the department's pending name change and the broader focus of the department and the profession, we believe it is now prudent to re-evaluate the department's traditional Agricultural Engineering Technology major. As a result of that re-evaluation, we have concluded that revision of the curriculum and retitling of the major are in order.

We propose that the revised program be titled Bioresources Engineering Technology. The revised program puts considerably more emphasis on biological systems and natural resources. Since the Bioresources Engineering Technology program is a revision of an existing program, we do not expect it will cause a need for any additional university resources or faculty.

The following pages detail the requirements of the program in a format similar to that which will appear in the undergraduate catalog. To assist the reader in evaluating the revised parts of the program, endnotes are provided to identify the changes. The endnotes will not appear in the undergraduate catalog.



Revised Copy, October 31, 1996

Degree: Bachelor of Applied Science  
Major: Bioresources Engineering Technology

**CURRICULUM**

**CREDITS**

**UNIVERSITY REQUIREMENTS**

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

**COLLEGE REQUIREMENTS**

**Mathematics and Computer Science**

Mathematics course (MATH 115 or higher level) 3  
Computer Science course selected from CISC 105, EGTE 111, 3  
FREC 135, or equivalent

**Agricultural and Biological Sciences**

9-12

Minimum of one course outside the student's major in three  
of the following areas: Food and Resource Economics, Food  
Science, Bioresources Engineering, Entomology and Applied  
Ecology, Plant and Soil Sciences, or Biology.

**Literature and Arts**

6

Six credits selected from the general areas of English, Art,  
Art History, Communication, Music, Theatre, or Foreign Language.

**Social Sciences and Humanities**

9

Minimum of one course in three of the following areas:  
Anthropology, Black American Studies, Criminal Justice,  
Economics, Education, Geography, History, Philosophy, Political  
Science, Psychology, Sociology, or Women's Studies.

**Physical Sciences**

8

Minimum of eight credits selected from one of the  
following areas: Chemistry, Geology, or Physical Science

**MAJOR REQUIREMENTS**

**Communications [note 1]**

7

Seven credits selected to provide training in oral and written  
communications to include:

EGTE 365 Junior Seminar 1

A second writing course selected from the following:

ENGL 301 Expository Writing 3  
ENGL 302 Advanced Composition 3  
ENGL 307 News Writing and Editing 3  
ENGL 312 Written Communications in Business 3  
ENGL 410 Technical Writing 3

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An oral communications course selected from the following:

AGRI 212	Oral Communications in Agr. And Nat. Res.	3
COMM 200	Introduction to Human Communication Systems	3
COMM 255	Fundamentals of Communication	3
COMM 312	Oral Communication in Business	3
COMM 350	Public Speaking	3
COMM 356	Small Group Communication	3

**Social Sciences and Humanities [note 1]** 15

Fifteen credits selected to provide an appreciation and understanding of our cultural heritage, interpersonal relationships, interrelationships between technology and society and a value system for sound decision making to include:

ECON 151	Introduction to Microeconomics	3
ECON 152	Introduction to Macroeconomics	3

The remaining nine credits to be selected from a minimum of three of the following areas: Anthropology, Art, Art History, Black American Studies, Criminal Justice, Economics, Education, English, Foreign Language, Geography, History, Music, Philosophy, Political Science, Psychology, Sociology, Theater or Women's Studies.

**Basic Sciences and Mathematics** 35

A minimum of 35 credits selected to provide fundamental knowledge about nature and its phenomena. Specific requirements are:

**Biology, Chemistry and Physics [note 2]**

Select one of following Biology/Life Sciences options:

	BISC 207	Introductory Biology I	4
and	BISC 208	Introductory Biology II	4

or

	BISC 103	General Biology	3
	BISC 113	General Biology Laboratory	1
and	ENTO 201	Wildlife Conservation and Ecology	3

or

	PLSC 101	Botany I	4
and	ENTO 201	Wildlife Conservation and Ecology	3

Required:

CHEM 103	General Chemistry	4
CHEM 104	General Chemistry	4
PHYS 207	Fundamentals of Physics I	4
PHYS 208	Fundamentals of Physics II	4

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**Mathematics [note 3]**

MATH 241	Analytic Geometry and Calculus A	4
MATH 242	Analytic Geometry and Calculus B	4
MATH 243	Analytic Geometry and Calculus C	4

**Technical Sciences [note 1]**

18

Eighteen credits that deal with the application of engineering science subject matter to include one course in each of the following areas: Electricity, Fluid Mechanics, Statics, and Thermodynamics.

Specific Requirements are:

EGTE 218	Fundamentals of Hydraulics	4
EGTE 244	Electricity for Engineering Technology	4
EGTE 311	Fundamentals of Thermodynamics	3
EGTE 354	Rural/Light Industrial Buildings	4

The remaining 3 credits must be selected from one of the following areas: Dynamics, Electronics, Materials Technology, or Strength of Materials. EGTE courses that satisfy this requirement are:

EGTE 344	Electronics and Microprocessors	3
EGTE 435	Machinery Design and Development	3

**Technical Skills [note 4]**

13

Thirteen credits selected to provide skills and knowledge of appropriate methods, procedures and techniques. May include computer use, graphics, problem solving, processes, construction techniques, instrumentation techniques, production methods, field operations, plant operations, safety and maintenance:

Required:

EGTE 111	Computer Applications in Engineering Technology	3
EGTE 113	Land Surveying	2
EGTE 125	Intro. to Bioresources Engineering Tech. [note 5]	2
EGTE 209	Computer Aided Drafting	3
EGTE 443	Instrumentation	3

**Technical Specialization [note 6]**

21

Twenty-one credits selected from courses that involve technical analysis and design.

Specific Requirements are:

EGTE 321	Storm-Water Management	4
EGTE 328	Waste Management Systems	3
EGTE 421	Bioresources Management Systems [note 7]	4
EGTE 431	Mechanical Aspects of Bio. and Nat. Res. [note 7]	4
EGTE 451	Senior Design [note 5]	3

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and one of the following:

AGEG 628	Land Application of Wastes	3
EGTE 331	Mechanical Power Units	4
EGTE 440	Plant Layout and Materials Handling	3
EGTE 444	Programmable Logic Control Systems	3
EGTE 445	Food Engineering Technology	4
EGTE 456	Fundamentals of HVAC	3

**Technical Support** [note 8]

Eighteen credits selected to support the specialization and career interests of the student. 18

**Specific Requirements:**

PLSC 204	Introduction to Soil Science	4
A minimum of three credits in biology/life sciences or natural resources, excluding courses used to satisfy the Biology, Chemistry, and Physics group		3

The remaining credits may be satisfied by additional courses in the Bioresources Engineering Department or related courses approved by the student's advisor.

To graduate with a major in Bioresources Engineering Technology, the student must attain an average 2.0 index in all courses with a AGEG (BREG) or EGTE prefix.

**ELECTIVES** [note 2]

**Electives**

After required courses, sufficient elective credits must be taken to meet the minimum number of 130 credits. May include Military Science, Music, or Physical Education. (Only four credits of activity-type Physical Education and/or four credits of performing Music organization credit may be counted toward the degree.)

**CREDITS TO TOTAL A MINIMUM OF** [note 2]

130

**ENDNOTES**

1. Requirements are the same as those of the old AET major.
2. The AET program required a minimum of 3 credits in Biology/Life Science. Most students satisfied the requirement by taking BISC 103. The new requirement is a minimum of 7 credits in Biology/Life Sciences to be satisfied by choosing one of three sets of course options.

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BISC 207 and 208 would be recommended for those students interested in obtaining a biology minor. The other change in this category is removal of the PHYS 201 and 202 sequence as a choice, leaving PHYS 207 and 208 as the requirement.

3. The AET program required a minimum of 12 credits of mathematics at or above the 200-level, to include two semesters of calculus. Either MATH 221 and 222 or MATH 241 and 242 were acceptable. Mathematical modeling and simulation of natural systems are important tools in the discipline of Bioresources Engineering. The Calculus A, B, and C course sequence covers the topics of partial derivatives and vector calculus--subjects that will allow us to enrich upper level courses with rigorous applications of mathematical modeling and simulation.
4. The thirteen credits under technical skills are explicitly specified in the BRET program. The AET requirement, EGTE 109, Technical Drafting, is replaced with EGTE 125, Introduction to Bioresources Engineering Technology. Many if not most incoming students have some board drafting or formal drawing experience and do not need another drafting course. The instrumentation course is specified because measurement systems and technology are important for all aspects of bioresources.
5. New course.
6. Total credits in this category have been reduced from 22 to 21. The list of required courses has been changed to emphasize biological systems and bioresources management.
7. This course is a retitled revision of the course having the same number in the current course catalog. Since this is an upper level course, there will be no immediate demand. We will initiate paperwork for the required changes next year.
8. The Technical Support category has been changed to specify 3 credits in biology/life sciences or natural resources in addition to the 4 credits from PLSC 204, Introduction to Soil Science, that are required for the AET program. The required total number of credits in this group has been reduced from 19 to 18.

Revised Copy, October 29, 1996

## ENGINEERING TECHNOLOGY

### Minor in Engineering Technology

A minor in engineering technology may be earned by a student in any University bachelor's degree program through successful completion of a minimum of 20 credits of engineering technology courses in accordance with the requirements listed here. All students must meet the required prerequisites for any engineering technology course before it is taken. Before being admitted to the minor, the student must have successfully completed MATH 222 or MATH 242, CHEM 102 or CHEM 104, and PHYS 202 or PHYS 208. A grade point average of at least 2.0 is required in the 20 credits of engineering technology courses for the minor and in the mathematics and science courses listed above.

The required engineering technology courses are:

EGTE 109	Technical Drafting	2
EGTE 111	Computer Applications in Eng. Tech.	3

An additional 15 credits in engineering technology must be taken of which at least 6 credits must be at the 300 level or higher. All engineering technology courses shall be selected with the approval of an advisor in the Department of Bioresources Engineering to meet each student's objectives. For students concerned with the environment, these courses might include EGTE 103, 113, and 328; for those interested in electronics, EGTE 244 and 344. Courses can also be chosen to give the student's minor an emphasis in other areas such as manufacturing, mechanics, or technical management.

## COLLEGE OF AGRICULTURAL SCIENCES - AGRICULTURAL EDUCATION

## COLLEGE REQUIREMENTS

## Mathematics and Computer Science

Mathematics course.....	3
Computer Science course selected from CISC 105, EGTE 111, FREC 135, or equivalent.....	3

## Agricultural and Biological Sciences..... 9-12

Minimum of one course outside the student's major in three of the following areas: Food and Resource Economics, Food Science, Agricultural Engineering, Animal Science, Entomology and Applied Ecology, Plant and Soil Sciences, or Biology.

## Literature and Arts..... 9

Nine credits from English and/or Communication.

## Social Sciences and Humanities..... 9

Minimum of one course in three of the following areas: Anthropology, Black American Studies, Criminal Justice, Economics, Education, Geography, History, Philosophy, Political Science, Psychology, Sociology, or Women's Studies.

## Physical Sciences..... 8

Minimum of eight credits selected from one of the following two-course sequences:

CHEM 101/102 or 103/104

PHYS 201/202 or 207/208

GEOL 105 and 106

SCEN 101 and 102

## MAJOR REQUIREMENTS

## External to the College

EDST 201 Education in a Multicultural Society.....	3
EDST 230 Introduction to Exceptional Children.....	3
EDST 304 Educational Psychology - Social Aspects.....	3
EDST 305 Educational Psychology - Cognitive Aspects.....	3
EDDV 400 Student Teaching.....	6

The Agricultural Education program requires a minimum 2.75 G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 127) should be consulted for other policies concerning qualifications for student teaching.

## Within the College

A 2.75 index in at least thirty credits of technical agriculture from at least three departments in the college. 30

## Within the Department

## Professional Education

AGED 380 Agricultural Education Materials and Approaches I.....	3
AGED 381 Agricultural Education Materials and Approaches II.....	3

## ELECTIVES

## Electives..... 32-35

May include Military Science, Music, or Physical Education. (Only four credits of activity-type Physical Education and/or four credits of performing Music organization credit may be counted toward the degree.)

In order to graduate with a major in Agricultural Education, students must have a minimum of 40 credit hours of General Education.

CREDITS TO TOTAL A MINIMUM OF 130

## AGRICULTURAL ENGINEERING

The Agricultural Engineering Department offers majors in Agricultural Engineering and Engineering Technology. Both majors are accredited by the Accreditation Board for Engineering and Technology (ABET).

Agricultural engineering technology is the application of engineering techniques in such areas as production mechanization, energy, soil and water conservation, plant and animal environments, agricultural waste management, processing and storage, and building construction. This requires a knowledge of physical and natural sciences and technical skills to support engineering activities.

The agricultural engineering technology curriculum is designed to prepare students for engineering-related employment in agricultural industries. A scientific or business background may be obtained according to the student's interest through the selection of electives in

the College of Agricultural Sciences and other colleges of the university. To graduate with a major in agricultural engineering technology students must attain a 2.0 average in agricultural engineering technology courses. This is in addition to the University requirement that a 2.0 average be attained in all course work at the University.

The computer is a heavily used tool throughout the agricultural engineering technology curriculum. Students are urged to purchase a personal computer. Please contact the department chair for information on computer specifications or the academic program.

## DEGREE: BACHELOR OF APPLIED SCIENCE

## MAJOR: AGRICULTURAL ENGINEERING TECHNOLOGY

## CURRICULUM

## UNIVERSITY REQUIREMENTS

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

Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 20).

## COLLEGE REQUIREMENTS

## Communications

Six credits selected to provide training in oral and written communications to include:

EGTE 365 Junior Seminar

A second writing course selected from the following:

ENGL 301 Expository Writing.....	
ENGL 302 Advanced Composition.....	
ENGL 307 News Writing and Editing.....	
ENGL 312 Written Communications in Business.....	
ENGL 410 Technical Writing.....	

An oral communications course selected from the following:

COMM 200 Introduction to Human Communication Systems.....	
COMM 255 Fundamentals of Communication.....	
COMM 312 Oral Communication in Business.....	
COMM 350 Public Speaking.....	
COMM 356 Small Group Communication.....	

## Social Sciences and Humanities

Fifteen credits selected to provide an appreciation and understanding of our cultural heritage, interpersonal relationships, interrelationships between technology and society and a value system for sound decision making.

Nine credits to be selected from a minimum of three of the following areas: Anthropology, Art, Art History, Black American Studies, Criminal Justice, Economics, Education, English, Foreign Language, Geography, History, Music, Philosophy, Political Science, Psychology, Sociology, Theatre, or Women's Studies.

## Basic Sciences and Mathematics

Thirty-one credits selected to provide fundamental knowledge about nature and its phenomena and mathematics including calculus as follows:

## Biology, Chemistry and Physics

Biology/Life Science course

CHEM 103 General Chemistry.....

CHEM 104 General Chemistry.....

PHYS 201 Introductory Physics I.....

or

PHYS 207 Fundamentals of Physics I.....

PHYS 202 Introductory Physics II.....

or

PHYS 208 Fundamentals of Physics II.....

## Mathematics and Statistics

A minimum of 12 credits in mathematics and statistics. Specific requirements are:

MATH 221 Calculus I.....

or

MATH 241 Analytic Geometry and Calculus A.....

MATH 222 Calculus II.....

or

MATH 242 Analytic Geometry and Calculus B.....

STAT 201 Introduction to Statistics I.....

or

MATH 243 Analytic Geometry and Calculus C.....

Elective Mathematics or Statistics Course at the 200-level or above



**DEGREE: BACHELOR OF SCIENCE IN AGRICULTURE****MAJOR: ENTOMOLOGY****CONCENTRATION: WILDLIFE CONSERVATION****CURRICULUM**

CREDITS

**UNIVERSITY REQUIREMENTS**

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

**COLLEGE REQUIREMENTS****Mathematics and Computer Science**

Mathematics course (MATH 115, 171 or higher level) ..... 3  
 Computer Science course selected from CISC 105, EGTE 111, ..... 3  
 FREC 135, or equivalent

**Agricultural and Biological Sciences** ..... 9-12

Minimum of one course outside the student's major in three of the following areas: Food and Resource Economics (except FREC 135), Food Science, Agricultural Engineering, Animal Science, Plant and Soil Sciences, or Biology. (except ANSC 300)

**Literature and Arts** ..... 6

Six credits selected from the general areas of English, Art, Art History, Communication, Music, Theatre, or Foreign Language.

**Social Sciences and Humanities** ..... 9

Minimum of one course in three of the following areas: Anthropology, Black American Studies, Criminal Justice, Economics, Education, Geography, History, Philosophy, Political Science, Psychology, Sociology, or Women's Studies.

**Physical Sciences** ..... 8

Minimum of eight credits selected from one of the following areas: Chemistry, Physics, Geology, or Physical Science.

**MAJOR REQUIREMENTS**

A minimum grade of C- is required for all ENTO credits used to satisfy departmental requirements. Except as noted, a course may be applied toward both a major requirement and a college requirement.

**Within or External to the College**

AGRI 211 Literature of Agricultural and Life Sciences ..... 1  
 BISC 207 Introductory Biology I ..... 4  
 BISC 208 Introductory Biology II ..... 4  
 BISC 302 General Ecology ..... 3

CHEM 101/102 General Chemistry ..... 8

or  
 CHEM 103/104 General Chemistry ..... 8

**Within the Department**

ENTO 205 Elements of Entomology ..... 3  
 ENTO 305 Entomology Laboratory ..... 2  
 ENTO 406 Insect Identification—Taxonomy ..... 3  
 ENTO 465 Seminar ..... 1

**Within the Concentration**

ENTO 201 Wildlife Conservation and Ecology ..... 3  
 ENTO 325 Wildlife Management ..... 3  
 ENTO 318 Taxonomy of Birds ..... 2  
 ENTO 418 Avian Biology ..... 2  
 ENTO 425 Mammalogy ..... 3  
 ENTO courses (may include 3 credits maximum of Independent Study, Research, and Field Experience) ..... 5

**GROUP I** — 8 credits from the following (or higher levels of CHEM and PHYS):

CHEM 213 Elementary Organic Chemistry ..... 4  
 CHEM 214 Elementary Biochemistry ..... 3  
 CHEM 216 Elementary Biochemistry Laboratory ..... 1  
 GEOG 206 Physical Geography: Topography-Soils ..... 3  
 GEOL 107 General Geology ..... 4  
 PHYS 201 Introductory Physics I ..... 4  
 PHYS 202 Introductory Physics II ..... 4  
 PLSC 204 Introduction to Soil Science ..... 4

**GROUP II** — 8 credits from the following:

ANSC 140 Functional Anatomy of Domestic Animals ..... 4  
 BISC 301 Molecular Biology of the Cell ..... 4  
 BISC 303 Genetic and Evolutionary Biology ..... 4  
 BISC 305 Cell Physiology ..... 4  
 BISC 306 General Physiology ..... 4  
 BISC 312 General Ecology Lab ..... 1  
 BISC 324 Invertebrate Zoology ..... 4  
 BISC 371 Introduction to Microbiology ..... 4  
 BISC 442 Vertebrate Morphology ..... 4

add PHIL 340 Cross Cultural  
 Environmental Ethics .. 3  
 PHIL 448 Environmental  
 Ethics .. 3

BISC 494 Experimental Ecology ..... 3  
 BISC 495 Evolution ..... 3  
 BISC 480 Vertebrate Natural History ..... 3  
 ENTO 300 Principles of Animal and Plant Genetics ..... 3  
 ENTO 310 Animal and Plant Genetics Laboratory ..... 1  
 (same as PLSC 300, 310; may not count for both Group II and III)

**GROUP III** — 8 credits from the following:

PLSC 101 Botany I ..... 4  
 PLSC 201 Botany II ..... 4  
 PLSC 300 Principles of Animal and Plant Genetics ..... 3  
 PLSC 310 Animal and Plant Genetics Lab ..... 1  
 (same as ENTO 300, 310; may not count for both Group II and III)  
 PLSC 402 Plant Taxonomy ..... 3  
 PLSC 410 Introduction to Plant Physiology ..... 3  
 PLSC 430 Plant Physiology Laboratory ..... 2

**GROUP IV** — 6 credits from the following:

Only 3 credits may count toward the College Literature and Arts Group Requirement. AGRI 212 Oral Communication in Agriculture and Natural Resources ..... 3  
 COMM 255 Fundamentals of Communication ..... 3  
 COMM 312 Oral Communication in Business ..... 3  
 COMM 350 Public Speaking ..... 3  
 ENGL 301 Expository Writing ..... 3  
 ENGL 307 News Writing and Editing ..... 3  
 ENGL 309 Feature and Magazine Writing ..... 3  
 ENGL 312 Written Communications in Business ..... 3  
 ENGL 410 Technical Writing ..... 3  
 THEA 102 Introduction to Performance ..... 3  
 THEA 204 Introduction to Voice and Speech ..... 3  
 THEA 220 Movement and Non-Verbal Communication ..... 3

**GROUP V** — 6 credits from the following or higher-levels in addition to college math and computer requirements:

EGTE 111 Computer Applications in Engineering Technology ..... 3  
 or  
 CISC 105 General Computer Science ..... 3  
 or  
 GEOG 250 Computer Methods in Geography ..... 4  
 FREC 408 Research Methods ..... 3  
 MATH 221 Calculus I ..... 3  
 MATH 222 Calculus II ..... 3  
 MATH 230 Finite Mathematics with Applications ..... 3  
 STAT 201 Introduction to Statistics I ..... 3  
 STAT 202 Introduction to Statistics II ..... 3

**GROUP VI** — 6 credits from the following:

ECON 151 Introduction to Microeconomics: Prices and Markets ..... 3  
 or  
 FREC 150 Economics of Agriculture and Natural Resources ..... 3  
 (Either of two previous courses is prerequisite to FREC 424, 444)  
 FREC 424 Resource Economics: Theory and Policy ..... 3  
 FREC 444 Economics of Environmental Management ..... 3  
 GEOL 234 Earth Resources and Ecology ..... 3  
 GEOL 421 Environmental and Applied Geology ..... 3  
 GEOG 235 Conservation of Natural Resources ..... 3  
 GEOG 236 Conservation: Global Issues ..... 3  
 POSC 105 The American Political System ..... 3  
 POSC 220 Introduction to Public Policy ..... 3  
 POSC 350 Politics and the Environment ..... 3  
 SOCI 210 Population Problems ..... 3

**ELECTIVES**

Electives ..... 6-26

Number of elective credits depends on number of courses chosen for concentration groups that also satisfy college requirements. May include Military Science, Music, or Physical Education. (Only four credits of activity-type Physical Education and/or four credits of performing Music organization credit may be counted toward the degree.)

**CREDITS TO TOTAL A MINIMUM OF** ..... 124

**REQUIREMENTS FOR A MINOR IN ENTOMOLOGY**

The minor in entomology requires 15 credits of courses with an ENTO prefix, including: ENTO 205, 305, and 406. A student may emphasize general entomology or wildlife conservation by proper choice of ENTO courses for the remaining 7 credits. A minimum grade of C- is required in all courses counting toward the minor. Credits for Special Problem, Independent Study, Research, and Field Experience do not count toward the minor.



## COLLEGE OF AGRICULTURAL SCIENCES • FOOD AND RESOURCE ECONOMICS

**PLANT AND SOIL SCIENCES**

Plant and Soil Sciences includes disciplines of study that apply chemical, biological, and physical principles toward insuring adequate food supplies in a safe and aesthetic environment. Faculty in the department have active teaching and research programs in plant molecular biology, botany, anatomy, physiology, taxonomy, genetics-plant breeding, cell and tissue culture, pathology, ornamental horticulture, landscape design, crop and vegetable science, soil chemistry, soil management, soil physics, and soil microbiology. Undergraduate students often are involved in some aspect of these research programs, which strengthens and broadens their understanding of science.

Students pursue a program of study leading to the degree Bachelor of Science in Agriculture. They can major in Plant Science and

**LANDSCAPE HORTICULTURE, PLANT BIOLOGY OR**

~~select one of four areas of concentration: general plant science, ornamental horticulture, agronomy, or pathology, or they can major in Environmental Soil Science. The department also co-offers Natural Resource Management, an interdisciplinary major.~~

Each candidate for a degree must earn a minimum of 124 credits; achieve a minimum cumulative grade point average of 2.00 on all work undertaken at the University of Delaware, and fulfill the course requirements of the degree program.

**DEGREE: BACHELOR OF SCIENCE IN AGRICULTURE****MAJOR: PLANT SCIENCE****~~CONCENTRATION: GENERAL PLANT SCIENCE~~**

CURRICULUM	CREDITS
<b>UNIVERSITY REQUIREMENTS</b>	
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. 20).	
<b>COLLEGE REQUIREMENTS</b>	
<b>Mathematics and Computer Science</b>	
Mathematics course.....	3
Computer Science course selected from CISC 105, CISC 111,.....	3
FREC 135, or equivalent	

**Agricultural and Biological Sciences**..... 9-12

Minimum of one course outside the student's major in three of the following areas: Food and Resource Economics, Food Science, Agricultural Engineering, Animal Science, Entomology and Applied Ecology, or Biology.

**Literature and Arts**..... 6

Six credits selected from the general areas of English, Art, Art History, Communication, Music, Theatre, or Foreign Language.

**Social Sciences and Humanities**..... 9

Minimum of one course in three of the following areas: Anthropology, Black American Studies, Criminal Justice, Economics, Education, Geography, History, Philosophy, Political Science, Psychology, Sociology, or Women's Studies.

**Physical Sciences**..... 8

Minimum of eight credits selected from one of the following areas: Chemistry, Physics, Geology, or Physical Science.

**MAJOR REQUIREMENTS**

A course may be applied toward both the major requirements and a college requirement, but credits are counted only once toward graduation.

**External to the College**

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

**One of the following three courses:**

PHYS 101 Introduction to Physics.....	4
GEO 105 General Geology.....	4
CHEM 214 Elementary Biochemistry.....	3

**Within the Department**

PLSC 101 Botany I.....	4
PLSC 201 Botany II.....	4
PLSC 204 Introduction to Soil Science.....	4
PLSC 300 Principles of Animal and Plant Genetics.....	3
PLSC 303 Introductory Plant Pathology.....	4
PLSC 305 Environmental Soil Management.....	4
PLSC 410 Introduction to Plant Physiology.....	3

**ELECTIVES****Electives**..... 46-50

May include Military Science, Music, or Physical Education. (Only two credits of activity-type Physical Education and/or two credits of performing Music organization credit may be counted toward the degree.) Elective credits will be reduced for students choosing one of the following three optional concentrations.

**CREDITS TO TOTAL A MINIMUM OF**..... 124**THE FOLLOWING CONCENTRATIONS  
WILL BE DELETED;**

ORNAMENTAL HORTICULTURE  
AGRONOMY  
PLANT PATHOLOGY

This page is  
attachment #5  
under Ann. for  
challenge.

Date: Thu, 21 Nov 1996 16:16:42 -0500 (EST)  
From: Jon Olson <olson@che.udel.edu>  
To: livingst@math  
Cc: Dan Boulet <Dan.Boulet@mvs>  
Subject: Curriculum Revision

My colleagues desire to make a small revision in the CHEG curriculum, and we need a reply from you agreeing to the change. Starting with the class that enters next fall (F97), the changes are

third term - drop MATH 303

fourth term - increase CHEG 325 from 3 to 4 credits

If all goes as planned, MATH 303 is needed for the F97 term but not thereafter. I expect this is an easy request for you, and I appreciate the efforts you've made to find faculty to teach MATH 303 to sophomore chemical engineers.

Thank you in advance for your assistance.

-Jon Olson

Date: Mon, 25 Nov 1996 09:51:02 -0500 (EST)  
From: Albert Livingston <livingst@math.udel.edu>  
To: olson@che.udel.edu  
Cc: livingst@math.udel.edu  
Subject: Re: Curriculum Revision

^The change that you propose is acceptable to us.  
Al Livingston



COLLEGE OF ENGINEERING

OFFICE OF THE DEAN

University of Delaware  
Newark, Delaware 19716-3101  
Ph: 302/831-2401  
Fax: 302/831-8179

November 8, 1996

MEMORANDUM

TO: Marian L. Palley, President  
Faculty Senate

FROM: Stuart L. Cooper, Dean  
College of Engineering

A handwritten signature in cursive script that reads "Stuart L. Cooper".

SUBJECT: Department Name Change

A proposal to change the name of the Department of Electrical Engineering to the Department of Electrical and Computer Engineering has received a unanimous vote in favor of the proposal from the Electrical Engineering faculty and a vote in favor of recommending approval from the College of Engineering faculty.

We seek the approval of the Faculty Senate for implementation of this name change effective September 1997.

he

Enclosures

cc: Neal C. Gallagher, Chair, Electrical Engineering Department  
Jon H. Olson, Chair, College Educational Activities Committee

# Proposal for changing the name of the Department of Electrical Engineering to the Department of Electrical and Computer Engineering

## Desirability of a name change

We strongly believe that Electrical Engineering and Computer Engineering are very much one and the same profession. However in recent years the growth of computer related industries has led to a situation where a segment of electrical engineering, computer engineering, has grown to be larger than the rest of the electrical engineering profession in terms of numbers of jobs. As such, the general public has grown to think of a computer engineer as being something separate and distinct from an electrical engineer. It is estimated that by the year 2005, there will be over 800,000 jobs for computer systems engineers, while the rest of electrical engineering will be just under 600,000 total jobs, nationwide.

Already today, about half of all electrical engineering departments across the nation have names that are something like "Department of Electrical and Computer Engineering", making us, at Delaware, hardly cutting edge in this regard.

## Impact on our Program

Last year, the approval of the new undergraduate degree in computer engineering within the Department of Electrical Engineering was a much needed enhancement to our program. We believe, however, that not all prospective students recognize we have two degree programs when they do their search for potential universities. They instead only see the department's name and move on, looking for computer engineering programs at other universities. A name change will give our program that much more up front visibility with prospective students.

Already a substantial number of our graduates find employment in computer related fields. A name change would give our program added visibility with these prospective employers.

Finally there is no cost, except possibly reordering new envelopes and stationary. No new courses or laboratories are required to make the name change work.

The faculty of Electrical Engineering have voted without dissent to change the name of the department at the first faculty meeting of the Fall semester.

Neal C. Gallagher  
Charles Black Evans Professor, and Chair  
Department of Electrical Engineering



TO: John C. Cavanaugh  
Interim Associate Provost for Graduate Studies

Robert L. Hampel  
Chair, Graduate Studies Committee

VIA: Stuart L. Cooper  
Dean, College of Engineering

Dan L. Boulet  
Engineering Educational Activities Committee

FROM: Eric W. Kaler  
Chair, Chemical Engineering

DATE: September 5, 1996, modified October 2, 1996

SUBJECT: Revision of PhD Requirements for Chemical Engineering

The faculty of Chemical Engineering request approval of a revision in the course requirements for the PhD degree in this department. This reduction is needed to increase the research productivity of our graduate students and to keep us competitive with other first-rank institutions. This package includes the descriptive material to be given to graduate students and the suggested revision of the Graduate Catalog. This memo presents a summary of the specific requests for the revision.

1. Reduce the minimum credit hours of course work from 36 to 24. This is accomplished by eliminating nine credits of the minor and one required Chemical Engineering course.
2. The required courses for the PhD program are:

CHEG 825	Thermodynamics
CHEG 830	Fluid Mechanics
CHEG 835	Applied Chemical Kinetics
CHEG 863	Diffusional Operations
MEEG 863/864	Engineering Analysis I, II
- Total: 18 credits
3. The remaining 6 credits are Chemical Engineering graduate electives chosen with the approval of the faculty advisor. One of these courses shall be CHEG 8xx and the other may be CHEG 6xx or CHEG 8xx.
4. These requirements will be available to all Chemical Engineering graduate students currently enrolled who have not achieved G2 Candidacy status.
5. A student will advance to G2 Candidacy when the minimum course work is completed successfully, the comprehensive examinations have been passed, and the proposed research program approved. After reaching G2 status, registration for 9 credits of CHEG 969 (Doctoral Dissertation) is required.

6. *Candidates seeking additional recognition for coursework may choose to earn a concentration. A concentration is a set of four courses in chemical engineering or related departments taken in support of a topical area of chemical engineering research. Two of these courses may be the chemical engineering electives. None of the required CHEG core courses nor the MEEG mathematics sequence will count toward the concentration. The courses for the concentration are tailored to meet the individual interests and goals of the candidate in consultation with the advisor. The title of the concentration and the courses selected for the concentration will be documented in a memo to the Graduate Studies office signed by the dissertation advisor and the Graduate Program Coordinator. Successful completion of the concentration will be noted on the student's transcript.*

The minimum number of course credits needed to complete a PhD program with a concentration is 30.

This proposal reduces the minimum coursework requirements for the PhD by twelve credits and thereby makes it possible for a student to attain candidacy status in one year. The student and the advisor then can decide if the additional work required for a concentration is in the student's best interest. Our overall goal is to increase the emphasis on high-quality research.

To buttress the argument for this new curriculum, we have made a survey of the course requirements of ten highly-regarded chemical engineering departments. A summary of the data is given below in terms of coursework credit hours (CCH):

School	Reqd CCH	Minor CCH	Total CCH
Berkeley	24	9	33
Cal Tech	12	0	12
Carnegie Mellon	27	0	27
Cornell	15	12	27
Illinois	24	0	24
Minnesota	24	14	38
MIT	9	9	18
Princeton	36	0	36
Stanford	13	0	13
Wisconsin	18	12	30
Average		5 yes 5 no	25.8
Proposed	24	no	24

Thus, the proposed modification is well within the range of the requirements of other institutions. Thank you for your consideration of this needed modification.

lh  
Enc.



INTERDEPARTMENTAL  
MEMORANDUM

TO: John C. Cavanaugh  
Interim Associate Provost for Graduate Studies

RECEIVED  
UNIVERSITY of DELAWARE

SEP 9 1996

Robert L. Hampel  
Chair, Graduate Studies Committee

FACULTY SENATE

VIA: Stuart L. Cooper  
Dean, College of Engineering

*Stuart L. Cooper*

Dan L. Boulet  
Engineering Educational Activities Committee

*Dan Boulet*

FROM: Eric W. Kaler  
Chair, Chemical Engineering

*E. Kaler*

DATE: September 5, 1996

SUBJECT: Revision of MChE Requirements for Chemical Engineering

The course requirements for the MChE Degree need to be modified slightly to be consistent with the revision of the content of one of the courses in the department. The proposed revision of the program to be made available to interested individuals is attached.

The revision makes the course requirements in applied mathematics consistent with the proposed PhD program. In the revision both MEEG 863 and 864, Applied Engineering Analysis I & II, are required. It is also possible to substitute courses of equivalent rigor. The revision also brings the list of approved electives up-to-date.

These revisions are housekeeping in nature.

lh  
Attachs.

MASTERS DEGREE IN CHEMICAL ENGINEERING  
DEPARTMENT OF CHEMICAL ENGINEERING  
UNIVERSITY OF DELAWARE

The Department of Chemical Engineering offers two options for graduate education leading to a Masters in Chemical Engineering (MChE) Degree. Our thesis option requires 6 credit hours of thesis work and 24 credit hours of course work and is designed for full-time graduate students in residence. Our course option requires 30 credits of course work and is designed for engineers who are studying part-time.

Students in both options must satisfy the Requirements for Admission as listed in the Chemical Engineering Section of the current Graduate Catalog of the University of Delaware. The faculty member supervising the thesis research will act as an advisor for students in the thesis option. The Department's graduate student advisor will act as an advisor to all students in the course work option. Graduate students who elect the thesis option and who receive a stipend from the Department will not be allowed to change to the course option.

Both options require 12 credits (four courses) of core courses in chemical engineering fundamentals.

**CHEG 825 Chemical Engineering Thermodynamics (3)**

Applications of classical and molecular thermodynamics to industrial problems in chemical and phase equilibrium. Topics include non ideal solutions, high pressure systems, complex reaction equilibria, generalized correlations, and equations of state.

*Prereq: CHEG 325 and C 444.*

**CHEG 830 Fluid Mechanics (3)**

Use of field equations of motion and a variety of constitutive assumptions to solve problems involving both laminar and turbulent flows. Emphasizes polymer processing, fluids transport and boundary layer theory.

*Prereq: Undergraduate study in fluid mechanics or transport phenomena.*

**CHEG 835 Applied Chemical Kinetics (3)**

The application of modern methods and recent experimental data to the design of chemical reaction equipment.

*Prereq: Undergraduate reaction engineering, physical chemistry.*

**CHEG 863 Diffusional Operations (3)**

An advanced course covering the latest theoretical and experimental studies in several fields involving mass transfer. These fields include humidification, absorption, extraction, distillation, ion exchange, and adsorption.

*Prereq: C 444*



Both options also require 6 credits in applied mathematics. The required courses are:

**MEEG 863 Engineering Analysis I (3)**

N-space, eigenvalue problem, diagonalization and quadratic forms; field theory; Sturm-Liouville theory, integral transforms; Bessel and Legendre functions; and partial differential equations. Engineering applications.

**MEEG 864 Engineering Analysis II (3)**

Continuation of partial differential equations complex variables; variational calculus. Engineering applications.

*Prereq: MEEG 863*

A student may substitute an applied math sequence of equivalent rigor with the approval of the graduate advisor. If the applied mathematics requirement is satisfied with a single course, the remaining three credits will be an additional technical elective.

The Department offers a range of technical elective courses in both chemical engineering and material science which are designed to expand ones knowledge in specialized areas. For the thesis option, 6 credits (2 courses) of technical electives are required, in addition to the 6 credits of thesis research (CHEG 869). For the course option, 12 credits (4 courses) are required. In both options, two of the courses may be taken outside the Department of Chemical Engineering upon approval of the graduate advisor. Typical technical elective courses are:

CHEG 601	Structure and Properties of Polymer Materials (3)
CHEG 602	Polymer Process Analysis and Design (3)
CHEG 603	Polymerization Reaction Engineering (3)
CHEG 604	Introduction to Polymer Science and Engineering II (3)
CHEG 605	Multiphase Fluid Mechanics (3)
CHEG 606	Introduction to Catalysis (3)
CHEG 610	Industrial and Engineering Chemistry (3)
CHEG 612	Applied Process Heat Transfer (3)
CHEG 615	Special Topics in Mixing (3)
CHEG 616	Chemistry & Physics of Surfaces and Interfaces (3)
CHEG 620	Biochemical Engineering (3)
CHEG 622	Risks, Hazards, and the Environment (3)
CHEG 635	Air Pollution and Its Control (3)
CHEG 650	Biomedical Engineering I (3)
CHEG 691	Technical Project Management (3)
CHEG 695	Patent Law for Engineers and Scientists (2-3)
CHEG 801	Process Control and Dynamics (3)
CHEG 826	Chemical Engineering Thermodynamics (3)
CHEG 827	Chemical Engineering Problems (2 or 3)
CHEG 828	Statistical Thermodynamics (3)
CHEG 836	Applied Chemical Kinetics (3)
CHEG 868	Research (1-9)
CHEG 869	Master's Thesis (1-6)



## COLLEGE OF HUMAN RESOURCES

DEPARTMENT OF  
TEXTILES, DESIGN AND  
CONSUMER ECONOMICS

University of Delaware  
Newark, Delaware 19716-3359  
Correspondent's Phone: 302.831-8714  
Fax: 302.831-6081

October 17, 1996

Professor Robert Carroll, Chair  
Coordinating Committee on Education

Dear Dr. Carroll:

The faculty of the Department of Textiles, Design and Consumer Economics (TDCE) voted, on October 11, 1996, to rename our unit the Department of Consumer Studies. This decision was unanimously supported by the faculty and staff of the College of Human Resources at its October 25 College meeting, and by Deans Klinzing, Golinkoff and Rich (see attached memos). We request Faculty Senate approval.

Our current name originated in 1977, when the College of Human Resources was organized into departmental units. At that time, TDCE contained five majors, including Textile Science and Interior Design. Each major operated independently, with no formal linkages among programs. Thus, our department name, compartmentalized to reflect the majors, was fairly descriptive of our programs at that time.

However, in more recent years, there have been changes in our programs and our modes of interaction. We no longer have programs in Textile Science and Interior Design. Further, we have spent the past three years recognizing the commonalities among our remaining majors - Apparel Design, Consumer Economics, and Fashion Merchandising - linking them through integrative instruction and scholarly projects across programs. In January, 1994, we explicitly recognized that all our majors have a central focus upon *the consumer*, as can be seen in our program definitions, published in the Undergraduate Catalog:

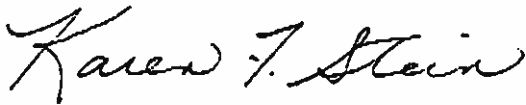
Apparel Design studies the conceptualization and production of products for apparel-related industries to meet *consumer* needs. Consumer Economics studies the interaction between individuals/families and the marketplace, emphasizing the effects of resources and public policy on *consumer* welfare. Fashion Merchandising studies the planning, production, promotion and distribution of products to meet *consumer* demand.

We believe the time is particularly appropriate, considering our move on July 1, 1997 from the College of Human Resources into the College of Human Resources, Education, and Public Policy, to organize under a department name that clearly reflects the commonalities and linkages across our majors, which all focus upon the study of consumer markets and consumer welfare. It is important to note that this is not indicative of a new direction or focus for our Department. Rather, this department name makes an explicit statement defining the reason our three majors are under the umbrella of this particular departmental unit. Other departments similar to our's, such as those at the University of Wisconsin-Madison, Auburn University, and the University

of Massachusetts, have come to this same realization and have also chosen to be known as departments of consumer studies.

In summary, we believe that the Department of Consumer Studies best represents - and communicates - the work of our faculty and our students to ourselves and to the wider university community. Further, we believe that this clearer identification of our programs will encourage the exploration of possible collaborative activities with our new colleagues in the College of Human Resources, Education, and Public Policy. Please do not hesitate to contact me if further information or clarification is needed.

Sincerely,

A handwritten signature in cursive script that reads "Karen F. Stein". The signature is written in dark ink and is positioned below the word "Sincerely,".

Karen F. Stein, Ph.D.  
Chair

cc: Provost Schiavelli  
Dean Klinzing



INSTRUCTIONAL  
TECHNOLOGY  
CENTER

Willard Hall Education Building  
University of Delaware  
Newark, Delaware 19716-1128  
Ph: 302/831-8162  
Fax: 302/831-2089

October 5, 1996

TO: Robert L. Hampel, Chairperson  
Faculty Senate Committee on Graduate Studies

FROM: Fred T. Hofstetter *[Signature]*  
Professor and Director

SUBJECT: Proposal to Create an Educational Technology Specialization in the  
Ed.D. in Leadership in Curriculum and Instruction

On behalf of my faculty colleagues who have cosigned its cover page, I am pleased to submit the enclosed proposal to create an Educational Technology Specialization in the Ed.D. in Leadership in Curriculum and Instruction.

Several students await admission into this program and really are counting on having the program approved this fall. If anything is found to be lacking in the proposal, please alert me promptly so I can take care of any problems in time for your committee to act on the proposal this fall.

As you requested, I am also enclosing copies of the course proposals to create the two repeating ed tech topics courses, one in the Department of Educational Studies (EDST 885), and the other in the Department of Educational Development (EDDV 885). The EDST 885 course proposal has been submitted to Professor David Kaplan, chairperson of the Ed Studies graduate curriculum committee, and the EDDV 885 proposal has been submitted to Professor Diana Wearne, who chairs the Ed Development graduate curriculum committee.

I will do anything I can to help expedite your review of the ed tech doctoral specialization proposal. Please do not hesitate to call upon me if I can be of assistance.

*approved, Grad Studies  
Committee, Nov 15, 1996. RL Hampel*

# Educational Technology Program Description

The doctoral program in Educational Technology is an interdisciplinary program stressing the relationship between curriculum design, instructional theory, and information technology. The program is based on the assumption that new media and the Internet can have a positive effect on teaching and learning. The program provides an opportunity for the doctoral candidate to consider the impact of technology on the future of schooling and to provide systemic leadership in using technology effectively.

## I. Prerequisites (in addition to admission requirements)

- A. Working knowledge of educational technology and proficiency using the Internet. Formal coursework in educational technology, inservice workshops, and on-the-job experience can be used to meet this prerequisite.
- B. Experience working with educational technology in school teaching or some other branch of educational practice.

## II. Program Requirements

- A. **Core Courses (24 credits).** Candidates will complete the core courses required in the Ed.D. in Leadership in Curriculum and Instruction. As described in the policy guidelines, there are electives and options in the core requirements. Candidates should confer with their doctoral advisor to select courses that complement the educational technology specialization.
- B. **Specialization (18 credits).** All candidates must complete at least four of the courses listed below, for a total of 12 credits. The remainder of the specialization will be determined in conference between the candidate and the doctoral adviser. For example, the remaining six credits may be used to take other scheduled courses (approved by the student's adviser), to engage in research in collaboration with a faculty member, and to take independent reading courses focused on the student's research topic. Note: EDST 885 and EDDV 885 are rotating topics courses that may be taken multiple times in different topic areas.

EDDV 885	Ed Tech Topics in Educational Development <ul style="list-style-type: none"><li>• Curriculum and Educational Technology (Tony Whitson)</li><li>• Social Impact of Information Technology (John Courtright)</li><li>• Advanced Multimedia Design and Development (Fred Hofstetter)</li></ul>
EDST 885	Ed Tech Topics in Educational Studies <ul style="list-style-type: none"><li>• Cognition and Instructional Technology (Elaine Coleman)</li><li>• Computer-Based Instruction (Dick Venezky)</li><li>• Assistive Technology (Al Cavalier)</li><li>• Computer-Assisted Instruction in Remedial/Special Education (Cindy Okolo)</li><li>• Advanced Applications of Computers in Teaching Writing to Elementary and Secondary Students (Charles MacArthur)</li><li>• Distance Learning Technology (Al Cavalier)</li></ul>
IFS 885	Computers in Early Childhood Education (Dan Shade)

- C. **Executive Position Paper (12 credits).** Candidates will fulfill the Executive Position Paper (EPP) requirement as described in the policy guidelines.

## III. Advisors

D. Archbald, A. Cavalier, E. Coleman, R. Ferretti, F. Hofstetter, S. MacArthur, C. Okolo, J. Whitson.

## IV. Supporting Faculty

B. Anderson, N. Brickhouse, M. Brooks, M. Halio, J. Courtright, G. Mulford, M. Roe, D. Shade, P. Sine, P. Toccafondi, L. Wilson, D. Venezky

# Rationale and Demand

Contributing to the rationale for this program is a combination of institutional factors, student demand, employment factors, regional trends, and the suitability of the University of Delaware to offer advanced study in educational technology.

## *Institutional Factors*

During the past decade, there has been an explosion in the use of technology in our society. Costs have dropped so rapidly that eighteen million homes became equipped with brand new multimedia PCs in 1995 alone. The rate at which schools are adopting technology has increased dramatically. During the next three years, our own state of Delaware will spend thirty million dollars from the Twenty-First Century Fund to connect every classroom in Delaware's public schools to the Internet at high speed.

My faculty colleagues who codeveloped this proposal believe that it is important for us to develop a scholarly, critical response to the nation's rush to technology. Educators need to be prepared to make informed, responsible decisions regarding educational technology policy and planning. There is a considerable amount of cognitive, instructional, and curriculum research that can help educators address pedagogical questions. Hundreds of published studies report results of ed tech research projects across the curriculum. Informed by an understanding of cognitive processes, educational leaders can reflect on this body of research and design effective ed tech curriculum projects that can build and sustain a community of learners in which students find the support needed to construct knowledge and gain an understanding of difficult concepts. By analyzing the large body of case studies from ed tech projects attempted elsewhere, educators will obtain the background needed to develop evaluation criteria for state, district, and local school technology plans. Through study of the social impact of information technology, educators will realize how individuals, families, organizations, and institutions are affected by rapid technological change, so ed tech planning can be sensitive to the needs of communities.

## *Student Demand*

UD is an excellent campus on which to offer an Ed.D. specialization in educational technology, and educators are looking to us to provide such a program. During the past year, Professor Carol Vukelich, who serves as Program Coordinator for the Leadership in Curriculum and Instruction area within the Ed.D. program, has received requests from several potential doctoral degree candidates wanting to specialize in educational technology. Professor Vukelich referred these requests to Fred Hofstetter, who began keeping a list of students who approached us. There are already eighteen students on the waiting list, and the program has not even been announced. These candidates would like to apply for admission to the degree program in time for the next admission deadline, which is in February 1997. Educational technology is a timely topic, and we believe dozens of candidates will apply to the program once it is approved.

## ***Employment Factors***

As the region and the nation have come to realize the importance of preparing for technology in all levels of education, employment opportunities have arisen for educators with advanced credentials in educational technology. Most of the candidates awaiting entry into the program are interested for career reasons. Multimedia and Internet-related technologies are among the biggest growth areas in the economy today. By the end of the decade, they are projected to comprise a \$21 billion industry. The proposed doctoral specialization in educational technology will help University of Delaware students position themselves for pursuing careers in the information society.

## ***Regional and National Trends***

As noted earlier, our state will spend thirty million dollars during the next three years to connect every classroom in Delaware's public schools to the Internet at high speed. All of our neighboring states have similar efforts underway, and both the Democrats and the Republicans have made connectivity a bipartisan, national priority. As the schools get connected, educators will begin to realize that there is more to educational technology than stringing cables into our schools' classrooms. Our nation's educational leaders need to be prepared to deal with the educational, human, and societal issues that technology raises. The proposed educational technology specialization will provide a place for leaders in our region to obtain this knowledge and expertise.

## ***Suitability of the University of Delaware***

The University of Delaware is particularly well-suited for a program in educational technology. For twenty-five years, our faculty has pioneered in educational computer applications. Many faculty have won grants and awards for their computer-based learning programs, and recently, our university was recognized by CAUSE as having the best network infrastructure in the country. Computerworld magazine has listed UD as one of the best places in the world to work in technology (<http://www.computerworld.com/bestplaces>). The University's excellent facilities, combined with the award-winning work of so many of our faculty, make Delaware an ideal campus for hosting a program in educational technology.

## ***Learning Resources***

The College of Education has worked with the Morris Library to keep the University's books and periodicals in educational technology current. Because the scholars who conduct research in educational technology are by nature technologically savvy, much of the current literature in this field is available online. The search engines on the World Wide Web make this information quick and easy to find. Thus, doctoral candidates admitted to this new specialization will enjoy a rich data base of both printed and online materials for conducting research in educational technology.

Also required for advanced study in educational technology are computing labs where students can use state-of-the-art multimedia computers for studying, evaluating, and developing computer-based learning materials. Once again, the University of Delaware excels in its commitment to keeping our facilities up-to-date. The University's Windows, Macintosh, and two-way interactive TV facilities are first-rate. In addition, the University is constructing a state-of-the-art high-tech classroom building (the Gore building), which will contain the latest networking and multimedia facilities.

## *Faculty Resources*

The chart below shows how courses will be scheduled in the educational technology specialization. This is a minimal plan that offers courses as infrequently as possible. If the program is a success and the courses attract lots of students from other programs, it may be possible to justify offering highly enrolled courses more often, such as during the summer. In the meantime, this chart has been developed to show that the proposed Ed.D. in Ed Tech can be started without overcommitting the College's teaching resources. All of the faculty listed in this chart have approved of this plan, as have their departmental chairpersons.

Faculty Member	97F	98S	98F	99S	99F	00S	00F	01S	01F	02S	02F	03S
Al Cavalier	DIS			AST			DIS			AST		
Elaine Coleman						COG				COG		
John Courtright		SOC				SOC				SOC		
Fred Hofstetter	AMD		AMD		AMD		AMD		AMD		AMD	
Charles MacArthur				WRI				WRI				WRI
Cindy Okolo					CAI				CAI			
Dan Shade			KIDS				KIDS				KIDS	
Dick Venezky		CBI				CBI				CBI		
Tony Whitson				CUR				CUR				CUR

### Key to Abbreviations

AST	Assistive Technology (Al Cavalier)
CAI	Computer-Assisted Instruction in Remedial/Special Education (Cindy Okolo)
CBI	Computer-Based Instruction (Dick Venezky)
COG	Cognition and Instructional Technology (Elaine Coleman)
DIS	Distance Learning Technology (Al Cavalier)
AMD	Advanced Multimedia Design and Development (Fred Hofstetter)
KIDS	Computers in Early Childhood Education (Dan Shade)
CUR	Curriculum and Educational Technology (Tony Whitson)
SOC	Social Impact of Information Technology (John Courtright)
WRI	Advanced Applications of Computers in Teaching Writing to Elementary and Secondary Students (Charles MacArthur)

Two of the faculty involved are from outside the College of Education. Dan Shade (IFS) and John Courtright (COMM) have secured the necessary permissions from their departments to participate in the proposed Ed.D. in Ed Tech program.



## ***Budgetary Needs***

No new budgetary request is being made for the proposed educational technology specialization, which makes strategic use of the technology infrastructure and computer-based learning resources already in place at the University of Delaware. It is assumed that the University will continue to keep these resources up-to-date. For a quarter of a century, UD has done so, and current trends indicate that the University plans to continue supporting technology. Happily, the mass marketing of multimedia computers and networking technologies are reducing the cost of equipping and connecting individuals to the Internet. The fact that most of the students applying for admission to this program own multimedia computers with connectivity lessens the impact of this program on the University's computing labs.

## ***Implementation and Evaluation***

As a plug-in to the existing Ed.D. in Leadership in Curriculum and Instruction, the proposed educational technology specialization will undergo periodic evaluation along with the doctoral program as a whole. Students enrolling in the ed tech specialty will take the core courses already established in the Ed.D. program, adding to the core course enrollments and bolstering the program as a whole. Similarly, students enrolled in other Ed.D. specialties are expected to elect the technology courses, because all fields are beginning to realize the importance of learning about new technology to prepare for life in the twenty-first century.

It is our hope that the Faculty Senate will approve of the educational technology specialization this fall, so students can apply for admission in time for the next Ed.D. application deadline, which will be in February 1997. If the program is approved, the doctoral-level ed tech courses will begin to be offered in the Fall of 1997.

## SUMMARY OF CHANGES IN APPAREL DESIGN CURRICULUM FOR THE CLASS OF 2001

DELETE REQUIREMENT	ADD REQUIREMENT	RATIONALE
HR Elective	TDCE Elective	The College of Human Resources will not exist after July 1, 1997.
Reduce TDCE 433 from 4 cr to 3 cr.	TDCE 431 (1 cr)	<p>Introduction of computer-aided pattern design into pre-requisite courses allows an adjustment of credit hours for TDCE 433</p> <p>Apparel design majors need a professional quality portfolio in additon to a resume as they seek employment. This course will provide the opportunity to develop one.</p>
TDCE 216	TDCE 221	The introduction of apparel design techniques earlier in the curriculum requires TDCE 216 Advanced Clothing Processes be replaced by a course in introductory apparel design techniques.

**PROPOSAL****REVISION OF TEXTILES AND CLOTHING: MERCHANDISING**

<b>Current Requirement and Pages in Catalog</b>	<b>Proposed Revision</b>	<b>Rationale</b>
<u>Title:</u> Textiles and Clothing: Merchandising (Page 152)	<u>Title:</u> Fashion Merchandising	The title change better represents the name of the major
Human Resources Elective - 3 credits (Page 152)	Free Elective - 3 Credits	The College of Human Resources will not exist after June, 1997

## SUMMARY OF CHANGES IN CONSUMER ECONOMICS CURRICULUM FOR CLASS OF 2001

DELETE REQUIREMENT		ADD REQUIREMENT		RATIONALE	
COMM 255 - 3 CREDITS		COMM 255 OR COMM 312 - 3 CREDITS		Recommendation from COMM dept (see supporting documentation attached to revision proposal)	
COMMUNICATIONS COURSES- 6 CREDITS		COMMUNICATION COURSE- 3 CREDITS AND COMMUNICATION COURSE OR TDCE 325- 3 CREDITS		TDCE 325 addresses presentation skills for students, and is suitable for meeting this requirement designed to increase student skills in oral and written presentation	
MATH OR STATISTICS COURSE - 3 CREDITS		STATISTICS COURSE OR EQUIVALENT - 3 CREDITS		Students will have 3 credits in math as well as 3 credits in statistics. An additional 3 credits in statistics will provide students with more of the analytical skills required of a consumer economics graduate.	
HUMAN RESOURCES COURSES - 9 CREDITS		FREE ELECTIVES - 6 CREDITS  CONSUMER ECONOMICS COURSES - 3 CREDITS. ADD TDCE 455 TO THE LIST OF ACCEPTED CONSUMER ECONOMICS COURSES.		The College of Human Resources will not exist after July 1, 1997.  Students need a solid grounding in courses specific to their major. An additional 3 credits in consumer economics courses will give students the opportunity to take TDCE 455, previously attended only by students in apparel design and fashion merchandising.	

UNIVERSITY OF DELAWARE INTER-DEPARTMENTAL

# Memorandum



October 11, 1996

TO: College of Human Resources,  
Undergraduate Studies Committee

FROM: Dept. of Nutrition & Dietetics  
Undergraduate Studies Committee

RE: Applied Nutrition Curriculum Revision

*Carolyn F. McManus*

The number of credits for graduation in the Applied Nutrition major is being reduced from 126 to 125 credits. This change is due to the deletion of NTDT 404 Nutrition Seminar. This course is no longer needed as the information is being provided through the advisement process.

UNIVERSITY OF DELAWARE INTER-DEPARTMENTAL

# Memorandum



November 12, 1996

TO: College of Human Resources,  
Undergraduate Studies Committee

FROM: Dept. of Nutrition & Dietetics  
Undergraduate Studies Committee

RE: Dietetics Major Revisions

*Campy L. Manning*

The Dietetics major is being revised as follows:

1. addition of a new course - NTDT 328 Foodservice Facility Design - 1 credit. Also, the required course NTDT 322 Foodservice Systems Management is being revised with the credits decreasing from 4 to 3. Therefore, the total number of credits for graduation remains the same at 129.

2. deletion of STAT 201 Introduction to Statistics and addition of STAT 200 Basic Statistical Practice. The Department of Mathematical Sciences is offering this new course to meet the needs of non-business majors for a one semester statistics course. The Dietetics Major requires a one semester statistics course and STAT 200 is appropriate for this curriculum.

## Summary of HRIM Curriculum Revisions

1) Current Requirement

NTDT 321 Quantity Food Service Production and Service (3 credits)

New Requirement

HRIM 321 Quantity Food Service Management (2 credit)

Justification

Change being made to separate NTDT and HRIM sections as a result of activity changes due to moving HRIM students to new laboratory facilities.

2) Current Requirement

NTDT 325 Laboratory in Quantity Food Service Production and Service (1 credit)

New Requirement

HRIM 325 Laboratory in Quantity Food Service Management (2 credits)

Justification

Change being made to separate NTDT and HRIM sections as a result of activity changes due to moving HRIM students to new laboratory facilities.

3) Current Requirement

STAT 201 Introduction to Statistics

New Requirement

STAT 200 Basic Statistical Practice (designed for students who do not intend to continue the study of statistics or minor in business)

or

STAT 201 Introduction to Statistics (designed for students who intend to continue the study of statistics or seek a business minor)

Justification

Change being made in response to changes being made in STAT 201 by the Department of Mathematical Sciences. See attached memorandum.

## Proposal

## Revision of Early Childhood Development and Education Major

The following changes are proposed to the Early Childhood Development and Education Major:

Current Requirement (and location in catalog)	Proposed Revision	Rationale
<i>Mathematics elective</i> .....3 (p. 148, under Science/Mathematics requirements)	Mathematics elective (for those seeking Primary Education certification must be MATH 253).....3 credits	This change clarifies to students seeking Early Care and Education Certification (0-K) and Primary Certification (K-4) that MATH 253 is necessary for the Primary Certification option.
<i>EDDV 400 Student Teaching</i> .. 8 credits (12 credits for dual certification) (p. 149, under Professional requirements)	EDDV 400 Student Teaching .....9-12 credits (12 credits for dual certification)	This change allows for the requirement that student teaching placements be nine weeks in length. Students have the option to do two full day nine week placements for 12 credits or one full day and one half day nine week placement for 9 credits.
No current description.	Students seeking certification in one area will complete one 9-week placement for a full day and one 9-week placement for a half day for a total of 18 weeks and 9 credits. Students seeking certification in two areas will complete two full day 9 week placements for a total of 18 weeks and 12 credits.	This statement clarifies that student teaching placements are nine weeks in length and specifies the requirements for the 9 credit or 12 credit option for student teaching.
<i>Electives</i> .....10 credits (p. 149, under Electives requirements)	Electives.....9 credits	This change in elective credits compensates for the increased number of credits required for student teaching. For students seeking a single certification, their program would be completed with 129 credits. For students seeking dual certification, their program would be completed with 132 credits.
<i>IFST 236 Infants and Toddlers: Development and Programs</i> ...3 (minimum grade C-) (p. 149, under Within the Department requirements)	IFST 236 Infants and Toddlers: Development and Programs....3	The minimum grade indication is redundant with the paragraph above "Within the College" requirements (p. 149) that indicates all IFST courses should be C- or better.



Minor in: DISABILITIES STUDIES (DIST)

Approval of a new Minor within the College of Human Resources.

RESOLVED, that the Faculty Senate approves the establishment of a new minor, Disabilities Studies (DIST) effective September 1, 1997.

#### REQUIREMENTS FOR A MINOR IN DISABILITIES STUDIES (DIST)

The minor in Disabilities Studies requires 18 credit hours, distributed as follows: all core courses, and three courses selected in consultation with and approved by the student's minor advisor. These courses shall be chosen from each of the topic areas of Human Development in Context, Social Policy and Ethics, and Methods and Services. At least one of these courses must be from outside the requirements of the students' major and outside his or her major department. All courses included within the minor must be completed with a grade of C- or better.

Advisory list of potential courses for inclusion as part of the Disabilities Studies Minor

Core Courses

Credits

IFST/PSYC/SOCI/270	Families and Developmental Disabilities	3
EDST 230	Introduction to Exceptional Children	3
<del>ARE</del> <del>DIS</del> 465*/**	Senior Seminar in Disabilities Studies	3

Topic Areas

*Human Development in Context*

HPER 250**	Motor Development	3
HPER 342**	Survey in Adaptive Physical Education and Recreation	3
IFST 403*	Concepts in Gerontology	3
IFST 405*	Impact of Aging on the Family	3
IFST 410*	Hospitalized Child	3
IFST 422*	Family Relationships	3
IFST 463*	Atypical Infant and Toddler	3
IFST 470*	Families and Children at Risk	3
NTDT 200	Nutrition Concepts	3
NTDT 305*	Nutrition in the Lifespan	3
NTDT 350*	Nutrition and Older Adults	3
NTDT 440*	Nutrition and Disease	3
NURS 411***	Topics in Health Care Delivery	3
PSYC 334*	Abnormal Psychology	3
PSYC 350*	Developmental Psychology	3
PSYC 380*	Psychopathology	3
PSYC 481*/**	Clinical Psychology	3
SOCI 308*	The Family	3
SOCI 346*	Sociology of Aging	3

*Social Policy and Ethics*

CSCC/SOCI 243	Society, Politics and Health Care	3
PHIL/CSCC 241	Ethical Issues in Health Care	3
PHIL/CSCC 444**	Medial Ethics	3
SOCI 341*	Welfare and Society	3
SOCI 448	Community-Based Treatment	3
TDCE 332*	Consumers, Health and Medical Care	3
TDCE 401*	Consumer Policy Analysis	3
TDCE 442	Consumer Welfare and Employee Benefits	3

*Methods, Services (including Environment/Technology)*

EDST 431*	Applied Behavior Analysis	3
EDST 432*	Curriculum for School-Age Exceptional Children	3
EDST 435*	Educational Evaluation for Exceptional Children	3
EDST 642*/**	Introduction to Technology in Special Education and Rehabilitation	3
HPER 318	Special Recreation	3
IFST 235*	Survey in Child and Family Services	3
IFST 347*	Human Service Delivery Systems	3
IFST 452*	Assessment of Young Children	3
MUED 385**	Music for the Special Learner	3
TDCE 310	Housing	3

\* Pre-requisite required; see undergraduate catalog

\*\* Restricted to certain majors and/or minors

\*\*\* Limited to the sections of Aids, Gerontology, Health Care and Public Policy for non-nursing majors.

It is recognized that courses may be added or deleted from this list as the offering of the University changes.

## PROPOSAL

### A. DESCRIPTION

The Disabilities Studies minor provides an opportunity for students from a variety of disciplines to gain a substantive introduction to and understanding of the biological, social, and psychological origins and ramifications of disabilities. The program provides coherence and guidance in the study of the meaning of disabilities to individuals and their families; and the social, fiscal, and institutional policy issues. The program is designed to increase interdisciplinary understanding of disability and provide students, through the senior seminar, with an experience integrating their major with disability issues.

### B. RATIONALE and DEMAND

People with disabilities have made great strides in the past few decades. Increasingly, our society is coming to the realization that disability does not have to be a barrier to education, recreation, employment, or independence. Rather, societal institutions must rise to the challenge of providing appropriate resources, modifications, social, and educational programs that will enable people with disabilities to achieve their full potential as productive citizens. These changes come at a time when demographic trends, such as an aging population, show an increasing need for programs and accommodations that can help a growing population of people with disabilities.

In order to effectively meet these challenges, persons from all walks of life need to understand the causes, characteristics, and needs of individuals with disabilities and their families. Effective programs and policies to support continued progress for people with disabilities require input and expertise from a broad range of disciplines, including but not limited to medicine, psychology, sociology, education, economics, family studies, and political science. Professionals from these and other disciplines need to know how to affect accommodations that are necessary and desirable from individuals with disabilities, and to recognize how their personal and professional behaviors can affect the lives of people with disabilities.

The University of Delaware is committed to educating students who may enrich society by being informed citizens and professionals. Central to this mission is respecting and understanding the views and values of an increasingly diverse population. This minor provides a unique opportunity within the University to pursue an understanding of the needs and challenges of individuals with disabilities and to relate these issues to the student's major field of study. A strength of the minor is the interdisciplinary, cross-campus collaborative approach to the study of a broad range of disabilities (including severe disabilities) and services.

The interdisciplinary nature of this minor is consistent with the academic administrative changes being undertaken at the University. This proposal is submitted by the College of Human Resources. Further, the minor has been developed in close cooperation with faculty in the Colleges of Education, Nursing, and Arts and Science. The administrative responsibility for the minor will be located in the College of Human Resources.

The Disabilities Studies minor was conceived through a planning process that resulted in the establishment of the The Center for Disabilities Studies. This initiative received its initial federal funding in 1992. A major goal of the The Center for Disabilities Studies is to increase the number of professionals in Delaware who could, through their daily activities in the community and in their employment, enable persons with disabilities to achieve greater independence, productivity, and inclusion in day-to-day community life. This goal can best be achieved through a multidisciplinary approach.

The Disabilities Studies minor has evolved over a five year period and was developed by the The Center for Disabilities Studies core faculty (representing faculty from 5 different Colleges) in response to student interest. Initial efforts began with an introductory experimental course offering. The course, IFST/PSYCH/SOCI 270- Families and Developmental Disabilities, was approved as a permanent course by the Faculty Senate, Spring 1996. The course has been taught three successive Spring semesters (94S, 95S, and 96S), under experimental # 267; enrollments totaled 78 students representing 13 majors. Requests for the course typically exceed enrollment limits. In addition, the course has been offered as a Focus course (95S, 95J, 96J) and a total of 19 students, from five majors, have elected this course option.

The Center for Disabilities Studies also sponsored undergraduate and graduate student traineeships to those enrolled in independent study courses. The traineeships are open to students from all majors within the university. Since 1993, 11 undergraduate trainees and 6 graduate students have received stipends through the program. These students were pursuing degrees in Family and Community Services, Psychology, Education, Microbiology, Sociology, Life Span Development, Family Studies, and Nursing.

Student response to these educational opportunities indicate a diverse and growing interest in the interdisciplinary study of disabilities. This interest is currently not being met elsewhere on campus. Consequently, The Center for Disabilities Studies core faculty proposed and developed a minor in disability studies to address this unmet academic need. The proposal is endorsed by all the major programs involved in The Center for Disabilities Studies. See appendix.

The Disabilities Minor includes the addition of a new course, Senior Seminar, DIST 465. See the appendix. The addition of this course should have no appreciable impact on the resources of other instructional, research, or service programs.

The minor will facilitate the coordination of resources across programs and increase the collaboration among faculty. The planning process of developing DIST core courses and the minor have already facilitated collaboration and communication between faculty and students from several different disciplines.

The University Institutional Research Office reports that approximately 24% of current seniors graduate with a minor. It is anticipated that the DIST minor will have unique appeal rather than competing with existing minors and will encourage more students to seek a minor. The flexibility of the requirements make it possible for students whose major field of study is heavily constrained by accreditation, certification or other external considerations, to also engage in a meaningful and

professionally important minor. We anticipate being able to accommodate 20 students per year in the minor.

Depending on the student's major, the addition of a minor in Disability Studies is expected to provide a competitive edge for students applying for advanced professional and graduate programs through the addition of a special interest focus. Further, the minor will facilitate employment opportunities. For example, teachers in Delaware are more likely to be hired if they have a background in special education. In addition, the field work and interdisciplinary experiences provided in the minor help to build a competitive edge for students especially in the coordination of within today's health care social service arenas.

#### C. ENROLLMENT, ADMISSIONS, and FINANCIAL AID

There are no enrollment limits for the minor. The minor is to be effective September 1, 1997.

Admissions Requirements are:

1. Preference will be given to freshman and sophomores
2. A minimum grade of C- earned in IFST/PSYCH/SOCI 270-Families and Developmental Disabilities.
3. Permission of academic advisor and The Center for Disabilities Studies advisor

#### D. RESOURCES AVAILABLE

The Center for Disabilities Studies Core faculty are committed to guide and direct student activities. Specific other resources include: The Center for Disabilities Studies resource collection. This is a growing resource that includes materials ranging governmental reports to journals which are not part of the holdings of the University Library System. Also, through the American Association of University Affiliated Programs, access to materials held by the other 60 UAPs throughout the United States is available to students in the program.

Student research, observation and practica opportunities are available in the University Preschool Laboratory which is an early childhood program that integrates children with disabilities and children without disabilities, the Adult Day Care Center program which serves elderly people who are frail, or with mental retardation, and other disabilities. The Office of Clinical Studies, College of Education; the College of Human Resources; and, the College of Nursing all arrange practicums and field experiences that involve students with people who are disabled.

#### E. RESOURCES REQUIRED

No new resources are required to support this minor and no new teaching obligations are placed on current faculty. To date, The Center for Disabilities Studies has sponsored, through federal funding provided by the Administration on Developmental Disabilities, US Department of Health and Human Services, the cost of the introductory course, Families and Developmental Disabilities. Additional teaching costs associated with the minor, such as teaching of the senior seminar, will

also be sponsored by The Center for Disabilities Studies. The Center for Disabilities Studies currently has a coordinator for the minor in place who will also assume advisement responsibilities for students in the minor. All other courses that may be counted for the minor are offered regularly and the minor simply codifies courses already in place (See appendix).

#### **F. IMPLEMENTATION AND EVALUATION PLAN**

IFST/PSYC/SOCI 270 will continue to be offered at least once each academic year and that students will begin to declare the minor, Fall 1997. The other courses on the advisement list are all offered on a regular basis by their Departments. Evaluation will initially include recording the number of students who express interest in the minor, those who declare the minor, keeping track of the majors represented, and those who graduate with the minor completed. Other measures of evaluation include a follow-up questionnaire to graduates to assess the role of DIST minor in their current position and to determine the usefulness of the program. In addition questions will be included that assess the overall quality of the program.

#### **VIII. Appendices**

- Letters of Collaborative Agreement

- Letters of Approval from Impacted Departments

- Other Pertinent Documents

- Advisement list of potential courses to be applied to the minor if approved by the The Center for Disabilities Studies Preservice Coordinator and the student's advisor.



WOMEN'S STUDIES  
INTERDISCIPLINARY PROGRAM

333 Smith Hall  
University of Delaware  
Newark, Delaware 19716-2506  
Ph: 302/831-8474

October 25, 1996

Memorandum To: Dean Mary P. Richards  
Senate Committee on Undergraduate Studies

Re: Existing Course Added to Science Area Requirement for Women's Studies

From: Dr. Beth Bonniwell Haslett, Director, Women's Studies Program 

In the Women's Studies major, students are required to take a three credit course in a science related area. Two courses, WOMS 233 Women, Biology and Medicine and WOMS 305 The Evolution of Human Sex Roles and Reproduction, fulfill this requirement.

We would like to add an already existing course, WOMs 389 Topics: Woman and Health Issues, to the courses that fulfill a science-related requirement for the Women's Studies major. We would like to increase the course options available for students to satisfy the science requirement.

Thank you for your consideration. It is my understanding that this memorandum is sufficient for processing this request, but if further information is required, please contact me and I will be happy to provide any further information.

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Academic Science



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**\* NEW MAJOR/CURRICULUM: EXERCISE AND SPORT SCIENCE \*  
FACULTY SENATE**

The field of Physical Education has grown over the past two decades; in the late 70's and early 80's, Physical Education was linked primarily to pedagogy. Over the past few years, however, the field has changed dramatically. Fitness Management, Health Promotion, Exercise Physiology, Sports Medicine - these are just a few of the terms used today in Physical Education. In fact, the current merger will have the College of Physical Education, Athletics, and Recreation combining with Nursing (and Nutrition) to make a College of Health and Nursing Science.

To reflect this change, the College would like to establish a new academic program to more appropriately reflect the recent developments in the field as well as changes that may occur in the future. This new program - Exercise and Sport Science - will provide the students in our College with more options, greater focus, and more flexibility. Concentrations in Exercise Physiology, Figure Skating Science, Fitness Management, Strength and Conditioning, and Physical Education Studies provides options that allow students in the College to specialize in a particular area, but allows enough flexibility to broaden their background.

Currently, the Physical Education Studies program has three concentrations: Figure Skating Science, Fitness Management, and Physical Education Studies (Liberal Studies). Approximately forty-five percent of the five hundred-plus students in the College are under this program; one-third of that number are in the Fitness Management program, another two percent are in the Figure Skating Science program. The remaining fifty-five percent follow the Physical Education Studies (Liberal Studies) degree program. The Physical Education Studies program allows students the opportunity to pursue either a University of Delaware-approved minor or concentration of study, which must be approved by the Department Chairperson. A significant number of students in this program specialized in either Exercise Physiology or Physical Therapy, Strength and Conditioning, or pursue minors in areas such as Biology, Nutrition, Educational Studies, and Psychology.

The Exercise and Sport Science degree program, with the proposed concentrations, provides students with the necessary coursework and experience to pursue professional and/or advanced degree opportunities. The Exercise Physiology Concentration provides students with the opportunity to pursue various fields in Sports Medicine - Exercise Physiology, Biomechanics, Physical and Occupational Therapy, etc. The Physical Education Studies Concentration - similar to the current Physical Education Studies (Liberal Studies) degree program - allow students to pursue two minors in related fields or pursue at least one minor and an Area of Interest - which allow students to pursue areas such as Aquatic Management, Human Movement Studies, and Sports Administration. The Strength and Conditioning Concentration provides students with the opportunity to learn and teach weight and strength training principles. The University of Delaware has one of the premiere weight training facilities in the country; establishing an academic program that does not exist at any other institution in the country provides a great opportunity to be on the leading edge in this field. The Fitness Management Concentration prepares students for employment opportunities in the field; these students will - in most instances - find either employment or graduate degree opportunities. Lastly, the Figure Skating Science Concentrations provides students with the knowledge and experience to become the leading professionals/coaches in skating. The University of Delaware, with one of the most extensive skating facilities in the country, has the only national academic program related to the development of skating professionals.

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
 DEPARTMENT: PHYSICAL EDUCATION  
 DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
 MAJOR: EXERCISE AND SPORT SCIENCE  
 CONCENTRATION: EXERCISE PHYSIOLOGY

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
<b>UNIVERSITY REQUIREMENTS</b>							
ENGL	110	Critical Reading and Writing	3	X			
xxxx	xxx	Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.	3	X	X	X	X
<b>COLLEGE REQUIREMENTS</b>							
xxxx	xxx	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."	3			X	
MATH	221	Calculus I	3	X			
<b>BREADTH REQUIREMENTS</b>							
Group A - Communication Skills Requires a minimum of 6 credits (from at least two different departments) from the following departments: English (writing/composition courses), Foreign Languages and Literature (language/communication courses), Communication, Linguistics, and Manual Communication courses (sign language courses).			6*	X	X	X	X
Group B - Humanities and Fine Arts Requires a minimum of 3 credits from the following departments: Art, Art History, Comparative Literature, English (literature courses), Foreign Languages and Literature (literature courses), Music, Philosophy, Theater, and specific courses from Textiles, Design and Consumer Economics			3*	X	X	X	X
Group C - Biological Sciences BISC 207 Introductory Biology I			4* 4	X X	X	X	X
Group D - History and Social Science PSYC 201 General Psychology Upper Level PSYC course (PSYC325, 334, or 350) Requires a minimum of 6 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 (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.			6* 3 3	X	X X	X	X X
Group E - Natural Science and Mathematics NTDT 200 Nutrition Concepts CHEM 103 General Chemistry Requires a minimum of 7 credits (from at least two different departments); remaining choices may include the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science courses), Mathematics (excluding MATH251 and MATH252), Physical Science, Physics (including Astronomy), 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.			7* 3 4	X	X X X	X	X

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
DEPARTMENT: PHYSICAL EDUCATION  
DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
MAJOR: EXERCISE AND SPORT SCIENCE  
CONCENTRATION: EXERCISE PHYSIOLOGY

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
<u>ACADEMIC STUDIES</u>							
HPER	210	Safety, First Aid, and Emergency Care	3	X			
HPER	214	Wellness: A Way of Life	3	X			
HPER	220	Anatomy and Physiology	3	X			
HPER	276	Personal Computers in Health, Physical Education, and Recreation	2	X			
HPER	290	Physiology of Activity	3		X		
HPER	291	Physiology of Activity Lab	1		X		
HPER	300	Issues in Physical Activity Studies and Sport	3			X	
HPER	305	Fundamentals of Athletic Training	3	X			
HPER	324	Measurement and Evaluation	3		X		
HPER	342	Survey in Adaptive Physical Education	3		X		
HPER	350	Basic Concepts in Kinesiology	3				X
			<u>3/30 (at 3??)</u>				
<u>CONCENTRATION AREA</u>							
<u>External to the College</u>							
BISC	208	Introductory Biology II	4	X			
BISC	276	Human Physiology and Anatomy	4			X	
or							
BISC	306	General Physiology	4			X	
CHEM	104	General Chemistry	4		X		
PHYS	201	Introductory Physics I	4				X
PHYS	202	Introductory Physics II	4				X
STAT	201	Introductory Statistics I	3			X	
<u>Within the Department</u>							
HPER	353	Seminar in Exercise Physiology	3			X	
HPER	420	Functional Human Anatomy	4			X	
or							
BISC	442	Vertebrae Morphology	4			X	
HPER	426	Biomechanics of Sport	4				X
HPER	432	Basic Exercise Prescription	3			X	
or							
HPER	434	Exercise Test Technology	3			X	
<u>ELECTIVES</u>							
<u>Electives</u>			11	X	X	X	X
CREDITS TO TOTAL A MINIMUM OF			120				

\* Indicates minimum number of credits required; the remaining 6 credits can be from any group in the Breadth Requirements.

**EXERCISE AND SPORT SCIENCE  
ADMISSION REQUIREMENTS AND GUIDELINES**

Students interested in any of the Exercise and Sport Science Concentrations will need to fulfill the following minimum requirements:

1. must complete at least 28 total credits, with at least 12 credits taken at the University of Delaware.
2. must complete the following courses:

HPER210 (3 cr)  
HPER214 (3 cr)

HPER220 (3 cr)  
HPER276 (3 cr)

HPER305 (3 cr)  
BISC course w/ lab (4 cr)

3. must complete the appropriate application form for each concentration. Applications for all of the concentrations will be accepted at only one time per year: June 15th. All forms should be returned to the Physical Education Advisement Center (112A Carpenter Sports Building) by the application deadline.

**NOTES:** (1) Students need to be in the College of P.E.A.R. in order to apply for any of the concentrations.  
(2) Meeting the minimum admission requirements does not guarantee acceptance into the Figure Skating Science, Fitness Management, and Strength and Conditioning Concentrations. Offers of admission into these concentrations are presented on a competitive basis to those individuals who are most qualified.

\* Application Procedures for the Concentrations in Exercise and Sport Science \*

+ Exercise Physiology

- Follow steps 1, 2, and 3 listed above

+ Physical Education Studies

- Follow steps 1, 2, and 3 listed above
- Upon completion of HPER235 - Professional Transitions and conferring with their advisor, students must declare either two University-approved Minors or one University-approved Minor and one Area of Study.

+ Strength and Conditioning

- Follow steps 1, 2, and 3 listed above, as well as the following:
  - a. must have a minimum Grade Point Average (GPA) of 2.00
  - b. complete a minimum of 100 hours of direct observation in the Chuck Hall Weight Room under the supervision of the Director of the program.
- After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
  - a. Cumulative and Major Grade Point Average
  - b. Application
  - c. Written Essay
  - d. Written Log with Listing of Direct Observation Hours
  - e. Interview (if necessary)
- 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.
- Approximately three to five students will be accepted into the program each year dependent upon the number of available spots.
- A minimum of 300 hours of clinical experience must be obtained once accepted into the program. The hours must be accumulated over a minimum of three semesters (with at least 100 hours per semester) and cannot do clinical experience for more than five semesters.
- Students cannot do the internship experience (HPER464) until they have completed the Practicum in Strength and Conditioning (HPER416), the United States Weightlifting Federation Certification course, and the 300 hour clinical experience.

+ Fitness Management

- Follow steps 1, 2, and 3 listed above, as well as the following:
  - a. Must have a minimum Grade Point Average (GPA) of 2.00
- After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
  - a. Cumulative and Major Grade Point Average
  - b. Application
  - c. Written Essay
  - d. Interview (if necessary)
- Once are admitted into the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review.
- Approximately twenty students will be accepted into the program each year dependent upon the number of available spots.
- Students cannot do the internship experience (HPER464) until they have completed the Seminar in Fitness Management (HPER354) and all of the courses in the Concentration Area.

+ Figure Skating Science

- Follow steps 1, 2, and 3 listed above
- After the above criteria have been met, each student will then need to meet with the Director of the Figure Skating Science Concentration to determine eligibility for the program.

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
 DEPARTMENT: PHYSICAL EDUCATION  
 DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
 MAJOR: EXERCISE AND SPORT SCIENCE  
 CONCENTRATION: FIGURE SKATING SCIENCE

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
UNIVERSITY REQUIREMENTS							
ENGL	110	Critical Reading and Writing	3	X			
XXXX	XXX	Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.	3	X	X	X	X
COLLEGE REQUIREMENTS							
XXXX	XXX	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."	3			X	
MATH	XXX	Must be an approved course at the 100-level or greater	3	X			
BREADTH REQUIREMENTS							
Group A - Communication Skills Requires a minimum of 6 credits (from at least two different departments) from the following departments: English (writing/composition courses), Foreign Languages and Literature (language/communication courses), Communication, Linguistics, and Manual Communication courses (sign language courses).			6*	X	X	X	X
Group B - Humanities and Fine Arts Requires a minimum of 3 credits from the following departments: Art, Art History, Comparative Literature, English (literature courses), Foreign Languages and Literature (literature courses), Music, Philosophy, Theater, and specific courses from Textiles, Design and Consumer Economics			3*	X	X	X	X
Group C - Biological Sciences Requires a minimum of 4 credits (BISC course with lab) from the Biological Sciences department.			4*	X	X	X	X
Group D - History and Social Science PSYC 201 General Psychology Requires a minimum of 6 credits (from at least two different departments) 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 (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.			6* 3	X	X X	X	X
Group E - Natural Science and Mathematics NTDT 200 Nutrition Concepts XXX XXX Science course with lab Requires a minimum of 7 credits (from at least two different departments); remaining choices may include the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science courses), Mathematics (excluding MATH251 and MATH252), Physical Science, Physics (including Astronomy), 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.			7* 3 4	X	X X	X	X X

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
DEPARTMENT: PHYSICAL EDUCATION  
DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
MAJOR: EXERCISE AND SPORT SCIENCE  
CONCENTRATION: FIGURE SKATING SCIENCE

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
			<u>ACADEMIC STUDIES</u>				
HPER	210	Safety, First Aid, and Emergency Care	3	X			
HPER	214	Wellness: A Way of Life	3	X			
HPER	220	Anatomy and Physiology	3	X			
HPER	276	Personal Computers in Health, Physical Education, and Recreation	2	X			
HPER	290	Physiology of Activity	3		X		
HPER	291	Physiology of Activity Lab	1		X		
HPER	300	Issues in Physical Activity Studies and Sport	3				X
HPER	305	Fundamentals of Athletic Training	3	X			
HPER	324	Measurement and Evaluation	3		X		
HPER	342	Survey in Adaptive Physical Education	3		X		
HPER	350	Basic Concepts in Kinesiology	3				X
			<u>CONCENTRATION AREA</u>				
			<u>External to the College</u>				
NTDT	310	Nutrition and Activity	3			X	
			<u>Within the Department</u>				
HPER	250	Motor Development	3			X	
HPER	260	Leisure Service Programming	3			X	
HPER	270	Recreation Leadership	3			X	
HPER	320	Principles of Strength and Conditioning	3		X		
HPER	355	Figure Skating Practicum I	3			X	
HPER	356	Figure Skating Practicum II	3			X	
HPER	360	Psychology of Coaching	1			X	
HPER	426	Biomechanics of Sport	4			X	
HPER	440	Strategies of Athletic Peak Performance	3				X
HPER	455	Figure Skating Practicum III	3				X
HPER	456	Figure Skating Practicum IV	3				X
			<u>ELECTIVES</u>				
<u>Electives</u>			11	X	X	X	X
CREDITS TO TOTAL A MINIMUM OF			120				

\* Indicates minimum number of credits required; the remaining 6 credits can be from any group in the Breadth Requirements.

**EXERCISE AND SPORT SCIENCE  
ADMISSION REQUIREMENTS AND GUIDELINES**

Students interested in any of the Exercise and Sport Science Concentrations will need to fulfill the following minimum requirements:

1. must complete at least 28 total credits, with at least 12 credits taken at the University of Delaware.
2. must complete the following courses:

HPER210 (3 cr)  
HPER214 (3 cr)

HPER220 (3 cr)  
HPER276 (3 cr)

HPER305 (3 cr)  
BISC course w/ lab (4 cr)

3. must complete the appropriate application form for each concentration. Applications for all of the concentrations will be accepted at only one time per year: June 15th. All forms should be returned to the Physical Education Advisement Center (112A Carpenter Sports Building) by the application deadline.

**NOTES:** (1) Students need to be in the College of P.E.A.R. in order to apply for any of the concentrations.  
(2) Meeting the minimum admission requirements does not guarantee acceptance into the Figure Skating Science, Fitness Management, and Strength and Conditioning Concentrations. Offers of admission into these concentrations are presented on a competitive basis to those individuals who are most qualified.

\* Application Procedures for the Concentrations in Exercise and Sport Science \*

- + Exercise Physiology
  - Follow steps 1, 2, and 3 listed above
- + Physical Education Studies
  - Follow steps 1, 2, and 3 listed above
  - Upon completion of HPER235 - Professional Transitions and conferring with their advisor, students must declare either two University-approved Minors or one University-approved Minor and one Area of Study.
- + Strength and Conditioning
  - Follow steps 1, 2, and 3 listed above, as well as the following:
    - a. must have a minimum Grade Point Average (GPA) of 2.00
    - b. complete a minimum of 100 hours of direct observation in the Chuck Hall Weight Room under the supervision of the Director of the program.
  - After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
    - a. Cumulative and Major Grade Point Average
    - b. Application
    - c. Written Essay
    - d. Written Log with Listing of Direct Observation Hours
    - e. Interview (if necessary)
  - 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.
  - Approximately three to five students will be accepted into the program each year dependent upon the number of available spots.
  - A minimum of 300 hours of clinical experience must be obtained once accepted into the program. The hours must be accumulated over a minimum of three semesters (with at least 100 hours per semester) and cannot do clinical experience for more than five semesters.
  - Students cannot do the internship experience (HPER464) until they have completed the Practicum in Strength and Conditioning (HPER416), the United States Weightlifting Federation Certification course, and the 300 hour clinical experience.
- + Fitness Management
  - Follow steps 1, 2, and 3 listed above, as well as the following:
    - a. Must have a minimum Grade Point Average (GPA) of 2.00
  - After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
    - a. Cumulative and Major Grade Point Average
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  - Once admitted into the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review.
  - Approximately twenty students will be accepted into the program each year dependent upon the number of available spots.
  - Students cannot do the internship experience (HPER464) until they have completed the Seminar in Fitness Management (HPER354) and all of the courses in the Concentration Area.
- + Figure Skating Science
  - Follow steps 1, 2, and 3 listed above
  - After the above criteria have been met, each student will then need to meet with the Director of the Figure Skating Science Concentration to determine eligibility for the program.

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
 DEPARTMENT: PHYSICAL EDUCATION  
 DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
 MAJOR: EXERCISE AND SPORT SCIENCE  
 CONCENTRATION: FITNESS MANAGEMENT

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
<b>UNIVERSITY REQUIREMENTS</b>							
ENGL	110	Critical Reading and Writing	3	X			
xxxx	xxx	Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.	3	X	X	X	X
<b>COLLEGE REQUIREMENTS</b>							
ENGL	312	Written Communication in Business	3			X	
MATH	xxx	Must be an approved course at the 100-level or greater	3	X			
<b>BREADTH REQUIREMENTS</b>							
Group A - Communication Skills Requires a minimum of 6 credits (from at least two different departments) from the following departments: English (writing/composition courses), Foreign Languages and Literature (language/communication courses), Communication, Linguistics, and Manual Communication courses (sign language courses).			6*	X	X	X	X
Group B - Humanities and Fine Arts Requires a minimum of 3 credits from the following departments: Art, Art History, Comparative Literature, English (literature courses), Foreign Languages and Literature (literature courses), Music, Philosophy, Theater, and specific courses from Textiles, Design and Consumer Economics			3*	X	X	X	X
Group C - Biological Sciences Requires a minimum of 4 credits (BISC course with lab) from the Biological Sciences department.			4*	X	X	X	X
Group D - History and Social Science PSYC 201 General Psychology SOCL 201 Introduction to Sociology Requires a minimum of 6 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 (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.			6* 3 3	X X X	X X X	X	X
Group E - Natural Science and Mathematics NTDT 200 Nutrition Concepts xxxx xxx Science course with lab Requires a minimum of 7 credits (from at least two different departments); remaining choices may include the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science courses), Mathematics (excluding MATH251 and MATH252), Physical Science, Physics (including Astronomy), 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.			7 3 4	X	X X	X X	X



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<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
ACADEMIC STUDIES							
HPER	210	Safety, First Aid, and Emergency Care	3	X			
HPER	214	Wellness: A Way of Life	3	X			
HPER	220	Anatomy and Physiology	3	X			
HPER	276	Personal Computers in Health, Physical Education, and Recreation	2	X			
HPER	290	Physiology of Activity	3		X		
HPER	291	Physiology of Activity Lab	1		X		
HPER	300	Issues in Physical Activity Studies and Sport	3			X	
HPER	305	Fundamentals of Athletic Training	3	X			
HPER	324	Measurement and Evaluation	3		X		
HPER	342	Survey in Adaptive Physical Education	3		X		
HPER	350	Basic Concepts in Kinesiology	3			X	
CONCENTRATION AREA							
<u>External to the College</u>							
BUAD	301	Introduction to Marketing	3			X	
or							
BUAD	309	Management and Organizational Behavior	3			X	
FREC	201	Records and Accounts	3		X		
<u>Within the Department</u>							
HPER	320	Principles of Strength and Conditioning	3			X	
HPER	332	Health Behavior Theory and Assessment	3			X	
HPER	354	Seminar in Fitness Management	1			X	
HPER	401	Leadership Practicum	1				X
HPER	432	Basic Exercise Prescription	3			X	
HPER	434	Exercise Test Technology	3			X	
HPER	445	Concepts of Fitness Testing	3				X
HPER	452	Principles of Fitness Management	3				X
HPER	464	Internship in Fitness Management	9				X
HPER	490	Development of Health Promotion Programs	3				X
ELECTIVES							
<u>Electives</u>			8	X	X	X	X
CREDITS TO TOTAL A MINIMUM OF			120				

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ADMISSION REQUIREMENTS AND GUIDELINES**

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  - Approximately three to five students will be accepted into the program each year dependent upon the number of available spots.
  - A minimum of 300 hours of clinical experience must be obtained once accepted into the program. The hours must be accumulated over a minimum of three semesters (with at least 100 hours per semester) and cannot do clinical experience for more than five semesters.
  - Students cannot do the internship experience (HPER464) until they have completed the Practicum in Strength and Conditioning (HPER416), the United States Weightlifting Federation Certification course, and the 300 hour clinical experience.
- + Fitness Management
  - Follow steps 1, 2, and 3 listed above, as well as the following:
    - a. Must have a minimum Grade Point Average (GPA) of 2.00
  - After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
    - a. Cumulative and Major Grade Point Average
    - b. Application
    - c. Written Essay
    - d. Interview (if necessary)
  - Once are admitted into the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review
  - Approximately twenty students will be accepted into the program each year dependent upon the number of available spots.
  - Students cannot do the internship experience (HPER464) until they have completed the Seminar in Fitness Management (HPER354) and all of the courses in the Concentration Area.
- + Figure Skating Science
  - Follow steps 1, 2, and 3 listed above
  - After the above criteria have been met, each student will then need to meet with the Director of the Figure Skating Science Concentration to determine eligibility for the program.

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
 DEPARTMENT: PHYSICAL EDUCATION  
 DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
 MAJOR: EXERCISE AND SPORT SCIENCE  
 CONCENTRATION: PHYSICAL EDUCATION STUDIES

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
<b>UNIVERSITY REQUIREMENTS</b>							
ENGL	110	Critical Reading and Writing	3	X			
xxxx	xxx	Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.	3	X	X	X	X
<b>COLLEGE REQUIREMENTS</b>							
xxxx	xxx	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."	3			X	
MATH	xxx	Must be an approved course at the 100-level or greater	3	X			
<b>BREADTH REQUIREMENTS</b>							
Group A - Communication Skills Requires a minimum of 6 credits (from at least two different departments) from the following departments: English (writing/composition courses), Foreign Languages and Literature (language/communication courses), Communication, Linguistics, and Manual Communication courses (sign language courses).			6*	X	X	X	X
Group B - Humanities and Fine Arts Requires a minimum of 3 credits from the following departments: Art, Art History, Comparative Literature, English (literature courses), Foreign Languages and Literature (literature courses), Music, Philosophy, Theater, and specific courses from Textiles, Design and Consumer Economics			3*	X	X	X	X
Group C - Biological Sciences Requires a minimum of 4 credits (BISC course with lab) from the Biological Sciences department.			4*	X	X	X	X
Group D - History and Social Science PSYC 201 General Psychology Requires a minimum of 6 credits (from at least two different departments) 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 (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.			6* 3	X	X X	X	X
Group E - Natural Science and Mathematics NTDT 200 Nutrition Concepts xxx xxx Science course with lab Requires a minimum of 7 credits (from at least two different departments); remaining choices may include the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science courses), Mathematics (excluding MATH251 and MATH252), Physical Science, Physics (including Astronomy), 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.			7* 3 4	X	X X	X X	X

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
DEPARTMENT: PHYSICAL EDUCATION  
DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
MAJOR: EXERCISE AND SPORT SCIENCE  
CONCENTRATION: PHYSICAL EDUCATION STUDIES

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
			<u>ACADEMIC STUDIES</u>				
HPER	210	Safety, First Aid, and Emergency Care	3	X			
HPER	214	Wellness: A Way of Life	3	X			
HPER	220	Anatomy and Physiology	3	X			
HPER	276	Personal Computers in Health, Physical Education, and Recreation	2	X			
HPER	290	Physiology of Activity	3		X		
HPER	291	Physiology of Activity Lab	1		X		
HPER	300	Issues in Physical Activity Studies and Sport	3			X	
HPER	305	Fundamentals of Athletic Training	3	X			
HPER	324	Measurement and Evaluation	3		X		
HPER	342	Survey in Adaptive Physical Education	3		X		
HPER	350	Basic Concepts in Kinesiology	3			X	
			<u>CONCENTRATION AREA</u>				
HPER	235	Professional Transitions	3		X		
Students selecting this program will be required to complete one of the following option:							
<u>Option I</u>			30*				
- Minor I (minimum of 15 credits) and			15*		X	X	X
- Minor II (minimum of 15 credits)			15*		X	X	X
or							
<u>Option II</u>			30*				
- Minor I (minimum of 15 credits) and			15*		X	X	X
- Area of Study (minimum of 15 credits)			15*		X	X	X
NOTE: All course work in the Area of Study must be developed with a department academic advisor and approved by the Chair of the Department of Physical Education.							
			<u>ELECTIVES</u>				
<u>Electives</u>			16*	X	X	X	X
CREDITS TO TOTAL A MINIMUM OF			120				

\* Indicates minimum number of credits required; the remaining 6 credits can be from any group in the Breadth Requirements.

\* Indicates minimum number of credits required for a minor/area of interest. Some curriculums may require a greater number of credits

\* Number of elective credits may vary based on minor(s) and/or area of interest chosen.

**EXERCISE AND SPORT SCIENCE  
ADMISSION REQUIREMENTS AND GUIDELINES**

Students interested in any of the Exercise and Sport Science Concentrations will need to fulfill the following minimum requirements:

1. must complete at least 28 total credits, with at least 12 credits taken at the University of Delaware.
2. must complete the following courses:

HPER210 (3 cr)  
HPER214 (3 cr)

HPER220 (3 cr)  
HPER276 (3 cr)

HPER305 (3 cr)  
BISC course w/ lab (4 cr)

3. must complete the appropriate application form for each concentration. Applications for all of the concentrations will be accepted at only one time per year: June 15th. All forms should be returned to the Physical Education Advisement Center (112A Carpenter Sports Building) by the application deadline.

**NOTES:** (1) Students need to be in the College of P.E.A.R. in order to apply for any of the concentrations.  
(2) Meeting the minimum admission requirements does not guarantee acceptance into the Figure Skating Science, Fitness Management, and Strength and Conditioning Concentrations. Offers of admission into these concentrations are presented on a competitive basis to those individuals who are most qualified.

\* Application Procedures for the Concentrations in Exercise and Sport Science \*

+ Exercise Physiology

- Follow steps 1, 2, and 3 listed above

+ Physical Education Studies

- Follow steps 1, 2, and 3 listed above
- Upon completion of HPER235 - Professional Transitions and conferring with their advisor, students must declare either two University-approved Minors or one University-approved Minor and one Area of Study.

+ Strength and Conditioning

- Follow steps 1, 2, and 3 listed above, as well as the following:
  - a. must have a minimum Grade Point Average (GPA) of 2.00
  - b. complete a minimum of 100 hours of direct observation in the Chuck Hall Weight Room under the supervision of the Director of the program.
- After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
  - a. Cumulative and Major Grade Point Average
  - b. Application
  - c. Written Essay
  - d. Written Log with Listing of Direct Observation Hours
  - e. Interview (if necessary)
- 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.
- Approximately three to five students will be accepted into the program each year dependent upon the number of available spots.
- A minimum of 300 hours of clinical experience must be obtained once accepted into the program. The hours must be accumulated over a minimum of three semesters (with at least 100 hours per semester) and cannot do clinical experience for more than five semesters.
- Students cannot do the internship experience (HPER464) until they have completed the Practicum in Strength and Conditioning (HPER416), the United States Weightlifting Federation Certification course, and the 300 hour clinical experience.

+ Fitness Management

- Follow steps 1, 2, and 3 listed above, as well as the following:
  - a. Must have a minimum Grade Point Average (GPA) of 2.00
- After the above criteria have been met, each student will then be evaluated and chosen based on the following criteria:
  - a. Cumulative and Major Grade Point Average
  - b. Application
  - c. Written Essay
  - d. Interview (if necessary)
- Once are admitted into the program, students will be required to maintain a cumulative index of at least 2.00 or be dropped from the program upon review.
- Approximately twenty students will be accepted into the program each year dependent upon the number of available spots.
- Students cannot do the internship experience (HPER464) until they have completed the Seminar in Fitness Management (HPER354) and all of the courses in the Concentration Area.

+ Figure Skating Science

- Follow steps 1, 2, and 3 listed above
- After the above criteria have been met, each student will then need to meet with the Director of the Figure Skating Science Concentration to determine eligibility for the program.

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
 DEPARTMENT: PHYSICAL EDUCATION  
 DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
 MAJOR: EXERCISE AND SPORT SCIENCE  
 CONCENTRATION: STRENGTH AND CONDITIONING

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
UNIVERSITY REQUIREMENTS							
ENGL	110	Critical Reading and Writing	3	X			
xxxx	xxx	Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.	3	X	X	X	X
COLLEGE REQUIREMENTS							
xxxx	xxx	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."	3			X	
MATH	xxx	Must be an approved course at the 100-level or greater	3	X			
BREADTH REQUIREMENTS							
Group A - Communication Skills Requires a minimum of 6 credits (from at least two different departments) from the following departments: English (writing/composition courses), Foreign Languages and Literature (language/communication courses), Communication, Linguistics, and Manual Communication courses (sign language courses).			6*	X	X	X	X
Group B - Humanities and Fine Arts Requires a minimum of 3 credits from the following departments: Art, Art History, Comparative Literature, English (literature courses), Foreign Languages and Literature (literature courses), Music, Philosophy, Theater, and specific courses from Textiles, Design and Consumer Economics			3*	X	X	X	X
Group C - Biological Sciences			4*				
BISC	106	Elementary Human Physiology	3	X	X	X	X
BISC	116	Elementary Human Physiology Lab	1	X			
Group D - History and Social Science			6*				
PSYC	201	General Psychology	3	X	X	X	X
Requires a minimum of 6 credits (from at least two different departments) 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 (except physiological), Sociology, Women's Studies, and specific courses from Individual and Family Studies.							
Group E - Natural Science and Mathematics			7*				
NTDT	200	Nutrition Concepts	3	X	X	X	X
CHEM	xxx	Chemistry course with lab	4		X		
Requires a minimum of 7 credits (from at least two different departments); remaining choices may include the following departments: Anthropology (physical and biological), Chemistry, Computer and Information Science, Engineering, Entomology, Geography (physical and meteorology), Geology, Health Sciences (natural science courses), Mathematics (excluding MATH251 and MATH252), Physical Science, Physics (including Astronomy), 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.						X	

COLLEGE: PHYSICAL EDUCATION, ATHLETICS, AND RECREATION  
DEPARTMENT: PHYSICAL EDUCATION  
DEGREE: BACHELOR OF SCIENCE IN EXERCISE AND SPORT SCIENCE  
MAJOR: EXERCISE AND SPORT SCIENCE  
CONCENTRATION: STRENGTH AND CONDITIONING

<u>SUGGESTED CURRICULUM</u>			<u>CREDITS</u>	<u>FRESHMAN</u>	<u>SOPHOMORE</u>	<u>JUNIOR</u>	<u>SENIOR</u>
<b>ACADEMIC STUDIES</b>							
HPER	210	Safety, First Aid, and Emergency Care	3	X			
HPER	214	Wellness: A Way of Life	3	X			
HPER	220	Anatomy and Physiology	3	X			
HPER	276	Personal Computers in Health, Physical Education, and Recreation	2	X			
HPER	290	Physiology of Activity	3		X		
HPER	291	Physiology of Activity Lab	1		X		
HPER	300	Issues in Physical Activity Studies and Sport	3			X	
HPER	305	Fundamentals of Athletic Training	3	X			
HPER	324	Measurement and Evaluation	3		X		
HPER	342	Survey in Adaptive Physical Education	3		X		
HPER	350	Basic Concepts in Kinesiology	3			X	
<b>CONCENTRATION AREA</b>							
<u>External to the College</u>							
NTDT	310	Nutrition and Activity	3				X
<u>Within the Department</u>							
HPER	320	Principles of Strength and Conditioning	3		X		
HPER	321	Advanced Principles in Strength and Conditioning	4			X	
HPER	322	Weight Room Safety and Design	1				X
HPER	323	Theories and Applications of Program Design	3			X	
HPER	354	Seminar in Strength and Conditioning	1			X	
HPER	390	Principles of Coaching	3			X	
HPER	416	Practicum in Strength and Conditioning	1				X
HPER	426	Biomechanics of Sport	4				X
HPER	440	Strategies of Athletic Peak Performance	3				X
HPER	464	Internship in Strength and Conditioning	9				X
<b>ELECTIVES</b>							
<u>Electives</u>			11	X	X	X	X
CREDITS TO TOTAL A MINIMUM OF			120				

\* Indicates minimum number of credits required; the remaining 6 credits can be from any group in the Breadth Requirements.

**EXERCISE AND SPORT SCIENCE  
ADMISSION REQUIREMENTS AND GUIDELINES**

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HPER305 (3 cr)  
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- + Exercise Physiology
  - Follow steps 1, 2, and 3 listed above
- + Physical Education Studies
  - Follow steps 1, 2, and 3 listed above
  - Upon completion of HPER235 - Professional Transitions and conferring with their advisor, students must declare either two University-approved Minors or one University-approved Minor and one Area of Study.
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  - 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.
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  - Follow steps 1, 2, and 3 listed above, as well as the following:
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    - c. Written Essay
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  - Students cannot do the internship experience (HPER464) until they have completed the Seminar in Fitness Management (HPER354) and all of the courses in the Concentration Area.
- + Figure Skating Science
  - Follow steps 1, 2, and 3 listed above
  - After the above criteria have been met, each student will then need to meet with the Director of the Figure Skating Science Concentration to determine eligibility for the program.





## COLLEGE OF AGRICULTURAL SCIENCES

DEPARTMENT OF  
PLANT AND SOIL SCIENCES147 Townsend Hall  
University of Delaware  
Newark, Delaware 19717-1303  
Ph: 302/831-2531  
Fax: 302/831-3651

October 1, 1996

TO: College Curriculum Committee  
FROM: *David Frey*  
David Frey, Plant and Soil Sciences  
RE: New Majors

The Department of Plant and Soil Sciences is proposing the addition of two new undergraduate majors to compliment the existing Plant Science Major, Landscape Horticulture and Plant Biology. In designing these majors, we have incorporated input from other academic institutions, an extensive mail survey of alumni and appropriate industry representatives, and a day long focus group session involving alumni and industry personnel.

Adding the new majors to our existing Plant Science Major will redistribute our students now in the four Plant Science concentrations. The Plant Science Major will remain and include the requirements currently listed under the General concentration. The current concentrations of Ornamental Horticulture, Plant Pathology and Agronomy will be deleted. It is anticipated that the total number of plant-oriented majors will not increase significantly but these changes will permit our students to pursue more specifically titled majors in the plant sciences.

This page is  
attachment for  
VI A + B - new  
majors in Plant Biol.  
+ Landscape  
Horticulture.

**DEGREE: BACHELOR OF SCIENCE IN AGRICULTURE**  
**MAJOR: PLANT BIOLOGY**

**CURRICULUM**

**CREDITS**

**UNIVERSITY REQUIREMENTS**

ENGL 110 Critical Reading and Writing	3
Three credits in an approved course or courses stressing multicultural, ethnic, and or gender-related content.	3

**COLLEGE REQUIREMENTS**

***Mathematics and Computer Science***

Mathematics course	3
Computer Science course FREC 135 or equivalent	3

***Agricultural and Biological Sciences***

Minimum of one course in three of the following areas: Food and Resource Economics, Food Science, Agricultural Engineering, Animal Science, Entomology and Applied Ecology or Biology.	9-12
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***Literature and Arts***

Six credits selected from the general areas of English, Art, Art History, Communication, Music, Theater, or Foreign Language.	6
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***Social Sciences and Humanities***

Minimum of one course in three of the following areas: Anthropology, Black American Studies, Criminal Justice, Economics, Education, Geography, History, Philosophy, Political Science, Psychology, Sociology, or Women's Studies.	9
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***Physical Sciences***

Minimum of eight credits selected from one of the following areas: Chemistry, Physics, Geology or Physical Science.	8
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## MAJOR REQUIREMENTS

### External to the College

BISC 207	Introductory Biology I	4
BISC 371	Introduction to Microbiology	4
CHEM 101 or 103	General Chemistry	4
CHEM 102 or 104	General Chemistry	4
CHEM 213 or 321/322	Organic Chemistry	4 or 8
One of the following		
CHEM 214 and 216	Elementary Biochemistry and Lab	3 + 1
CHEM 527	Biochemistry	3
CHEM 641 and 642	Biochemistry	<u>8</u>
		23 -28

### One of the following Communication courses

AGRI 212	Oral Communication in Ag Sciences	3
Comm 312	Oral Communication in Business	3
Comm 350	Public Speaking	3
Engl 312	Written Communications in Business	3
Engl 410	Technical Writing	3

### Within the Department/College

PLSC 101	Botany I	4
PLSC 201	Botany II	4
PLSC 204	Intro to Soil Sciences	4
PLSC 300	Principles of Plant and Animal Genetics	3
PLSC 303	Introduction to Plant Pathology	4
PLSC 306	Introduction to Plant Molecular Biology	4
PLSC 410	Introductory Plant Physiology	4
PLSC 435	Plant Developmental Biology	3
FREC 408	Research Methods	3
ENTO 465	Seminar (Consider PLSC cross/listing)	<u>1</u>
		34

Other Life Science Courses - Minimum of four courses and 12 credits with at least six credits at the 400 level or above.

12

Suggested courses for different subject matter interests are:

### General Plant Biology

BISC 302 or 321	General Ecology/Environmental Biology	3
PLSC 366 or higher	Independent Study	3
PLSC 402	Plant Taxonomy	3
PISC 467	Weed Biology and Control	4
PISC 607	Plant and Soil Water Relations	3
PLSC 609	Plant Microtechnique	4
PLSC 615	Vascular Plant Anatomy	3
Any life science course (ANSC, BISC, ENTO, PLSC) at 400 level or above		6

### Agronomy

PLSC 151	Introduction to Crop Science	3
PLSC 305	Environmental Soil Management	4
PLSC 367	Environmental Soil Microbiology	4
PLSC 401	Agronomic Crop Science	3
PLSC 411	Diagnostic Plant Pathology	3
PLSC 470	Weed Biology and Control	4
PLSC 602	Physiological Plant Productivity	3
PLSC 605	Plant Breeding	3
ENTO 205	Elements of Entomology	3
ENTO 305	Entomology Laboratory	2

### Horticulture

PLSC 133	Ornamental Horticulture	3
PLSC 211	Herbaceous Landscape Plants	3
PLSC 212	Woody Landscape Plants	4
PLSC 213	Turf Establishment and Maintenance	4
PLSC 411	Diagnostic Plant Pathology	3
PLSC 417	Greenhouse Management	4
PLSC 422	Plant Propagation	3
ENTO 205	Elements of Entomology	3
ENTO 305	Entomology Laboratory	2

### Plant Biotechnology

PLSC 270	Biotech: Science and Socioeconomic Issues	3
PLSC 310	Plant Genetics Laboratory	1
PLSC 414	Plant Cell and Tissue Culture	4
PLSC 420	Plant Physiology Laboratory	2
PLSC 605	Plant Breeding	3
ANSC 570	Principles of Molecular Genetics	3
BISC 301	Molecular Biology of the Cell	4
BISC 303	Genetics and Evolutionary Biology	4
BISC 604	Recombinant DNA Laboratory	4
BISC 653	Recent Advances in Molecular Biology	2
BISC 654	Biochemical Genetics	3

### Plant Pathology

PLSC 411	Diagnostic Plant Pathology	3
PLSC 413	Principles of Plant Disease Control	3
PLSC 429	Introduction Mycology	4
PLSC 440	Integrated Pest and Disease Management	3
PLSC 616	Plant Viorology	4
ENTO 205	Elements of Entomology	3
ENTO 305	Entomology Laboratory	2
ENTO 411	Economic Entomology	3

**ELECTIVES** (14-23 credits)

May include Military Science, Music or Physical education. (Only two credits of activity-type Physical Education and/or two credits of performing Music organization credit may be counted toward the degree.)

Suggest courses include:

PHYS 20I or higher	Introductory Physics (Recommended for students interested in graduate school)	4
CHEM 220/221	Quantitative Analysis	4

**CREDITS TO TOTAL MINIMUM OF 124**

**DEGREE: BACHELOR OF SCIENCE IN AGRICULTURE**  
**MAJOR: LANDSCAPE HORTICULTURE**

**CURRICULUM**

**CREDITS**

**UNIVERSITY REQUIREMENTS**

ENGL 110 Critical Reading and Writing	3
Three credits in an approved course or courses stressing multicultural, ethnic, and or gender-related content	3

**COLLEGE REQUIREMENTS**

***Mathematics and Computer Science***

Mathematics course	3
Computer Science course FREC 135 or equivalent	3

***Agricultural and Biological Sciences***

Minimum of one course in three of the following areas: Food and Resource Economics, Food Science, Agricultural Engineering, Animal Science, Entomology and Applied Ecology or Biology.	9-12
--	------

***Literature and Arts***

Six credits selected from the general areas of English, Art, Art History, Communication, Music Theater, or Foreign Language.	6
---	---

***Social Sciences and Humanities***

Minimum of one course in three of the following areas: Anthropology, Black American Studies, Criminal Justice, Economics, Education, Geography, History, Philosophy, Political Science, Psychology, Sociology, or Women's Studies.	9
--	---

***Physical Sciences***

Minimum of eight credits selected from one of the following areas: Chemistry, Physics, Geology or Physical Science.	8
--	---

## MAJOR REQUIREMENTS

### External to the College

CHEM 101 or 103	General Chemistry	4
CHEM 102 or 104	General Chemistry	4
CHEM 213	Organic Chemistry	4

One communication course chosen from the following

AGRI 212	Oral Communication in Agriculture Sciences	3
COMM 312	Oral Communication in Business	3
COMM 350	Public Speaking	3
ENGL 312	Written Communication in Business	3
ENGL 410	Technical Writing	3

One business related course chosen from the following

ACCT 207	Accounting	3
ACCT 352	Law and Social Issues in Business	3
ECON 151	Introduction to Microeconomics	3
ECON 152	Introduction to Macroeconomics	3
FREC 201	Records and Accounts	3
FREC 302	Management of Agribusiness Firms	3
FREC 312	Food Retailing and Product Management	3
FREC 404	Food and Fiber Marketing	3
FREC 406	Agricultural and Natural Resource Policy	3
FREC 430	Establishing and Managing a Food and Agribusiness Enterprise	3
PHIL 200	Business Ethics	3
PLSC 403	Nursery and Garden Center Management	3
POSC 220	Introduction to Public Policy	3
POSC 301	State and Local Government	3
TDC 200	Consumer Economics	3
TDC 242	Consumer Movement in Perspective	3

### Within the Department/College

EGTE 103	Land and Water Management	3
ENTO 205	Elements of Entomology	3
FREC 150	Economics of Ag and Natural Resources	3
PLSC 101	Botany I	4
PLSC 133	Ornamental Horticulture	3
PLSC 201	Botany II	4

PLSC 204	Introductory Soil Science	4
PLSC 211	Herbaceous Landscape Plants	3
PLSC 212	Woody Landscape Plants	4
PLSC 213	Turf Establishment and Maintenance	4
PLSC 300	Principles of Animal and Plant Genetics	3
PLSC 303	Introductory Plant Pathology	4
PLSC 305	Environmental Soil Management	4
PLSC 332	Basic Landscape Design	4
PLSC 364	Ornamental Horticulture Internship	3
	or	
PLSC 366	Independent Study	3
PLSC 410	Plant Physiology	3
PLSC 455	Issues in Horticulture	3
PLSC 470	Weed Biology and Control	<u>3</u>
		62

### Electives

May include Military Science, Music or Physical Education. (Only two credits of activity-type Physical Education and/or two credits of performing Music organization credit may be counted toward the degree.)

**CREDITS TO TOTAL MINIMUM OF 124**



Honors B.A. in Communication

We are proposing an Honors B.A. in Communication that can be attained in either of our two undergraduate concentrations, interpersonal communication and mass communication. We will have available each year honors sections of at least the following six classes:

- COMM 245 - Mass Communication and Culture
- COMM 330 - Communication and Interpersonal Behavior
- COMM 417 - Communication and the Management of Conflict
- COMM 424 - Media Message Analysis
- COMM 450 - Mass Communication Effects
- COMM 485 - Analysis of Face-to-Face Communication

All of these courses are requirements for either or both concentrations. An Honors student concentrating in mass communication would take at least the following four courses, all required for that concentration:

- COMM 245 - Mass Communication and Culture
- COMM 330 - Communication and Interpersonal Behavior
- COMM 424 - Media Message Analysis
- COMM 450 - Mass Communication Effects

An Honors student concentrating in interpersonal communication would take at least the following four courses, all required for that concentration:

- COMM 245 - Mass Communication and Culture
- COMM 330 - Communication and Interpersonal Behavior
- COMM 417 - Communication and the Management of Conflict
- COMM 485 - Analysis of Face-to-Face Communication

Honors sections of other Communication classes might also be available on an intermittent basis.

**Honors B.A. in Communication  
(Applies to all Concentrations)**

**The recipient must complete:**

- 1. All requirements for the B.A. in Communication**
- 2. All the University's generic requirements for the Honors Degree**

**Nine of the Honors credits in the major must be at the 300 level or above, and must include at least one COMM 400 level course.**

**UNIVERSITY OF DELAWARE**  
**Mathematical Sciences Department**  
**HONORS – BA MATHEMATICS**

The recipient must complete

1. All requirements for the B.A. in Mathematics
2. All the University's generic requirements for the Honors degree

All Mathematics and Statistics courses listed below the 600-level in which the student takes an honors component may be counted toward the minimum 12 hours of Honors credits in the major required by the generic requirements for the Honors degree. All Mathematics and Statistics courses listed at the 600-level or higher may be counted toward the same 12 Honors credit requirement.

**UNIVERSITY OF DELAWARE**  
**Mathematical Sciences Department**  
**HONORS - BS MATHEMATICS**

The recipient must complete

1. All requirements for the B.S. in Mathematics
2. All the University's generic requirements for the Honors degree

All Mathematics and Statistics courses listed below the 600-level in which the student takes an honors component may be counted toward the minimum 12 hours of Honors credits in the major required by the generic requirements for the Honors degree. All Mathematics and Statistics courses listed at the 600-level or higher may be counted toward the same 12 Honors credit requirement.

**UNIVERSITY OF DELAWARE**  
**Mathematical Sciences Department**  
**HONORS – BA MATHEMATICS EDUCATION**

The recipient must complete

1. All requirements for the B.A. in Mathematics Education
2. All the University's generic requirements for the Honors degree

All Mathematics and Statistics courses listed below the 600-level in which the student takes an honors component may be counted toward the minimum 12 hours of Honors credits in the major required by the generic requirements for the Honors degree. All Mathematics and Statistics courses listed at the 600-level or higher may be counted toward the same 12 Honors credit requirement.



WOMEN'S STUDIES  
INTERDISCIPLINARY PROGRAM

333 Smith Hall  
University of Delaware  
Newark, Delaware 19716-2506  
Ph: 302/831-8474

October 25, 1996

Memorandum To: Dean Mary P. Richards  
Senate Committee on Undergraduate Studies

Re: Proposed Honor's Degree in Women's Studies

From: Dr. Beth Haslett, Director, Women's Studies Program

A handwritten signature in dark ink, appearing to read "B. Haslett".

The Women's Studies Program is requesting approval for an honor's degree in its curriculum. The program has had a major since 1992, and attracts high caliber academic students. Of our twelve graduating majors last year, half of them qualified for graduation with honors. In view of this, as well as the gifted teaching faculty in the WOMS program, we would like to offer an honor's degree to supplement the options available to students.

Since 1990, Women's Studies has offered 38 honors courses, with seven different honors courses being offered at the 300 level or above. Thus the program, without any expansion, can already offer sufficient courses to satisfy the requirements for an honor's degree.

We believe this is an important addition to offerings already available to students. It would allow Women's Studies to recognize the talent of students already enrolled and attract even more highly qualified students.

Attached is a list of honor's courses taught in WOMS since 1990, a brief statement clarifying that cross-listed courses would be considered as fulfilling the honor's degree requirements in WOMS (drafted by Dr. Robert Brown, director of the Honor's Program) and a letter of support from Dr. Brown.

Thank you for your consideration.

# WOMS HONORS COURSES

1990 - 1996

1990   Winter   None

<u>1990</u>	<u>Spring</u>	WOMS 201.080	Intro to Women's Studies	Turkel
		WOMS 267.080	Motherhood, Culture & Politics	Turkel
		WOMS 294.080	The Battered, the Put Down, and the Rejected	Trabant
		WOMS 296.080	Women in Western Culture	Kerrane
		WOMS 333.080	Psychology of Women	Geis
		WOMS 390.080	Colloquium: The Gender Question in Political Thought	Roof

1990   Summer   None

<u>1990</u>	<u>Fall</u>	WOMS 201.080	Intro to Women's Studies	Zingo
		WOMS 381.080	Women in Literature	Scott
		WOMS 390.080	Colloquium: Modern Women, Modern Voices: Literature By and About Women	Horowitz

\* \* \* \* \*

1991   Winter   None

<u>1991</u>	<u>Spring</u>	WOMS 293.080	Women's History Thru Film	Boylan
		WOMS 296.080	Women in Western Thought	Kerrane
		WOMS 392.080	Colloquium: Racism, Sexism, and Speciesism	Palmer

1991   Summer   None

<u>1991</u>	<u>Fall</u>	WOMS 392.080	Colloquium: Racism, Sexism, and Speciesism	Palmer
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\* \* \* \* \*

1992   Winter   None

<u>1992</u>	<u>Spring</u>	WOMS 293.080	Women's History Thru Film	Baggett
		WOMS 390.080	Colloquium: Culture and the Lives of Women	Budani

1992   Summer   None

<u>1992</u>	<u>Fall</u>	WOMS 201.080	Intro to Women's Studies	O'Toole
		WOMS 267.080	Racism, Sexism, & Speciesism	Palmer
		WOMS 297.080	Research in Lesbian, Gay, and Bisexual Studies	Amsler

\* \* \* \* \*

1993   Winter   None

<u>1993</u>	<u>Spring</u>	WOMS 293.080	Women's History Thru Film	Baggett
		WOMS 300.080	Women in American History	Baggett
		WOMS 333.080	Psychology of Women	Bauer
		WOMS 381.080	Women in Literature: Women on the Margins of Empire	Scott

1993   Summer   None

<u>1993</u>	<u>Fall</u>	WOMS 201.080	Intro to Women's Studies	Turkel
		WOMS 302.080	The World in Our Time: Radicalism, Dogma & the Woman	Alchon
		WOMS 333.080	Psychology of Women	Geis
		WOMS 350.080	Women & the Criminal Justice System	Robbins
		WOMS 390.080	Colloquium: International Women's Health Perspectives	Conway-Turner
		WOMS 390.081	Racism, Sexism, & Speciesism	Palmer

\* \* \* \* \*

1994   Winter   None

<u>1994</u>	<u>Spring</u>	WOMS 201.080	Intro to Women's Studies	Cherrin
		WOMS 291.080	Women's History Thru Film	Baggett

1994   Summer   None

<u>1994</u>	<u>Fall</u>	WOMS 201.080	Intro to Women's Studies	Turkel
		WOMS 267.080	Gay & Lesbian Film Series	White
		WOMS 392.080	Racism, Sexism, & Speciesism	Palmer

\* \* \* \* \*

1995   Winter   None

<u>1995</u>	<u>Spring</u>	WOMS 202.080	Intro to Internat'l Women's Studies	Cherrin
		WOMS 291.080	Women's History Thru Film	Walls
		WOMS 290.080	Colloquium: International Women's Health Perspectives	Conway-Turner

<u>1995</u>	<u>Fall</u>	WOMS 201.080	Hnrs. Intro to Women's Studies	Turkel
		WOMS 392.080	Colloquim: Racism; Sexism & Speciesism	Palmer

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Honors B.A. in Women's Studies

The recipient must complete:

1. All requirements for the B.A. in Women's Studies.
2. All the University's generic requirements for the Honors Degree.

The Honors credits required in the major must be in courses in Women's Studies or courses cross-listed with Women's Studies.

( R. Brown, 10/15/96 )

UNIVERSITY OF DELAWARE INTER-DEPARTMENTAL

# Memorandum



October 25, 1996

TO: College of Human Resources,  
Undergraduate Studies Committee

FROM: Dept. of Nutrition & Dietetics  
Undergraduate Studies Committee

RE: Coordinated Undergraduate Dietetics (CUD) Major Deletion

The CUD major is being deleted because this American Dietetic Association supervised practice experience is now being offered through the post-baccalaureate dietetic internship offered by the Dept. of Nutrition & Dietetics in collaboration with the Delaware Dept. of Public Health.