

**ARMSTRONG ATLANTIC  
STATE UNIVERSITY**

**MEMORANDUM**

**To:** University Curriculum Committee  
**From:** Phyllis Panhorst  
Catalog Editor and Committee Secretary  
**Date:** January 14, 2011  
**Re:** Agenda – January 19, 2011

---

The University Curriculum Committee will meet at 3:00 p.m. on Wednesday, January 19 in University Hall 282.

**A G E N D A**

**CALL TO ORDER**

Glenda Ogletree

**APPROVAL OF MINUTES** – December 1, 2010

**ITEMS**

- I. College of Education (no items)
- II. College of Health Professions
- III. College of Liberal Arts
  - A. Art, Music, & Theatre

**1. Delete the following courses:**

<del>ARTS 5760 U/G History of Photography</del>	<del>3-0-3</del>
<del>ARTS 5780 U/G Art of Africa and Diaspora</del>	<del>3-0-3</del>
<del>ARTS 5770 U/G Art and Identity</del>	<del>3-0-3</del>

Rationale: Courses no longer are being taught and are being deleted from the catalog.

**Effective Term: Fall 2011**

**2. Delete the following course:**

**THEA 5010 U/G Topics in Film** **3-0-3**

Rationale: Course is no longer being used in the Theatre curriculum. The FILM version is now used in the Theatre curriculum.

**Effective Term: Fall 2011**

**3. Modify the following course**

MUSC 2390 String ~~and Guitar~~ Methods 0-2-1  
 Open only to music majors. Principles of string ~~and guitar~~ instrument performance and pedagogy.

Rationale: The guitar requirement has been dropped from accreditation standards, and is no longer included in the course. The addition of “instrument” is consistent with the language in MUSC 2360 and 2380.

**Effective Term: Fall 2011**

**4. Modify Program of Study for the Bachelor of Arts in Music, Liberal Arts Option.**

**PROGRAM FOR THE DEGREE OF BACHELOR OF ARTS IN MUSIC**

Liberal Arts Option

C. Related Field Courses ..... 12 hours

Foreign Language 1002

Foreign Language 2001

Two courses selected from (at least 3 hours at 3000 level or above):

ARTS 2720 - Art History II

~~ARTS 5760U – History of Photography~~

~~ARTS 5770U – Art and Identity~~

~~ARTS 5750U – Contemporary Art & Criticism~~

**Any 3000 level or above Art History, Foreign Language or Theatre Courses**

Rationale: ARTS 5760U and ARTS 5770U are being eliminated. We are opening up student choices to any 3000 level or above art history, foreign language or theatre courses to give students more options that would enhance their education in the liberal arts option.

**Effective Term: Fall 2011**

**5. Modify Program of Study for the Bachelor of Arts in Music,  
 PROGRAM FOR THE DEGREE OF BACHELOR OF ARTS IN MUSIC**

Performance/Composition Options

MUSC 4160 - Instrumental Pedagogy and Repertoire

MUSC 4350 – Band Repertoire and Advanced Instrumental Conducting

MUSC 4400 (2 semesters) - Applied Music

MUSC 4450 - Full Recital  
 MUSC 4850 - Senior Project  
 One course appropriate to major instrument selected from:  
 MUSC 2360 - Brass Methods  
 MUSC 2370 - Woodwind Methods  
 MUSC 2380 - Percussion Methods  
 MUSC 2390 - String ~~and Guitar~~ Methods  
 Elective Ensembles - 8 hours  
 MUSC 2550, 3550, 2510, 3510, 2520, 3520, 2530, 3530, 2540, 3540, 4890 or other  
 approved ensembles.  
 7 hours of music electives.

Rationale: The guitar requirement has been dropped from accreditation standards, and is no longer included in the course. The addition of “instrument” is consistent with the language in MUSC 2360 and 2380.

**Effective Term: Fall 2011**

#### **6. Modify Program of Study for the Bachelor of Music Education.**

##### **PROGRAM FOR THE DEGREE OF BACHELOR OF MUSIC EDUCATION**

B. Major Field Courses ..... 32 hours  
 MUSC 1000 (7 semesters) - Recital Attendance  
 MUSC 2112 - Intermediate Theory II  
 MUSC 2130 (1 semester) - Advanced Keyboard Harmony (in addition to Area F requirement)  
 MUSC 2360 - Brass Methods  
 MUSC 2370 - Woodwind Methods  
 MUSC 2380 - Percussion Methods  
 MUSC 2390 - String ~~and Guitar~~ Methods  
 MUSC 2400 (1 semester) - Applied Music (in addition to Area F requirement)  
 MUSC 2540 - University Chorale (1 semester) or MUSC 2560 (1 semester) - Wind Ensemble  
 (in addition to Area F requirement)  
 MUSC 2810 - Conducting  
 MUSC 3120 - Form and Analysis  
 MUSC 3400 - (2 semesters) - Applied Music  
 MUSC 3450 - Half Recital  
 MUSC 3540 - University Chorale or MUSC 3560 (2 semesters) Wind Ensemble (in addition  
 to Area F requirement)  
 MUSC 3610 - Orchestration and Arranging  
 MUSC 3710 - Music History I  
 MUSC 3720 - Music History II  
 MUSC 5300U – Curriculum and Methods in General Music  
 MUSC 5430U - Technology in Music

Rationale: The guitar requirement has been dropped from accreditation standards, and is no longer included in the course. The addition of “instrument” is consistent with the language in MUSC 2360 and 2380.

**Effective Term: Fall 2011**

- B. Criminal Justice, Social, & Political Science (no items)
- C. Economics

**1. Create the following course:**

**ECON 3210 Marketing** **3-0-3**

**Prerequisite: ACCT 2101 and ECON 2106**

**Description: Marketing functions, the activities of producers, wholesalers, retailers and other intermediaries, the channels of distribution, integration of the marketing functions, price policies and government regulation.**

Rationale: This course will be required for the new business track in the economics major and is likely to serve students in other disciplines such as theater management who would find knowledge of marketing to be a valuable addition to their skills.

**Effective Term: Fall 2011**

**CURCAT:**

**Major Department: Economics**

**Can the course be repeated for additional credit: No**

**Maximum number of credit hours: 3**

**Grading Mode: Normal**

**Instructional Type: Lecture**

**Course Equivalent: None**

**2. Create the following course:**

**ECON 3220 Management** **3-0-3**

**Prerequisite: ECON 2106**

**Description: Management of organizations with an emphasis on the fundamentals of organizational behavior. Topics include organizational structure, leadership, communication, motivation, group dynamics, decision-making, planning and controlling. Business ethics and the roles and functions of managers are integrated throughout all these topics.**

Rationale: This course will be required for the new business economics track in the economics major and is likely to serve students in other disciplines such as theater management who would find knowledge of general management to be a valuable addition to their skills.

**Effective Term: Fall 2011**

**CURCAT:**

**Major Department: Economics**  
**Can the course be repeated for additional credit: No**  
**Maximum number of credit hours: 3**  
**Grading Mode: Normal**  
**Instructional Type: Lecture**  
**Course Equivalent: None**

**3. Create the following course:**

**ECON 3230 Finance** **3-0-3**

**Prerequisite: ACCT 2101 and ECON 2106**

**Description: Basic concepts and analytical tools of finance in both corporate finance and investments. Topics include risk and return, financial institutions, efficient markets, valuation theory, capital budgeting, portfolio theory, cost of capital.**

Rationale: This course will be required for the new business economics track in the economics major and is likely to serve students in other disciplines such as theater management who would find knowledge of finance to be a valuable addition to their skills.

**Effective Term: Fall 2011**

**CURCAT:**

**Major Department: Economics**  
**Can the course be repeated for additional credit: No**  
**Maximum number of credit hours: 3**  
**Grading Mode: Normal**  
**Instructional Type: Lecture**  
**Course Equivalent: None**

**4. Modify the following courses:**

- a. **ECON 4520, -30, -40 INTERNSHIP 3-0-3**

Prerequisite: permission of instructor or department head

Description: Open to juniors or above. Applied economic setting using nonprofit agencies such as the Chamber of Commerce, as well as financial institutions and international businesses. Supervision by departmental instructors and agency officials. Students may use only one internship as part of their ~~eight~~ upper division economics classes. Open to transient students only with permission of department head.

- b. **ECON 5111U ECONOMICS OF ENTREPRENEURSHIP I 3-0-3**

Prerequisite: permission of instructor

A project based class focusing on the application of economic principles to real-world business formation and management. This course provides instruction in

both the legal and logistical requirements of starting a business and serves as a forum for development of business ideas and practices. ~~(Economics majors may only use this course under the Related Field Courses).~~

c. ECON 5112U ECONOMICS OF ENTREPRENEURSHIP II 3-0-3

Prerequisite: ECON 5111

Continuation of Economics and Entrepreneurship I, this course will cover advanced business challenges including the financial requirements of starting businesses. Students will work in groups to develop a viable business plan that will be presented to local business owners for review. ~~(Economics majors may only use this course under the Related Field Courses).~~

Rationale: These changes are to accommodate the business economics track. The reference is no longer to a set of eight upper division economics courses. The relevant number of courses varies by track, and need not be specified. The programs of study now specify the entrepreneurship courses are appropriate for one of the tracks.

**Effective Term: Fall 2010**

**5. Modify the following programs of study:**

a. Finance Certificate

ECON 2105 - Principles of Macroeconomics ..... 3 hrs

**ECON 3230 – Finance .....3 hrs**

ECON 5300U - Money and Banking ..... 3 hrs

ECON 4100 - Financial Economics: Portfolio Analysis ..... 3 hrs

ECON 4150 - Money and Capital Markets ..... 3 hrs

ECON 5310U - International Finance ..... 3 hrs

**~~One additional course at the 3000 level or above as approved by the Head of the Economics Department.~~ ..... 3 hrs**

b. Minors

**Economics ..... 15 hours**

ECON 2105 or 2106

Twelve credit hours **of upper division economics courses, 3000 and above, except for ECON 5150U. selected from: ~~ECON 3050, 3060, 3100 3450, 3470, 3500, 3600, 3700, 3800, 4100, 4150, 4400, 4410, 4451, 4460, 4500, 4550, 5200U, 5300U, 5310U, 5400U, 5630U.~~**

Rationale: The new courses are appropriate for the minor and certificate, and alleviate the problem of finding a suitable fifth course for the certificate.

**Effective Term: Fall 2011**

## 6. Modify the following program of study:

### PROGRAM FOR THE DEGREE OF BACHELOR OF ARTS IN ECONOMICS

#### A. General Requirements

Core Areas A, B, C, D, and E ..... 42 hours  
 Area F ..... 18 hours

ECON 2105 - Principles of Macroeconomics

ECON 2106 - Principles of Microeconomics

MATH 2200 - Elementary Statistics

MATH 1950 - Applied Math or MATH 1161 - Calculus I

Six credit hours from one of the following areas:

Accounting (**required for business economics track**)

ACCT 2101 - Principles of Financial Accounting

ACCT 2102 - Principles of Managerial Accounting

Foreign language sequence (1002 and 2001) (required for international track)

Mathematics

MATH 2072 - Calculus II

MATH 2083 - Calculus III

Information Technology

CSCI 1150 – Fundamentals of the Internet and World Wide Web

ITEC 1310 – Programming in Visual Basic

**Physical Education** ..... **3 hours**

#### Track I: General Economics

B. Major Field Courses ..... 33 hours

ECON 3050 - Intermediate Macroeconomics

ECON 3060 - Intermediate Microeconomics

ECON 3700 – Econometrics

ECON 4900 - Economic Methods and Senior Thesis

Twenty one credit hours drawn from at least three of the following categories:

Global

ECON 3100 - Multinational Economic Enterprises

ECON 4400 - Seminar in Third World Economic Development

ECON 4450 – Comparative Economics

ECON 5200U - International Trade

ECON 5310U - International Finance

Quantitative

ECON 3600 - Mathematical Economics

ECON 3800 - Quantitative Consumer Research

Applied

ECON 3470 - Economics of Health

ECON 3500 - Managerial Economics

ECON 4451 - Industrial Organization

ECON 4460 - Economic Analysis of the Law

ECON 5400U - Economics of Labor

Financial

**ECON 3230 – Finance**

ECON 4100 - Financial Economics: Portfolio Analysis

ECON 4150 - Money and Capital Markets

ECON 5300U - Money and Banking

## Public Policy and Economic History

ECON 3450 - Environmental Economics

ECON 4410 - Regional Economics

ECON 4500 - Public Finance

ECON 4550 - Public Choice

ECON 5630U - Economic History of the US

## Internships and Specialized Courses

ECON 3950 - Research in Economics

ECON 3960 - Research in International Economics

ECON 4520, -30, -40 - Internship (with permission of department head)(maximum of one internship may count toward degree)

**ECON 5010, -20, -30 Special Topics in Economics**

C. Related Field Courses ..... 9 hours

ITEC 1050 - Introduction to Computer Concepts or CSCI 1060 - Computer Concepts and Applications

Six credit hours of upper division courses from the following fields: anthropology, **communication**, economics, **English (3720, 5710, 5740, 5750 only)**, geography, information technology, mathematics, philosophy, political science, psychology, or sociology.

D. Electives ..... 18 hours

Total Semester Hours 123 hours

E. Regents' Test, university exit exam, and department exit exam

## Track II: International Economics

The international track requires a language sequence in Area F and at least three credits earned toward the degree in an international study program. Students participating in the international track are expected to choose project, paper, and research topics related to international economics whenever possible.

B. Major Field Courses ..... 33 hours

ECON 3050 - Intermediate Macroeconomics

ECON 3060 - Intermediate Microeconomics

ECON 3700 – Econometrics

ECON 4900 - Economic Methods and Senior Thesis

ECON 5200U - International Trade

ECON 5310U - International Finance

Fifteen credit hours drawn from among the following courses:

ECON 3100 - Multinational Economics Enterprises

**ECON 3210 – Marketing****ECON 3220 – Management****ECON 3230 – Finance**

ECON 3450 - Environmental Economics

ECON 3470 – Economics of Health

ECON 3500 - Managerial Economics



ECON 3960 – Research in International Economics  
 ECON 4100 - Financial Economics: Portfolio Analysis  
 ECON 4150 - Money and Capital Markets  
 ECON 4400 - Seminar in Third World Economic Development  
 ECON 4450 - Comparative Economics  
 ECON 4500 - Public Finance  
 ECON 5300U - Money and Banking

C. Related Field Courses ..... 9 hours

ITEC 1050 - Introduction to Computer Concepts or CSCI 1060 - Computer Concepts and Applications

Six credit hours of upper division courses outside the economics discipline approved for the International Studies minor.

D. Electives ..... 18 hours

Total Semester Hours 123 hours

E. Regents' Test, university exit exam, and department exit exam

### **Track III: Business Economics**

**B. Major Field Courses ..... 33 hours**

**ECON 3050 - Intermediate Macroeconomics or ECON 3060 Intermediate Microeconomics**

**ECON 5300U – Money and Banking**

**ECON 3500 – Managerial Economics**

**ECON 5111 – Economics of Entrepreneurship I**

**ECON 3210 – Marketing**

**ECON 3220 – Management**

**ECON 3230 – Finance**

**Twelve credit hours drawn from among the following courses:**

**ECON 3050 - Intermediate Macroeconomics**

**ECON 3060 – Intermediate Microeconomics**

**ECON 3700 – Econometrics**

**ECON 3800 - Quantitative Consumer Research**

**ECON 3100 - Multinational Economic Enterprises**

**ECON 4450 – Comparative Economics**

**ECON 5112 - Economics of Entrepreneurship II**

**ECON 5200U - International Trade**

**ECON 5310U - International Finance**

**ECON 3470 - Economics of Health**

**ECON 4451 - Industrial Organization**

**ECON 5400U - Economics of Labor**

**ECON 4100 - Financial Economics: Portfolio Analysis**

**ECON 4150 - Money and Capital Markets**

**ECON 3450 - Environmental Economics**

**ECON 4410 - Regional Economics**

**ECON 4500 - Public Finance**

**ECON 4520, -30, -40 - Internship (maximum of one internship may count toward degree)**

**C. Related Field Courses . 15 hours**  
**ITEC 1050 - Introduction to Computer Concepts or CSCI 1150 Fundamental of the Internet and World Wide Web**  
**COMM 2280 Speech Communication**

**Nine credit hours of upper division courses from among the following fields/courses:**

**COMM 3060 Public Relations**  
**COMM 5050U Interpersonal Communication in the Workplace**  
**ENGL 3720 Business and Technical Communication**  
**ENGL 5710 Writing for the Non-Profit Sector**  
**ENGL 5740 Technical Editing**  
**ENGL 5750 Publication Design**  
**HSCA 3600 Financial Management for Health-Related Organizations**  
**HSCA 4201 Health Care Marketing**  
**HSCA 4600 Principles of Human Resource Management**  
**HSCA 4620 Principles of Management in Health Service Organizations**  
**ITEC 3500 Database Administration**  
**ITEC 3710 E-Commerce**  
**POLS 4190 Environmental Laws and Regulations**  
**PSYC 3000 Human Resource Development Skills**  
**PSYC 5150U Conflict Resolution**  
**PSYC 5200U Industrial and Organizational Psychology**  
**PSYC 5300U Leadership and Group Dynamics**

**D. Electives ..... 12 hours**

**Total Semester Hours 123 hours**

**E. Regents' Test, university exit exam, and department exit exam**

Rationale: The number of Pre-Business students is growing. These students intend to finish degrees at other institutions, primarily because we have no business degree. Many of these students came to AASU because they would rather be here, but we are losing them. The applied nature of this program is very likely to keep many of these students at AASU.

**Effective Term: Fall 2011**

D. Gender and Women's Studies

**1. Modify the following program of study:**

**PROGRAM FOR THE DEGREE OF BACHELOR OF ARTS IN GENDER AND WOMEN'S STUDIES**

Additional Major Field Courses

List A: Arts and Humanities (3000 or above) ..... 6 hours

Choose from:

~~ARTS 5760U – History of Photography~~

~~ARTS 5770U – Art and Identity~~

ENGL 5340U - Literature by Women

ENGL 5355U – Black Women Writers

FILM 5025U – Popular Culture Theory and Criticism  
 GWST 4700 Gender and Women’s Studies Internship  
 GWST 5000U - Topics in Gender and Women’s Studies  
 GWST 5500U - Topics in Women’s Leadership  
 HIST 5660U - Topics in the History of Women and Gender in America  
 HIST 5670U - Topics in the History of Women and Gender in Europe

Rationale: Courses no longer are being taught and are being deleted from catalog.

**Effective Term: Fall 2011**

## 2. Modify the Minor in Gender and Women’s Studies

Gender and Women’s Studies Minor

Gender and Women’s Studies ..... 15 hours

Fifteen semester hours from courses approved for the Gender and Women’s Studies Minor in addition to those taken to satisfy areas A-E of the core. The courses taken from the approved list must include:

1. At least nine semester hours from courses numbered 3000 or higher
2. Either GWST 1101 or 2101 (but may include both)

Courses approved for the Gender and Women’s Studies Minor and Undergraduate Certificate:

~~ARTS 5760U – History of Photography~~

~~ARTS 5770U – Art and Identity~~

ENGL 5340U - Literature by Women

ENGL 5355U – Black Women Writers

FILM 5025U – Popular Culture Theory and Criticism

FILM 5040U - Women and Film

GWST 1101 - Introduction to Gender and Women’s Studies

GWST 2101 - Ethics, Values, and Gender

GWST 2200 - Gender in Global Contexts

GWST 5000U - Topics in Gender and Women’s Studies

GWST 5500U - Topics in Women’s Leadership

GWST/SOCI 5600U - Sociology of Gender

GWST 5700U - Feminist Theory

HIST 3740 - History of American Women

HIST 5660U - Topics in the History of Women and Gender in America

HIST 5670U - Topics in the History of Women and Gender in Europe

NURS 3355 - Women’s Health

PSYC 3100 - Human Sexuality

PUBH 5570U - Women and Minority Health Issues

PUBH 5575U - Health and Sexuality Education

SOCI 3150 - Sociology of the Family

SOCI 3300 - Social Stratification

SOCI 3800 - Sociology of Sexuality

Rationale: Courses no longer are being taught and are being deleted from catalog.

**Effective Term: Fall 2011**

## **E. History**

### **1. Create the following course:**

**HIST 5790U/G ARCHIVAL STUDIES 3-0-3**

**Introduction to the archivist as a professional and to the role of archives in society. Survey of the documentary materials and of the principles and practices involved in their acquisition, cataloging, care, and retrieval in public and private facilities also included.**

Rationale:

Under the current guidelines, undergraduates may no longer take 6000-level courses, therefore HIST 6790 is being deleted. This course will replace it. Students taking it at the graduate level will be required to additional work including additional papers and classroom presentations.

**Effective Term: Fall 2011**

**CURCAT:**

**Major Department: History**

**Can course be repeated for additional credit? No**

**Maximum Number of Credit Hours: 3**

**Grading Mode: Normal**

**Instruction Type: Normal**

**Course Equivalent: HIST 6790**

### **2. Create the following course:**

**HIST 3920 Modern American Popular Culture 3-0-3**

**Prerequisites: HIST 1100 or POLS 1100 or HIST 2112**

**Description: Examines American popular culture since the late nineteenth century, considering a variety of media and forms of cultural expression, including vaudeville, cinema, television, and music (including jazz, rock 'n' roll, and hip-hop), as well as advertising and consumerism.**

Rationale: This course will complement our existing American courses by exposing students to cultural history, with an emphasis on the intersection of political developments and the representation of "race," class, and gender in the media. Students will benefit from working with primary sources.

**Effective Term: Fall 2011**

**CURCAT:**

**Major Department:** History  
**Can course be repeated for additional credit?** No  
**Maximum Number of Credit Hours:** 3  
**Grading Mode:** normal  
**Instruction Type:** lecture  
**Course Equivalent:** none

**3. Delete the following courses:**

~~**HIST 5730U/G FIELDWORK IN HISTORICAL ARCHAEOLOGY V-V (1-6)**~~  
~~**HIST 5740U/G PRACTICUM IN ARCHAEOLOGY V-V (1-6)**~~

Rationale: The History Department no longer has faculty to support these classes.

**Effective Term: Fall 2011**

**4. Delete the following courses:**

~~**HIST 3820 Introduction to Archaeology 3-0-3**~~  
~~**HIST 3560 Modern Europe 3-0-3**~~

Rationale: We no longer offer HIST 3820; HIST 3560 was replaced by HIST5480U/G

**Effective Term: Fall 2011**

- F. Languages, Literature, & Philosophy (no items)
- G. Liberal Studies (no items)
- H. Honors Program (no items)

**IV. College of Science and Technology**

**A. Biology**

**1. Create the following course:**

**BIOL 3800 Mycology** **3-3-4**

**Prerequisite:** BIOL 1108 (minimum grade of C) or BIOL 1108H (minimum grade of C)

**Description:** The course will cover evolution, taxonomy, reproduction, ecology, and modern uses of fungi and fungal-like organisms. Laboratories may include field trips for local collections.

Rationale: Fungi are classified in their own kingdom and make up a diverse group of organisms that have great impact on ecosystems, human, animal and plant health, and the food, medical and biotechnology industries. The current Biology curriculum lacks a course devoted to the study of fungi, Mycology. The course BIOL 1108 Principles of Biology II only briefly introduces fungi. An entire course is necessary to expose students to the necessary details and impact of these organisms. The proposed Mycology course will fill the current hole in the Biology curriculum ensuring that students receive a well-rounded, biological degree. We propose that this course be

taught every other Fall semester, beginning Fall 2011, by a faculty member who has expertise in Mycology. We also propose that this course be added to courses offered under Track I: General Biology and Track III: Cell and Molecular Biology within the Biology major.

**Effective Term: Fall 2011**

**CURCAT:**

**Major Department: Biology**

**Can Course be repeated for additional credit? No**

**Maximum Number of Credit Hours: 4**

**Grading Mode: Normal**

**Instruction Type: Lecture and Laboratory**

**Course Equivalent: none**

**2. Modify the following program of study:**

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY**

Track I: General Biology

B. Major Field Courses ..... 35-40 hours

Required Courses (16 hours)

BIOL 2020- Survey of the Kingdoms Plantae and Fungi

BIOL 3000- Cell Biology

BIOL 3700- Genetics

BIOL 4700- General Ecology

BIOL 4801- Senior Seminar in General Biology

Elective Courses (19-24 hours)

Choose one of the following:

BIOL 4150- Plant Physiology

BIOL 4200- Mammalian Physiology

BIOL 4210- Comparative Physiology

Choose one of the following:

BIOL 3470- Environmental Restoration

BIOL 3600- Salt Marsh Ecology

BIOL 4320- Environmental Microbiology

BIOL 4460- Phytoplankton Ecology

BIOL 4750- Tropical Field Biology

Choose two of the following:

BIOL 3520- Medical Microbiology

BIOL 4000- Cancer Biology

BIOL 4010- Evolution

BIOL 4100- Cell and Molecular Biology Laboratory

BIOL 4220- Endocrinology

BIOL 4310- Applied Microbiology

BIOL 4500- Bioinformatics and Biotechnology

BIOL 4400- Virology  
 BIOL 4500- Bioinformatics and Biotechnology  
 BIOL 4510- Molecular Development  
 BIOL 4650- Immunology

Choose two of the following:

BIOL 3020- Vertebrate Zoology  
 BIOL 3150- Horticulture  
 BIOL 3200- Taxonomy and Identification of Flowering Plants  
 BIOL 3300- Entomology  
 BIOL 3310- Invertebrate Zoology  
 BIOL 3750- Natural History of Vertebrate Animals  
 BIOL 3770- Developmental and Comparative Anatomy of the Vertebrates  
**BIOL 3800- Mycology**  
 BIOL 3920- Parasitology  
 BIOL 4550- Biology of Marine Organisms  
 BIOL 4600- Ichthyology

### **Track III: Cell and Molecular Biology**

**B. Major Field Courses** ..... **26-29 hours**

Required Courses (13 hours)

BIOL 3000- Cell Biology  
 BIOL 3700- Genetics  
 BIOL 4100- Cell and Molecular Biology Laboratory  
 BIOL 4500- Bioinformatics and Biotechnology  
 BIOL 4803- Senior Seminar in Cell and Molecular Biology

Elective Courses (13-16 hours)

Choose one of the following:

BIOL 4150- Plant Physiology  
 BIOL 4200- Mammalian Physiology  
 BIOL 4210- Comparative Physiology

Choose one of the following:

BIOL 3020- Vertebrate Zoology  
 BIOL 3300- Entomology  
 BIOL 3310- Invertebrate Zoology  
 BIOL 3750- Natural History of Vertebrate Animals  
**BIOL 3800- Mycology**

BIOL 3920- Parasitology

Choose two of the following:

BIOL 3520- Medical Microbiology  
 BIOL 4000- Cancer Biology  
 BIOL 4010- Evolution  
 BIOL 4220- Endocrinology  
 BIOL 4310- Applied Microbiology  
 BIOL 4320- Environmental Microbiology  
 BIOL 4400- Virology  
 BIOL 4510- Molecular Development

BIOL 4650- Immunology

## B. Chemistry & Physics

### 1. Request Catalog corrections:

(1) Add the prerequisite of PHYS 2211K (minimum grade of C) **and MATH 2072 Calculus II** back to the Catalog description of PHYS 2212K PRINCIPLES OF PHYSICS I. (The part including Calculus II was supposed to be kept as a prerequisite when PHYS 2212/2212L was converted to PHYS 2212K. See UCC Minutes of Jan. 20, 2010. This was somehow omitted in the publishing of the 2010-2011 AASU Catalog.)

(2) Correct typos in the prerequisite for PHYS 3312 ELECTROMAGNETISM. It should be Prerequisite: PHYS ~~22K12~~ **2212K** (minimum grade ~~oe~~ of C) and MATH 2083. Correcting these should only require a communication to the catalog editor.

### 2. Modify the following CURCAT:

**PHYS 4950 SPECIAL TOPICS IN PHYSICS**

**V-V-(3-9)**

CURCAT:

Major Department: Chemistry and Physics

Can course be repeated for additional credit: ~~No~~ **Yes**

Maximum Number of Credit Hours: 9

Grading Mode: Normal

Instruction Type: Lecture

Rationale: This course needs to be repeatable as needed for additional credit for a different topic to accommodate the study needs of students in different areas of physics. This need has arisen and required department head/registrar override to facilitate. This would avoid replacing the initial credit on the student's record when additional credit is taken.

**Effective Term: Fall 2011**

### 3. Modify the following program of study:

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN APPLIED PHYSICS**

**C. Related Field Courses ..... 23 hours**

CHEM 1211 - Principles of Chemistry I (and lab)

CHEM 1212 - Principles of Chemistry II (and lab)

CSCI 1301- Introduction to Programming Principles or ENGR 1371 – Computing for Engineers (one hour applies to area F)

~~ENGL 3720 – Business and Technical Communication~~

MATH 2160 - Linear Algebra

MATH 3411 - Differential Equations

A three semester-hour upper-division math course (3000 or 4000 level, excluding

MATH 3411), approved by the physics faculty.

**Three hours of related field electives approved by the physics faculty**



Rationale: ENGL 3720 Business and Technical Communication is no longer appropriate as a required related field course for Applied Physics majors. It has been previously removed as a related field course for chemistry and engineering majors. Applied Physics majors could still opt to take/count it as an upper division free elective course or as the three hours of related field free elective.

**4. Delete the following courses:**

~~PHYS 3801 OPTICS AND MODERN PHYSICS 2-0-2~~

~~PHYS 3801L OPTICS AND MODERN PHYSICS LAB 0-3-1~~

Rationale: See item 5, below.

**Effective Term: Fall 2011**

**5. Create the following courses:**

- a. **PHYS 3801K MODERN PHYSICS (2-3-3)**  
**Prerequisite: PHYS 2212K (minimum grade of C) or both MATH 1161 and PHYS 1112K (minimum grade of C)**  
**Description: Modern physics, relativity, atomic physics, and nuclear physics. Includes laboratory investigation.**

**CURCAT:**

**Major Department: Chemistry and Physics**

**Can course be repeated for additional credit: No**

**Maximum Number of Credit Hours: 3**

**Grading Mode: Normal**

**Instruction Type: Lecture-Lab**

**Course Equivalent: PHYS 3801 with PHYS 3801L**

- b. **PHYS 3700K OPTICS (2-3-3)**  
**Prerequisite: PHYS 2212K (minimum grade of C) or both MATH 1161 and PHYS 1112K (minimum grade of C)**  
**Description: Geometrical and physical optics. Includes laboratory investigation.**

**CURCAT:**

**Major Department: Chemistry and Physics**

**Can course be repeated for additional credit: No**

**Maximum Number of Credit Hours: 3**

**Grading Mode: Normal**

**Instruction Type: Lecture-Lab**

**Course Equivalent: PHYS 3801 with PHYS 3801L**

Rationale: Most physics programs have separate modern physics and optics courses. The proposed format combines the lab and the lecture using the “studio format” that is currently in place for PHYS 1111K, PHYS 1112K, PHYS 2211K, and PHYS 2212K. This format

maximizes the use of lab and lecture time. It is being utilized at many universities and has been shown to be a better environment to learn physics than the traditional separate lab/lecture formats.

**Effective Term: Fall 2011**

**5. Create the following course:**

**PHYS 1000 Introduction to Physics (1-0-1)**

**Corequisite: MATH 1161**

**Description: Introduction to and development of problem solving skills, exposure to current research topics in physics, and improvement of writing and presentation skills.**

Rationale: This course will benefit all students preparing for an applied physics major. The purpose of this course is to develop and reinforce problem solving skills that will be needed in later courses, engage students in current topics in physics, and strengthen a student's writing and presentation skills.

**CURCAT:**

**Major Department: Chemistry and Physics**

**Can course be repeated for additional credit: No**

**Maximum Number of Credit Hours: 1**

**Grading Mode: Normal**

**Instruction Type: Lecture**

**Course Equivalent: None**

**Effective Term: Fall 2011**

**6. Modify the following program of study:**

**A. General Requirements**

**Core Areas A, B, C,D and E**.....42 hours  
Applied physics majors are required to take MATH 1113 in core Area A and MATH 1161 in core area D

**Area F**.....18 hours  
PHYS 2211K, 2212K—Principles of Physics I,II (unless taken to satisfy core area D, in which case replace with 8 hours of lower division electives)

MATH 2072

MATH 2083

One hour excess for MATH 1161 from core area D

~~One hour excess for CSCI 1301 or ENGR 1371 from Related Field Courses~~

**1 hour excess from PHYS 1000 or from any science or math course approved by the physics faculty**

**B. Major Field Courses** .....30hours

PHYS 3100 – Electric Circuit Analysis

PHYS 3120 – Digital Electronics

PHYS 3210 – Intermediate Mechanics or PHYS 4170 –Advanced Mechanics

PHYS 3300 – Thermodynamics or PHYS 3400 Chemical Thermodynamics

~~PHYS 3801/3801L – Optics and Modern Physics and Lab~~

**PHYS 3801K – Modern Physics**

PHYS 3802 – Introduction to Quantum Mechanics

PHYS 4120 – Scientific Measurement with Digital Interfacing

Nine semester hours from:

PHYS 2900 – Introduction to Research in Physics

PHYS 3220 – Mechanics of Deformable Bodies

PHYS 3230 – Fluid Mechanics

PHYS 3312 - Electromagnetism

PHYS 3500 – Diffraction and Crystallography

**PHYS 3700K – Optics**

PHYS 4900 – Independent Study in Physics

PHYS 4950 – Special Topics in Physics

PHYS 4960 – Physics Internship

PHYS 4991 – Advanced Research in Physics

C. Related Field Courses .....23 hours

CHEM 1211 – Principles of Chemistry I (and lab)

CHEM 1212 – Principles of Chemistry II (and lab)

CSCI 1301 – Introduction to Programming Principles or ENGR 1371 – Computing for Engineers

~~(one hour applies to area F)~~

~~ENGL 3720 – Business and Technical Communication~~

MATH 2160 – Linear Algebra

MATH 3411 – Differential Equations

A three semester-hour upper-division math course (3000 or 4000 level, excluding MATH 3411), approved by the physics

**Three semester hours of related field electives approved by the physics faculty**

Rationale: ENGL 3720 Business and Technical Communication is no longer appropriate as a required related field course for Applied Physics majors. It has been previously removed as a related field course for chemistry and engineering majors. Applied Physics majors could still opt to take/count it as an upper division free elective course or as the three hours of related field free elective.

Deleting the parenthetical ~~(one hour applies to area F)~~ for CSCI 1301 – Introduction to Programming Principles or ENGR 1371 – Computing for Engineers would allow the PHYS 1000 Physics Seminar to go to Area F or to the Free Elective spot as an option for the student and would allow the total hours for the Related Field Courses to be the correct total of its listed courses.

Other changes update the program to reflect creations/deletions above.

**Effective Term: Fall 2011**

**C. Computer Science and Information Technology**

**1. Modify the following course:****CSCI 3201 Foundations of Digital Systems (3-0-3)**

Prerequisite: CSCI 1302

Hardware and software concepts of digital computing systems, with emphasis on fundamental ~~system software~~ digital system design and details of hardware operation. ~~Virtual machines, systems~~ Systems organization, digital logic, instruction and data formats, addressing modes, error detecting and correcting codes, and register transfer ~~notation~~.

Rationale: For compliance to standards of the Accreditation Board for Engineering and Technology (ABET).

**Effective Term: Fall 2011****2. Modify the following course****CSCI 5210 High performance Computing (3-0-3)**

Prerequisite: CSCI 3341

High performance software development for modern hardware. ~~Optimization techniques at the algorithm, architecture, and processor levels.~~ Introduction to multi-threaded and parallel computing concepts. ~~Introduction to practical vector, multi-threaded, and parallel computing concepts.~~ Optimization techniques for practical parallel algorithms. Programming required.

Rationale: For compliance to standards of the Accreditation Board for Engineering and Technology (ABET).

**Effective Term: Fall 2011****3. Modify the following course:****CSCI 5700 Computer Security (3-0-3)**Prerequisite: CSCI ~~5220~~ 2625 or and CSCI ~~5410~~ 3301

Rationale: For compliance to standards of the Accreditation Board for Engineering and Technology (ABET).

**Effective Term: Fall 2011****4. Modify the following course:****CSCI 5720 Advanced Database Systems (3-0-3)**

Prerequisite: CSCI 3720

Survey of database systems, query processing and optimization, transactions, transaction systems, currency control, recovery, security, ~~data mining, XML, web data, and Internet commerce~~ and e-commerce.

Rationale: For complying with standards of the Accreditation Board for Engineering and Technology (ABET).

**Effective Term: Fall 2011**

**5. Modify the following course:****CSCI 5820 Machine Learning (3-0-3)**

Prerequisite: CSCI 2490 and CSCI 2625

~~Pattern matching and classification with an emphasis on~~ Developing advanced applications using diverse machine learning methods and computational intelligence algorithms for pattern recognition, classification and decision-making, including decision trees, neural networks, Bayesian learning, clustering, and ~~hidden Markov models~~ kernel-based techniques. Multiple projects and a term project ~~includes a major project~~ encompassing some or all of these concepts.

Rationale: For compliance to standards of the Accreditation Board for Engineering and Technology (ABET).

**Effective Term: Fall 2011****6. Modify the following course****CSCI 5830 Computer Graphics (3-0-3)**Prerequisite: CSCI 2490 and **either** MATH 2160 **or** CSCI 3625

Rationale: For compliance to standards of the Accreditation Board for Engineering and Technology (ABET).

**Effective Term: Fall 2011**

- D. Engineering Studies (no items)
- E. Mathematics (no items)
- F. Psychology (no items)

**OTHER BUSINESS****A. UCC Bylaws****John Kraft****ADJOURNMENT**