



**ARMSTRONG ATLANTIC STATE UNIVERSITY
UNIVERSITY CURRICULUM COMMITTEE MEETING**

Minutes January 19, 2005

PRESENT: Joyce Bergin, Suzanne Carpenter, Beth Howells, Caroline Hopkinson, Stephen Jodis, Dale Kilhefner, Jennifer Lander, Randall Reese, Stephen Taylor, Patrick Thomas, Edward Thompson, Michael Price (Catalog Editor)

ABSENT: Ross Bowers (excused), Jacquie Fraser (excused)

GUESTS: Mark Finlay, Pamela Harwood

CALL TO ORDER. The meeting of the University Curriculum Committee was called to order at 3:05 p.m. on Wednesday, January 19, 2005 in University Hall 282. Dr. Edward Thompson presided.

APPROVAL OF MINUTES – The minutes of December 15, 2004 were approved as presented.

ITEMS

I. College of Arts and Sciences

A motion was made, seconded, and approved to Create a Post Baccalaureate Certificate in Pre-Medical Studies:

Certificate in Post Baccalaureate Pre-Medical Professions

Students will receive a post-baccalaureate certificate for pre-Medical studies when they complete this sequence of chemistry, physics, and biology courses:

CHEM 2102 - Organic Chemistry II

CHEM 3801 - Biochemistry I

PHYS 1112 - Introductory Physics II or PHYS 2212 - Principles of Physics II

BIOL 3000 - Cell Biology

BIOL 4200 - General Vertebrate Physiology

A 2.5 grade point average in these courses

If any of these five courses were taken in the undergraduate program or at another institution, an appropriate substitute must be approved by the pre-Medical Advisor and substituted for the requirement.

Rationale: There are significant numbers of college graduates who determine that they would like to change career directions and return to school to take courses that will allow them to apply to schools granting medical degrees, physician's assistant degrees, pharmacy degrees, dental degrees, and so on. We have advertised for some years that we specialize in such work and have been the institution of choice for many such students. However, we have had no formal mechanism for recognizing the students who complete this additional education at Armstrong. Creation of this certificate provides such a formal mechanism with the following two additional advantages:

- For students who are successfully admitted to a medical program (M.D., D.Pharm.,...) this certificate will build stronger ties to Armstrong, the school that made their admission possible.
- For students who are unsuccessful in their admission attempts, this certificate provides documentation that they have completed a significant addition to their undergraduate program. One can imagine a business major who used this certificate to compete for a job in pharmaceutical sales or a social work major who used this certificate to compete for a job in medical school work.

Finally, we note that there are 23 other institutions in the country with post-baccalaureate pre-Med certificates including Georgetown University, Columbia University, Pennsylvania State University, and Worcester State College. However, completion of this certificate does not ensure admission to any professional program.

- A. General Studies (no items)
- B. Art, Music, & Theatre (no items)
- C. Biology (no items)
- D. **Chemistry & Physics**

1. **A motion was made, seconded, and approved to Delete the following two courses:**

CHEM 1211L
CHEM 1212L

Rationale: The changes above represent combining the lecture and laboratory components of two courses. These changes will provide students with a more accurate measure of their overall performance in General Chemistry (i.e., coalescing grades from lecture and lab into one course grade) and follows the pattern already in place for the Principles of Biology sequence.

2. **A motion was made, seconded, and approved to Change the prerequisite and description of the following course:**

CHEM 1211 PRINCIPLES OF CHEMISTRY I 3-0-3 3-3-4
 Prerequisite or corequisite: MATH 1111 ~~and CHEM 1211L~~
 Corequisite: CHEM 1211R if the score on the mathematics portion of the SAT is less than 500. If no SAT score is available, permission must be obtained from the department head prior to registering for CHEM 1211.

Description: First course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science majors. Topics include composition of matter; nomenclature; atomic structure; bonding and molecular geometries; stoichiometry; properties of solids, liquids, gases; acids and bases; solutions; thermochemistry; and periodic relations. **The lab reinforces these topics.**

3. **A motion was made, seconded, and approved to Change the prerequisite and description of the following course:**

CHEM 1212 PRINCIPLES OF CHEMISTRY II 3-0-3 3-3-4

Prerequisite: CHEM 1211 and ~~CHEM 1211L~~

~~Prerequisite or corequisite: CHEM 1212L~~

Description: Second course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science majors. Topics include thermodynamics; equilibria (including complex equilibria); kinetics; electrochemistry; nuclear chemistry; descriptive inorganic chemistry; and introduction to organic chemistry. **The lab reinforces these topics.**

Rationale: The changes above represent combining the lecture and laboratory components of two courses. These changes will provide students with a more accurate measure of their overall performance in General Chemistry (i.e., coalescing grades from lecture and lab into one course grade) and follows the pattern already in place for the Principles of Biology sequence.

Effective Term: Fall 2005

E. Criminal Justice, Social, & Political Science (no items)

F. Economics (no items)

G. History (no items)

H. **Languages, Literature, & Philosophy**

1. **A motion was made, seconded, and approved to Change the course description and CURCAT of the following courses:**

a. FREN 3200 Special Topics in French Literature 3-0-3

French literature: subject announced ~~at time~~ **when** course ~~is~~ offered. Includes surveys of nineteenth and twentieth century literature. **May be repeated for additional credit when topics change.**

b. FREN 4010 Special Genre 3-0-3

French literature: subject announced ~~at time of~~ **when** course ~~offering~~ offered. **May be repeated for additional credit when topics change.**

c. FREN 4020 Special Author 3-0-3

French literature: subject announced ~~at time of~~ **when** course ~~offering~~ offered. **May be repeated for additional credit when topics change.**

d. PHIL 4000 Special Topics 3-0-3

Offered on demand. Focuses either on a topic such as existentialism, aesthetics, philosophy of science, philosophy of language, philosophy and literature, or on one great ancient, medieval, or modern philosopher such as Plato, Aristotle, Augustine, Aquinas, Descartes, Hume, Kant, Hegel, Nietzsche, Whitehead, Sartre, or Wittgenstein. **May be repeated for additional credit when topics change.**

- e. SPAN 4010 Special Genre 3-0-3
Hispanic literature: subject announced when course offered. **May be repeated for additional credit when topics change.**
- f. SPAN 4020 Special Author 3-0-3
Hispanic literature: subject announced when course offered. **May be repeated for additional credit when topics change.**
- g. SPAN 4030 Special Topics 3-0-3
Hispanic literature: subject announced when course offered. Thematic studies such as the picaresque and the anti-hero. **May be repeated for additional credit when topics change.**

Rationale: The intent of each of these special topics type courses is to allow the department the flexibility to offer different content using these course numbers and titles while at the same time allowing students to earn additional credits for courses offered with different content. Adding the same single "repeatable" clause to each of these course descriptions would make this clear to the students and bring the appropriate Language, Literature, and Philosophy courses under a single consistent policy. Other minor stylistic or grammatical changes in the descriptions are included for a more uniform presentation of these LLP courses.

Effective Term (applicable to each course): Fall 2005

CURCAT (applicable to each course):

Major Department: LLP

Can course be repeated for additional credit? ~~No~~ Yes

Maximum number of credit hours: ~~3~~ 12

Grading mode: normal

Instruction Type: lecture

2. *For information only*

Change the course description and CURCAT of the following courses:

- a. ENGL 5000 Special Topics 3-0-3
Subject announced when course is offered. **May be repeated for additional credit when topics change.**
- b. ENGL 5610 Major Author 3-0-3

Subject is announced when the course is offered. **May be repeated for additional credit when topics change.**

- c. ENGL 5435 Topics in Drama 3-0-3
Study of a selected topic in English, American, or World dramatic literature. ~~May be repeated as topics vary.~~ **May be repeated for additional credit when topics change.**
- d. FILM 5010B Topics in Film 3-0-3
Crosslisted as THEA 5010U.
~~Special topics in film~~ Subject announced when course is offered. For example, film genres, auteurs, critical approaches, and individual historical periods. **May be repeated for additional credit when topics change.**
- e. LING 5000 Topics in Linguistics 3-0-3
Seminar in topics of theoretical and applied linguistics. ~~Course may be taken more than once for credit as topics change.~~ **May be repeated for additional credit when topics change.**

Rationale: The intent of each of these special topics type courses is to allow the department the flexibility to offer different content using these course numbers and titles while at the same time allowing students to earn additional credits for courses offered with different content. Adding the same single "repeatable" clause to each of these course descriptions would make this clear to the students and bring the appropriate Language, Literature, and Philosophy courses under a single consistent policy. Other minor stylistic or grammatical changes in the descriptions are included for a more uniform presentation of these LLP courses.

Effective Term (applicable to each course): Fall 2005

CURCAT (applicable to each course):

Major Department: LLP

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

Maximum number of credit hours: ~~3~~ **12**

Grading mode: normal

Instruction Type: lecture

I. Mathematics

1. **A motion was made, seconded, and approved to Delete the following courses:**

MATH 3211	Probability and Mathematical Statistics I	3-0-3
MATH 3222	Probability and Mathematical Statistics II	3-0-3
2. **A motion was made, seconded, and approved to Create the following five courses:**
 - a. **STAT 3211 Probability and Statistics Applications I** **3-0-3**
Prerequisites: MATH 2072

Description: Data collection, organization and description; probability, random variables; discrete and continuous probability distributions; Central Limit Theorem; point and interval estimation; tests of hypotheses; simple linear regression and correlation.

- b. **STAT 3222 Probability and Statistics Applications II** **3-0-3**
Prerequisites: STAT 3211 and MATH 2160
Description: Sampling techniques, multiple linear regression, nonparametric statistics, and MANOVA.
- c. **STAT 3231 Mathematical Statistics I** **3-0-3**
Co-requisite: MATH 2083
Description: Probability, properties of discrete and random variables, joint and conditional distributions, expectation, and transformations.
- d. **STAT 3232 Mathematical Statistics II** **3-0-3**
Prerequisites: STAT 3231
Description: Central limit theorem, point and interval estimation, sampling distributions, sufficient statistics, and hypothesis testing.
- e. **STAT 3240 Experimental Design** **3-0-3**
Prerequisites: STAT 3211 or STAT 3231
Description: Completely randomized and randomized block designs, incomplete block designs, fixed, random and mixed effects models, split-plot designs, nested experiments, analysis of covariance, and factorial experiments.

Note: The Applied Statistics sequence described above (STAT 3211, 3222) is equivalent to the current Probability and Mathematical Statistics sequence (MATH 3211, 3222). Programs that currently require MATH 3211 (namely Computer Science) should be made aware of the change in name and prefix.

3. **A motion was made, seconded, and approved to Create the following minor:**

Statistics 16 hours

MATH 2072 - Calculus II

MATH 2160 - Linear Algebra

Three courses chosen from:

STAT 3211, STAT 3222, STAT 3231, STAT 3232, STAT 3240

4. **A motion was made, seconded, and approved to Modify the requirements for the degree of Bachelor of Science in Mathematical Sciences as follows:**

Option 1: Mathematics

B. Major Field Courses

MATH 3000 – Introduction to Mathematical Proof

MATH 3110 – Abstract Algebra

~~MATH 3211 – Probability and Mathematical Statistics~~

STAT 3231 – Mathematical Statistics I

MATH 3411 – Differential Equations

MATH 4011 – Advanced Calculus I

One course selected from:

MATH 3170 – Advanced Linear Algebra

MATH 4022 - Advanced Calculus II

MATH 5160 – Theory of Numbers

Nine semester hours of upper-division mathematics **or statistics courses**

exclusive of MATH 3201, 3911, 3912, 3932, 4961, 4962, 4963, 4964, 5911U.

Option 2: Applied Mathematics

B. Major Field Courses

MATH 3000 – Introduction to Mathematical Proof

~~MATH 3211 – Probability and Mathematical Statistics~~

STAT 3211 – Probability and Statistics Applications I

MATH 3411 – Differential Equations

One course selected from:

MATH 3110 – Abstract Algebra

MATH 3170 – Advanced Linear Algebra

MATH 4011 - Advanced Calculus I

MATH 5160 – Theory of Numbers

Nine semester hours of upper-division mathematics **or statistics courses**

exclusive of MATH 3201, 3911, 3912, 3932, 4961, 4962, 4963, 4964, 5911U.

C. Related Field Courses

CSCI 1302 - Advanced Programming Principles

Complete the prescribed courses in one of the following concentration areas:

Actuarial science

ECON 2105 or ECON 2106

MATH ~~3222~~, 3251, 3460, or 4200

STAT 3222

MATH 3251 or 3460

MATH 4200

Two courses selected from:

ECON 3050, 3060, 3300, 3500, 3600, or 3700

Operations research:

~~MATH 3222 – Probability and Mathematical Statistics~~

STAT 3222 – Probability and Statistics Applications II

MATH 3251 – Probability and Combinatorics

MATH 3460 – Introduction to Operations Research

MATH 3480 – Optimization and Graph Theory

MATH 4400 – Operations Research Seminar

MATH 4610 – Numerical Analysis

Statistics

STAT 3222 - Probability and Statistics Applications II

STAT 3231 - Mathematical Statistics I

STAT 3232 - Mathematical Statistics II

STAT 3240 - Experimental Design

MATH 3251 - Probability and Combinatorics

MATH 4610 - Numerical Analysis

Rationale: The proposed changes modify and expand the department's course offerings in order to support a minor in statistics as well as a concentration area in statistics for the applied mathematics option in the mathematical sciences degree (p. 112 of the 2004-2005 AASU Catalog), which fills a gap in the quantitative science offerings and provides a bridge to various industries/businesses in the area. These options for students serve as a first step toward the establishment of a degree program in statistics. We have chosen to use the STAT prefix rather than MATH to make the courses, and hence the minor and area of concentration, more visible.

The current upper-level statistics sequence, MATH 3211-3222 (Probability and Mathematical Statistics), serves dual purposes—a “mathematical statistics” sequence for mathematics majors, as well as a calculus-based applied statistics course for other majors—and hence serves neither particularly well. So we are giving more appropriate names to those courses (Probability and Statistics Applications I and II), adjusting their content accordingly, and creating another sequence, Mathematical Statistics I and II that will provide a more theoretical treatment of statistics. The new STAT 3211-3222 will be equivalent to the old MATH 3211-3222, and thus affect the program of study for the B.S. in Computer Science. We believe STAT 3240 will be of considerable value to students in a number of programs across campus including biology, psychology, and the proposed E-commerce program.

- J. Psychology (no items)
 - K. Honors Program (no items)
 - L. Gender and Women's Studies (no items)
- II. College of Health Professions
- A. Dental Hygiene (no items)
 - B. Health Sciences (no items)
 - C. Medical Technology (no items)
 - D. Nursing (no items)
 - E. Physical Therapy (no items)
 - F. Radiologic Sciences
 - G. Respiratory Therapy (no items)
 - H. Speech/Pathology (no items)
- III. College of Education (no items)

- A. Early Childhood Education (no items)
- B. Health and Physical Education (no items)
- C. Middle, Secondary, and Adult Education (no items)
- D. Special Education (no items)

IV. School of Computing

- A. Computer Science (no items)
- B. Information Technology (no items)
- C. Engineering Studies (No items)

V. **OTHER BUSINESS.** There was no other business.

VI. **ADJOURNMENT.** The meeting was adjourned at 3:35 p.m.

Respectfully submitted,

Phyllis L. Panhorst
Coordinator of Faculty Information