

# Armstrong

## UNIVERSITY CURRICULUM COMMITTEE

University Hall 282

Minutes, March 2, 2016

**PRESENT:** Myka Bussey-Campbell (Chair), Suzanne Carpenter, Kathryn Craven, Katrina Embrey, Jackie Kim, John Kraft, Andi Beth Mincer, Anthony Parish, Jared Schlieper, Julie Swanstrom, James Todesca, Phyllis Fulton (Catalog Editor)

**ABSENT:** Jose da Cruz (Vice Chair), Robert Harris

**GUESTS:** James Brawner, Donna Brooks, Lesley Clack, Brent Feske, Delana Gajdosik-Nivens, Rick McGrath, Kathy Platt, Sandy Streater, Heather Thornton

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The University Curriculum Committee will meet at 3:00 p.m. on Wednesday, March 2 in University Hall 282.

### A G E N D A

**CALL TO ORDER.** The meeting was called to order at 3:02 p.m. by Myka Bussey-Campbell.

**APPROVAL OF MINUTES.** The minutes of February 3, 2016, were approved as presented.

#### ITEMS

I. College of Education

#### II. College of Health Professions

*Items 1-2 from the College of Health Professions were discussed and approved by the committee. They are being submitted to the Faculty Senate for approval.*

**1. Delete the following course**

~~[HLPR 2200—Interprofessional Teams in Healthcare Organizations—3-0-3](#)~~

Rationale: This course will better serve the COHP programs as a 3000 level course that can be used in the major as an elective.

**Effective Date: Spring 2017**

**2. Create the following course:**

HLPR 3200 Interprofessional Teams in Healthcare Organizations 3-0-3

Prerequisite: ENGL 1102

An introduction to theory and skills related to interprofessional practice in healthcare organizations.

Rationale: Course content has been developed to include advanced communications skills that are specific to healthcare and interprofessional teamwork. As this course will serve upper division students in the health professions, as well as students considering graduate work in healthcare, students must have more than entry-level skills in communication.

**Effective Date: Spring 2017**

**CURCAT:**

**Major Department – College of Health Professions**

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

**Maximum number of credits: 3**

**Grading Mode: Normal**

**Instruction Type: Directed Study**

**Course Equivalent: HLPR 2200**

A. Diagnostic and Therapeutic Sciences (no items)

**B. Health Sciences**

*Items 1-2 from the Department of Health Sciences were discussed and approved by the committee. They are being submitted to the Faculty Senate for approval.*

**1. Create the following course:**

**HITC 3000 Introduction to Health Informatics 3-0-3**

**Prerequisite or Co-requisite: RESP 2110 or Permission of Instructor**

An introductory survey of the field of health informatics, including the origin and development of the discipline into a profession as well as current and future trends in practice. Student orientation to the terminology used in the field as well as some of its more common applications including data quality assessment, data standards, and the regulatory framework for data privacy and confidentiality (HIPAA) are presented.

Rationale: An introductory course to the health informatics major does not exist. As a strategy to increase campus and community awareness of the field and major as well as potentially stimulate increased enrollment in the future, it was felt that such a course would be appropriate. A survey of other health informatics programs indicates that such introductory courses are common across different curricula. We would like to request that this action be

expedited as this is a necessary course addition for fall. If it gets put into Banner by the end of spring semester we can get students to add it to their schedules during late registration in the fall.

**Effective Date: Fall 2016**

**CURCAT:**

**Major Department – Health Sciences**

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

**Maximum number of credits: 3**

**Grading Mode: Normal**

**Course Equivalent: None**

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

**Bachelor of Health Science, Health Informatics track:**

**A. General Requirements**

**Core Area F**

**18 hours**

CSCI 1150 Fundamentals of the Internet and the World Wide Web

CSCI 2070 Introduction to Computer Ethics and Cybersecurity

HSCC 2500 Health Issues and Resources

[HSCC 2300 Management of Health Information](#)

ITEC 1310 Programming for Information Technology

**MATH 2200 Elementary Statistics\***

RESP 2110 Medical Terminology

**\*If not taken in Area D. If MATH 2200 taken in Area D, select a course from the following list:**

**ANTH 1102 Anthropology**

**ECON 1101 Survey of Economics**

**ECON 2105 Principles of Macroeconomics**

**ECON 2106 Principles of Microeconomics**

**PSYC 1101 Introduction to Psychology**

**SOCI 1101 Introductory Sociology**

**B. Major Field Courses**

**15 hours**

**HITC 3000 Introduction to Health Informatics**

**HLPR 2200 Interprofessional Teams in Healthcare Organizations**

**HSCC 2300 Management of Health Information**

**HSCC 3110 Legal Issues in the Healthcare Environment**

**HSCC 3140 Epidemiology**

**[ITEC 2530 Operating Systems](#)[ITEC 3500 Database Administration](#)**

**C. Related Field Courses**

**45 hours**

**HITC 4100 Analysis of Healthcare Data**

**HITC 4700 Introduction to Project Management**

HITC 4750 Principles of Knowledge Management and Decision Support  
 HITC 4800 Special Topics in Health Informatics  
 HITC 4900 Internship (6 credit hours)  
 HSCA 4620 Principles of Management in Health Services Organizations  
 HSCA 4630 Health Information Systems  
 HSCA 4655 Principles of Health Insurance and Reimbursement  
 HSCA 4660 Survey of Health Outcomes  
 HSCC 4020 Seminar in Professional Issues  
 HSCP 2000 Ethical Theories/Moral Issues in Health  
 ITEC 3500 Database Administration  
 ITEC 3600 System Analysis and Design  
 ITEC 3700 Cybersecurity I  
~~ITEC 3800 Data Communication and Networks~~

Rationale: MATH 2200 was moved into Area F to ensure that all HI students took this course given that it is a pre-requisite for several major courses. It was previously listed as one option under Area D3 for non-science majors. Flexibility is provided in Area F for those persons who take MATH 2200 in Area D3 to take another pre-approved 1000-2000 level course in economics, psychology, anthropology, and/or psychology. Given the movement of MATH 2200 into Area F, HSCC 2300 had to be moved to Major Field courses. The newly created HITC 3000 course will also be listed as a major field course. This requires the movement of ITEC 3500 to related field courses. On the advice of colleagues in CS/IT, ITEC 2530 and ITEC 3800 are being removed from the major.

**Effective Date: Fall 2016**

- C. Nursing (no items)
- D. Rehabilitation Sciences (no items)

### **III. College of Liberal Arts**

- A. Art, Music, and Theatre (no items)
- B. Criminal Justice, Social, and Political Science (no items)

#### **C. Economics**

*Items 1-15 from the Department of Economics were discussed and approved by the committee. They are being submitted to the Faculty Senate for approval.*

**Note from College of Liberal Arts: The Provost has authorized an effective term of Fall 2016.**

**1. Create the following course**  
**MKTG 3350 CONSUMER BEHAVIOR** **3-0-3**

Prerequisite: ECON 2106

Topics related to understanding and influencing consumer behavior including behavioral and social aspects of marketing, research methods and findings from behavioral sciences, and their application to production, consumption and marketing of products and services.

Rationale: This course is commonly taken as part of marketing minors or concentrations.

**Effective Term: Fall 2016**

**CURCAT:**

**Major Department: Economics**

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

**Maximum number of credits: 3**

**Grading Mode: Normal**

**Instruction Type: Lecture**

**Course Equivalent: None**

**2. Create the following course**  
**MKTG 4150 DIGITAL MARKETING** **3-0-3**

Prerequisite: ECON/MKTG 3210

Examines major trends and technologies in electronic commerce (e-commerce), various internet marketing strategies and applications, the business implications of social media such as blogs, opinion forums, social networks, search engine marketing, and other kinds of emerging online communities and applications.

Rationale: This course is commonly taken as part of marketing minors or concentrations.

**Effective Term: Fall 2016**

**CURCAT:**

**Major Department: Economics**

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

**Maximum number of credits: 3**

**Grading Mode: Normal**

**Instruction Type: Lecture**

**Course Equivalent: None**

**3. Create the following course**  
**MKTG 4250 ADVERTISING STRATEGY** **3-0-3**

Prerequisite: ECON/MKTG 3210

Development and implementation of integrated marketing communications programs. Topics include the communications process, budget determination, strategic brand management, internet marketing, and issues of monitoring, evaluation, and control.

Rationale: This course is commonly taken as part of marketing minors or concentrations.

**Effective Term: Fall 2016**

**CURCAT:**

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

**4. Create the following course**

**MKTG 4350 INTERNATIONAL MARKETING** **3-0-3**

Prerequisite: ECON/MKTG 3210

Methodology and skills of marketing goods, services, and information across political boundaries, as well as global economic and cultural environments, including topics related to market segmentation and logistics.

Rationale: This course is commonly taken as part of marketing minors or concentrations.

**Effective Term: Fall 2016**

**CURCAT:**

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

**5. Create the following course**

**ECON 4170 FINANCIAL DERIVATIVES** **3-0-3**

Prerequisite: ECON 2105, ECON 2106, and MATH 2200

Futures, options, and other related financial instruments, focusing on pricing methodologies and market value calculations and on their uses for hedging and trading by corporations and financial institutions. Applications include topics such as financial risk management and investment.

Rationale: This course is commonly taken as part of marketing minors or concentrations.

**Effective Term: Fall 2016**

**CURCAT:**

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

- 6. Create the following course**
- ECON 3710 BUSINESS AND ECONOMIC FORECASTING** **3-0-3**
- Prerequisite: ECON 2105, ECON 2106, and MATH 2200
- Concepts in time series analysis such as autoregression, moving averages, stationarity, and cointegration. Applications include topics such as macroeconomic and financial forecasting.

Rationale: This course is commonly taken as part of marketing minors or concentrations.

**Effective Term: Fall 2016**

**CURCAT:**

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

- 7. Modify the following course**
- ECON 4150 ~~MONEY AND CAPITAL MARKETS~~** **3-0-3**
- Prerequisite: ECON 2105 and ECON 2106
- ~~An examination of the role of money and financial institutions in the exchange process, the Federal Reserve's monetary policy strategy, and the impact of monetary policy on financial markets and aggregate economic activity.~~ **Five major debt markets (corporate, government and agency, municipal, asset backed, and funding markets) including key institutions and analytical tools used for pricing and risk management. Applications include topics such as investing in fixed-income securities.**

Rationale: The content of this course is being more clearly specified to reduce potential overlap with ECON 3300 Money and Banking and to establish complementarity with ECON 4100 Financial Economics: Portfolio Analysis.

**Effective Term: Fall 2016**

**CURCAT:**

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

- 8. Request blanket change from ECON 4150 MONEY AND CAPITAL MARKETS to ECON 4150 CAPITAL MARKETS throughout the catalog.**

Rationale: The course appears in multiple places in the economics curriculum and may appear elsewhere. The content has not changed sufficiently to require specific notification.

**Effective Term: Fall 2016**

- 9. Modify the following course:**

**ECON 4900 ECONOMIC METHODS AND SENIOR THESIS** **3-0-3**

Prerequisite: ECON 3050 or ECON 3060, and either ECON 3700 or 3710

Should be taken the last term available before graduation. Review of the methods and tools of economic analysis culminating in an extensive research report (**International Economics track requires a topic related to international economics**) -which will be evaluated by a departmental committee. ~~International economics track requires topic related to international economics.~~ Honors senior theses must meet the standards for presentation at a professional conference or submission to a journal.

Rationale: ECON 3710 provides sufficient analytical foundation to be used as a substitute for ECON 3700 depending on the student's choice of topic for ECON 4900. This will be of particular value to students in the finance track proposed below.

**Effective Term: Fall 2016**

**CURCAT:**

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



**10. Create the following minor**

**Marketing** **15 hours**  
**ECON 2106 plus 12 hours of marketing (MKTG) courses at the 3000-level or above. No more than six credits may be used for both the major and the minor.**

Rationale: The minor in marketing offers business knowledge and a credential to students that will help further their educational and career goals.

**Effective Term: Fall 2016**

**11. Modify the following minor**

**Finance** **18 hours**  
 ACCT 2101, ECON 2105, and 12 credits from ECON 3230, ECON 3300, ECON 4100, ECON 4150, **ECON 4170**, ECON 4310  
***ECON 4100, 4150, 4170 and 4310 may not be used to meet both major and minor requirements.***

Rationale: The newly created course in financial derivatives is an appropriate addition to the choices for the finance minor or finance track proposed below.

**Effective Term: Fall 2016**

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

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

**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 3200 International Trade  
 ECON 4310 International Finance  
 ECON 4400 Seminar in Third World Economic Development  
 ECON 4450 Comparative Economics

**Quantitative**

ECON 3600 Mathematical Economics  
**ECON 3710 Business and Economic Forecasting**  
 MKTG 3800 Quantitative Marketing Research

**Applied**

ECON 3400 Economics of Labor  
 ECON 3470 Economics of Health

ECON 3500 Managerial Economics  
 ECON 4242 Analyzing Innovation through Science Fiction  
 ECON 4451 Industrial Organization  
 ECON 4460 Economic Analysis of the Law

**Financial**

ECON 3230 Finance  
 ECON 3300 Money and Banking  
 ECON 4100 Financial Economics: Portfolio Analysis  
 ECON 4150 ~~Money and~~ Capital Markets  
 ECON 4170 Financial Derivatives

**Public Policy and Economic History**

ECON 3450 Environmental Economics  
 ECON 3460 Economics of Immigration  
 ECON 3480 Economics of Vice  
 ECON 3630 Economic History of the United States  
 ECON 4410 Regional Economics  
 ECON 4500 Public Finance  
 ECON 4550 Public Choice

**Internships and Specialized Courses**

ECON 3950 Research in Economics  
 ECON 3960 Research in International Economics  
 ECON 4010, 4020, 5030U Special Topics in Economics  
 ECON 4520 Internship (with permission of department head) (maximum of three credits may count toward Major Field Courses)

Rationale: The new courses are appropriate for the assigned categories in the program of study for the BA in Economics.

**Effective Term: Fall 2016**

**13. Modify the following program of study**

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
 BUSINESS ECONOMICS**

**Track I: General Business Economics**

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

ECON 3230 Finance  
 ECON 3700 Econometrics or ECON/MKTG 3800 Quantitative Marketing Research  
 MGMT 3220 Management  
 MGMT 4111 Entrepreneurship or ECON 4900 Economic Methods and Senior Thesis  
 MKTG 3210 Marketing  
 Six credits selected from:  
 ECON 3050 – Intermediate Macroeconomics and ECON 3060 – Intermediate Microeconomics

ECON 3050 – Intermediate Macroeconomics and ECON 3500 – Managerial Economics

ECON 3060 – Intermediate Microeconomics and ECON 3300 – Money and Banking

Six credits selected from:

ECON 3100 Multinational Economic Enterprises

ECON 3200 International Trade

ECON 3300 Money and Banking

ECON 3400 Economics of Labor

ECON 3450 Environmental Economics

ECON 3460 Economics of Immigration

ECON 3470 Economics of Health

ECON 3500 Managerial Economics

**ECON 3710 Business and Economic Forecasting**

ECON/MKTG 3800 Quantitative Marketing Research

ECON 4100 Financial Economics: Portfolio Analysis

ECON 4150 ~~Money and~~ Capital Markets

**ECON 4170 Financial Derivatives**

ECON 4310 International Finance

ECON 4410 Regional Economics

ECON 4451 Industrial Organization

ECON 4460 Economic Analysis of the Law

ECON 4500 Public Finance

ECON/MGMT 4800 Small Business Consulting

Three credits of upper division economics, 3000 and above, except for ECON 5150U.

**C. Related Field Courses .....15 hours**

COMM 2280 Speech Communication

ENGL 3720 Business and Technical Communication

MATH 1161 Calculus I or MATH 1950 Applied Math for Non-Science Majors (if not taken in the core)

PHIL 2030 Introduction to Ethics and Moral Issues

Three credits from:

**COMM 3050 Interpersonal and Small Group Communication**

COMM 3060 Public Relations

COMM 5050U Interpersonal Communication in the Workplace

COMM 5500U Communication ~~b~~etween the Genders

**ENGL 5700U Promotional Writing**

ENGL 5710U Writing for the Non-Profit Sector

ENGL 5740U Technical Editing

ENGL 5750U Publication Design

Rationale: The new courses are appropriate for the assigned categories in the program of study for the BS in Business Economics. The degree is being broken into tracks.

**Effective Term: Fall 2016**

**14. Modify the following program of study by creating a finance track.**

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
BUSINESS ECONOMICS**

**Track II: Finance**

**B. Major Field Courses ..... 39 hours**

ECON 3230 Finance

ECON 3700 Econometrics or ECON 3710 Business and Economic Forecasting

ECON/MGMT 3220 Management

ECON 4900 Economic Methods and Senior Thesis

MKTG 3210 Marketing

Six credits selected from:

ECON 3050 Intermediate Macroeconomics and ECON 3060 Intermediate  
Microeconomics

ECON 3050 Intermediate Macroeconomics and ECON 3500 Managerial  
Economics

ECON 3060 Intermediate Microeconomics and ECON 3300 Money and  
Banking

Six credits of upper division economics, 3000 and above. No more than three credits  
from ECON 3950, 4450, and 4520.

Twelve credits selected from:

ECON 3300 Money and Banking

ECON 4100 Financial Economics: Portfolio Analysis

ECON 4150 Capital Markets

ECON 4170 Financial Derivatives

ECON 4310 International Finance

**C. Related Field Courses .....15 hours**

COMM 2280 Speech Communication

ENGL 3720 Business and Technical Communication

MATH 1161 Calculus I or MATH 1950 Applied Math for Non-Science Majors  
(if not taken in the core)

PHIL 2030 Introduction to Ethics and Moral Issues

Three credits from:

COMM 3050 Interpersonal and Small Group Communication

COMM 3060 Public Relations

COMM 5050U Interpersonal Communication in the Workplace

COMM 5500U Communication between the Genders

ENGL 5700U Promotional Writing

ENGL 5710U Writing for the Non-Profit Sector

ENGL 5740U Technical Editing

ENGL 5750U Publication Design

**D. Electives .....6 hours**

Rationale: There is educational and professional value in creating a dedicated finance track in the BS in Business Economics.

**Effective Term: Fall 2016**

**15. Modify the following program of study by creating a marketing track**

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
BUSINESS ECONOMICS**

**Track III: Marketing**

**B. Major Field Courses ..... 39 hours**

ECON 3230 Finance

ECON 3800 Quantitative Marketing Research

ECON/MGMT 3220 Management

MGMT 4111 Entrepreneurship or MGMT 4800 Small Business Consulting

MKTG 3210 Marketing

Six credits selected from:

ECON 3050 Intermediate Macroeconomics and ECON 3060 Intermediate  
Microeconomics

ECON 3050 Intermediate Macroeconomics and ECON 3500 Managerial  
Economics

ECON 3060 Intermediate Microeconomics and ECON 3300 Money and  
Banking

Six credits of upper division economics, 3000 and above. No more than three credits  
from ECON 3950, 4450, and 4520.

Twelve credits selected from:

MKTG 3350 Consumer Behavior

MKTG 4010 Special Topics in Marketing

MKTG 4020 Advanced Topics in Marketing

MKTG 4150 Digital Marketing

MKTG 4250 Advertising Strategy

MKTG 4350 International Marketing

**C. Related Field Courses .....15 hours**

COMM 2280 Speech Communication

ENGL 3720 Business and Technical Communication

MATH 1161 Calculus I or MATH 1950 Applied Math for Non-Science Majors  
(if not taken in the core)

PHIL 2030 Introduction to Ethics and Moral Issues

Three credits from:

COMM 3050 Interpersonal and Small Group Communication

COMM 3060 Public Relations

COMM 5050U Interpersonal Communication in the Workplace

COMM 5500U Communication between the Genders

ENGL 5700U Promotional Writing

ENGL 5710U Writing for the Non-Profit Sector

ENGL 5740U Technical Editing

ENGL 5750U Publication Design

**D. Electives .....6 hours**

Rationale: There is educational and professional value in creating a dedicated marketing track in the BS in Business Economics.

**Effective Term: Fall 2016**

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

#### **IV. College of Science and Technology**

- A. Biology (no items)
- B. Chemistry and Physics (no items)

#### **C. Computer Science and Information Technology**

*Item 1 from the Department of Computer Science and Information Technology was discussed and approved by the committee. It is being submitted to the Faculty Senate for approval.*

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

##### **CSCI 1150 FUNDAMENTALS OF THE INTERNET AND WORLD WIDE WEB**

**3-0-3**

A survey of the fundamentals of the Internet and the World Wide Web. Topics covered include the history of the Internet and the World Wide Web, ~~basics of computer networking~~, overview of computer and network architecture, ~~e-mail systems~~, ~~Internet service providers~~, ~~text editing~~, data representation and conversion, ~~basic web programming~~, web search using Boolean logic, ~~researching and publishing online~~, ~~the Internet~~, ~~the World Wide Web~~, ~~searching the World Wide Web~~, ~~FTP~~, ~~HTML programming~~, ~~multimedia~~, people-centric Internet applications, ~~and related as well as~~ privacy and security concerns.

Rationale: Although CSCI 1150 is in Area F for students majoring in Information Technology, it is also located in Area D for non-IT majors. The original course description did not meet the Board of Regents requirements for a course in Area D. After reviewing the requirements and the content of the course, the description has been changed to better meet those requirements.

**Effective Term: Fall 2016**

##### **CURCAT**

**Major Department: Computer Science and Information Technology**

**Cross-listed: No**

**Repeatable: No**  
**Grading Mode: Normal**  
**Instruction Type: Lecture**  
**Equivalent Courses: None**

D. Engineering Studies (no items)

## E. Mathematics

*Items 1-4 from the Department of Mathematics were discussed and approved by the committee. They are being submitted to the Faculty Senate for approval.*

### 1. CREATE THE FOLLOWING COURSE

**MATH 4990 Capstone Seminar**

**1-0-1**

Prerequisite: MATH 3000

Under the guidance of a mathematics faculty advisor, students will conduct a research project in mathematics. Students will be required to write a short paper and give a presentation on the research completed.

**Rationale:** The capstone seminar will enhance students' ability to apply critical thinking skills to model, analyze, and solve authentic problems.

**Effective Term: Spring 2017**

#### **CURCAT:**

**Major Department: Mathematics**

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

**Maximum Number of Credit Hours: 1**

**Grading Mode: Normal**

**Instruction Type: Lecture**

### 2. MODIFY THE FOLLOWING COURSE:

**MATH 5412 Secondary School Curriculum and Methods**

**3-V-33-0-3**

Prerequisite: Admission to the College of Education and completion of MATH 3932.

Materials and methods of teaching secondary school mathematics including field experiences.

**Rationale:** The variable number of laboratory hours reflects the field experiences incorporated in the course.

**Effective Term: Fall 2016**

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

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
 MATHEMATICAL SCIENCES**

**Option 1: Mathematics****B. Major Field Courses****27-28 hours**

MATH 3000 Introduction to Mathematical Proof

MATH 3110 Abstract Algebra

STAT 3231 Mathematical Statistics I

MATH 3411 Differential Equations

MATH 4011 Advanced Calculus I

**MATH 4990 Capstone Seminar**

One course selected from:

MATH 3170 Advanced Linear Algebra

MATH 4022 Advanced Calculus II

MATH 5160U Theory of Numbers

Nine semester hours of upper-division mathematics or statistics courses exclusive of MATH 3201, 3750, 3911, 3912, 3932, 4750, 4961, 4962, 4963, 5412U, 5600U and 5911U

**D. Electives****15-14 hours****Option 2: Applied Mathematics****B. Major Field Courses****21-22 hours**

MATH 3000 Introduction to Mathematical Proof

MATH 3411 Differential Equations

**MATH 4990 Capstone Seminar**

One course selected from:

STAT 3211 Probability and Statistics Applications I

STAT 3231 Mathematical Statistics I

One course selected from:

MATH 3110 Abstract Algebra

MATH 3170 Advanced Linear Algebra

MATH 4011 Advanced Calculus I

MATH 5160U Theory of Numbers

Nine semester hours of upper-division mathematics or statistics courses exclusive of MATH 3201, 3750, 3911, 3912, 3932, 4750, 4961, 4962, 4963, 5412U, 5600U and 5911U

**D. Electives****12-2111-20 hours**

**Rationale:** The inclusion of the capstone seminar, MATH 4990, will enhance students' ability to apply critical thinking skills to model, analyze, and solve authentic problems.

**Effective Term: Fall 2016****4. Modify the following program of study:**

**PROGRAM FOR THE DEGREE OF BACHELOR OF SCIENCE IN  
MATHEMATICAL SCIENCES WITH TEACHING CERTIFICATION**



<b>A. General Requirements</b>	
<b>Core Areas A, B, C, D.IIA, and E</b>	<b>42 hours</b>
Mathematics majors are required to take MATH 1113 in core area A and MATH 1161 in core area D.	
<b>Area F</b>	<b>18 hours</b>
One hour excess for MATH 1161 from area D	
MATH 2072 Calculus II	
MATH 2083 Calculus III	
MATH 2160 Linear Algebra	
CSCI 1301 Introduction to Programming Principles I	
<del>Three hours of lower division electives</del> EDUC 2110 Investigating Critical and Contemporary Issues in Education	
<b>Physical Education</b>	<b>3 hours</b>
<b>First-Year Seminar</b>	<b>1 hour</b>
<b>B. Major Field Courses</b>	<b>24-25 hours</b>
MATH 3000 Introduction to Mathematical Proof	
MATH 3110 Abstract Algebra	
MATH 3360 Modern Geometry	
MATH 3932 Mathematical Reasoning and Representation	
<b>MATH 4990 Capstone Seminar</b>	
One course selected from:	
STAT 3211 Probability and Statistics Applications I	
STAT 3231 Mathematical Statistics I	
One course selected from:	
MATH 5160U Theory of Numbers	
MATH 5700U History of Mathematics	
Six additional semester hours of upper-division mathematics exclusive of MATH 3201, 3750, 3911, 3912, 3932, 4750, 4961, 4962, 4963, 5412U, 5600U and 5911U	
<b>C. Related Field Courses</b>	<b>3835 hours</b>
<del>EDUC 2110 Investigating Critical and Contemporary Issues in Education</del>	
EDUC 2120 Exploring Socio-Cultural Perspectives on Diversity in Education Contexts	
EDUC 2130 Exploring Learning and Teaching	
<del>EDUC 3100 Technology Applications for Teachers</del>	
EDUC 3200 Curriculum, Instruction, and Assessment	
EDUC 3300 Educating Students with Disabilities in the General Education Classroom	
<b>EDUC 3081 Student and Classroom Assessment (2 semester hours)</b>	
<del>MGSE-SCED</del> 3400 Classroom Management Strategies	
<del>SCED</del> MGSE 3750 Internship I	
MATH 4750 or <b>SCED 4750</b> Internship II-Student Teaching (12 semester hours)	
MATH 5412U Secondary School Curriculum and Methods, Mathematics	
<b>Total Semester Hours</b>	<b>126-124 hours</b>

### **E. Exit Exam**

Rationale: For the B.S. in Mathematics with Teacher Certification, EDUC 2110 is moved to Area F, and the inclusion of SCED 3081 will better prepare future teachers to assess student learning. The technology applications in EDUC 3100 can be addressed in other mathematics and computer science courses required for this program of study.

F. Psychology (no items)

### **OTHER BUSINESS**

#### **A. Report from the UCC Subcommittee on the Language used to distinguish Dual Degrees, Second Baccalaureate Degrees and Double Majors (see Attachment 1)**

The ad hoc committee members were thanked for providing their research findings.

The Registrar provided a document showing how degrees are set up in Banner and related to majors and departments (see Attachment 2). This was in answer to a question raised at the last meeting.

It was asked why it cannot be set up to reflect two majors from different degree types. Dr. Brooks said she would call someone at the Board of Regents (BOR) and report back at the next meeting.

It was noted that the BOR does not specifically address double majors in the policy manual.

The desire to notate double majors of different degree types on transcripts was voiced. However, it needs to be done in such a way that departments do not argue as to which department gets credit. Currently with double majors within the same degree type, both majors are listed on the transcript but only one department gets to take credit in the graduation numbers.

**ADJOURNMENT.** The meeting was adjourned at 3:48 p.m.

Respectfully submitted,

Phyllis L. Fulton  
Catalog Editor and Secretary to the Committee

**Report from the UCC Subcommittee on the Language used to distinguish Dual Degrees. Second Baccalaureate Degrees and Double Majors.**

Members:

Kathryn Craven, CST Biology

Julie Swanstrom, COLA LLP

Jared Schlieper, CST Mathematics

See UCC Minutes, Fall 2015 p. 38-39 Other Business for the charge to the subcommittee.

The summary is based on the language used on P. 7, 72 and 73 of the Armstrong Undergraduate Catalog. The language used by Armstrong was cross referenced with the USG Board of Regents Policy (USG, BOR Academic & Student Affairs Handbook).

**Dual Degrees**

p. 72

Defined as 2 separate diplomas after satisfying 2 approved degree programs concurrently.

**REQUIREMENTS:**

Students must satisfy all program and additional requirements for each degree and an additional 30 hours of coursework.

**NOT SPECIFIED:**

The 30 hours can be any level, any discipline.

**RESTRICTIONS:**

Courses used for area F and above (major classes) cannot be used twice.

p. 7

Describes a dual degree agreement for Engineers between Armstrong and Georgia Institute of Technology (and a few other schools). Two diplomas are issued (one from each school) and details are given by the Engineering studies coordinator.

**BOR POLICY (Academic & Student Affairs Handbook 2.3.9):**

Degrees can be granted by one school or 2 schools.

Both degrees must already be approved by BOR.

Schools must notify the Office of Academic Programs of 2 weeks prior to implementation for Dual Degrees.

**Second Baccalaureate Degrees**

p. 73

Following graduation with a baccalaureate degree, a student may return to Armstrong to obtain a second baccalaureate degree.

**REQUIREMENTS:**

Students must satisfy all program and additional requirements for the second degree and a minimum of 30 additional credit hours of coursework.

**ASSUMED:**

The first degree was earned at Armstrong.

**RESTRICTIONS:**

None listed.

**BOR POLICY:**

None listed.

### **Double Majors**

p. 72

Defined as one diploma for one baccalaureate degree (one major listed on the diploma), two majors will be listed on the transcript.

**REQUIREMENTS:**

Students must satisfy all major requirements for each discipline. Classes in each major may be taken concurrently.

**NOT SPECIFIED:**

That the majors **MUST** be completed concurrently.

**RESTRICTIONS:**

None listed in Armstrong policy

**BOR POLICY:**

None listed.

**Related Issues:**

According to the registrar, software coding procedures make it impossible to double major in two disciplines that are granted different kinds of baccalaureate degrees (BA, BS, BLS, BHS, BEd).

### **Joint Degrees**

Not defined by Armstrong

**BOR POLICY** (Academic & Student Affairs Handbook 2.3.10):

One degree can be granted by 2 or more USG schools.

The single diploma will have the name of all USG schools.

Schools must notify the Office of Academic Programs of the intention for a Joint Degree.

### **Major Programs/Baccalaureate Degrees**

**BOR POLICY** (Academic & Student Affairs Handbook 2.3.5):

120 hours

21 upper division\* hours in the major field

At least 39 upper division\* credit hours total.

### **Minor Programs**

**BOR POLICY** (Academic & Student Affairs Handbook 2.3.1):

15-18 hours, 9 must be upper division\*.

Area F courses may be counted as coursework in the minor.

\*upper division = 3000+

Please accept the subcommittees report on degree program definitions according to Armstrong and the USG Board of Regents. Please refer directly to the published information from these institutions for clarification. The report includes information that refers to the overlap in courses applied to different degrees for informational purposes. The subcommittee does not make any actionable recommendations at this time.

UCC info from Registrar's Office:

Attached is a quick draft of my attempt to explain how these are entered. Last year Rock approved a student to earn a double major, I forced it based on his approval and it was sent back to us as an error. We had to waive the hour requirement for this student and award the two degrees.

The rules for program codes are defined in BANNER, these rules are based on created data items (department, major, program, degree) and based on approval from BOR. The screen below shows that the program code BA\_PSYC1 was created as a BA degree with PSYC major under PSYC department. If we attempted to change someone's major to BA with major code MATH, an error would occur in the system...but it is not only a software error it would be an incorrect degree, major combination since the BOR has not approved us to offer a BA in MATH. The rules are set up as they are approved by BOR.

**Majors and Departments**

From Term: 199808 To Term: 999999  
 Program: BA\_PSYC1 Level: US Campus: College: ST Degree: BA

From Term: 199808 To Term: 999999

Major	Department	Concentration	Recruiting	Admissions	General Student	Academic History	CAPP	Major Rule
PSYC	Psychology		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1098

**EDI and Self Service**

Display on Self Service	Auto Student	Self Service Description	EDI Degree	EDI Level	Generate Identification	EDI Identification
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Psychology (BA)			<input checked="" type="checkbox"/>	

Similarly to the major change, when a student applies to graduate, their curricula is entered in a different screen. The program code is the high level and entered first, the major (field of study) has to be an approved major that corresponds with the degree. If this student were earning a double major in Theater and Music, I could add the music major below. However, if I try to add Physic I would get an error.

The screenshot shows a web-based interface for managing student information. At the top, there are tabs for 'Learner Outcome', 'Curricula', 'Dual Degree', 'Honors', 'Institutional Courses', 'Transfer Courses', 'Non-Course Work', and 'Course Attributes'. The 'Learner Outcome' tab is active.

**Learner Outcome Information**

Outcome Status: OS (dropdown) Graduating Senior  
 Student Record Term: 201602 (dropdown)  
 Bulletin Academic Year: 2015 (dropdown)  
 Degree Completion Term: 201602 (dropdown)  
 Graduation Application Date: 05-FEB-2016 (calendar icon)  
 Calculate GPA: Σ (button)  
 Apply to Graduate: [button]

**Graduation Information**

Graduation Term: 201602 (dropdown) Graduation Year: 2016 (dropdown)  
 Graduation Status: [dropdown]  
 Graduation Date: [calendar icon]  
 Fee:  Charge Fee  Waive Fee  None Fee Term: [dropdown]  
 Fee Detail: [dropdown]  Fee Charged  Fee Waived  No Fee  
 Fee Amount: [input] Fee Date: [calendar icon]  
 Authorize: PLATTKAT

**Curricula Summary - Primary**

Priority	Term	Program	Catalog	Level	Campus	College	Degree
1	201502	Theater Performance	201502	Undergraduate	Armstrong-Main Campu	College of Liberal Arts	Bachelor of Arts

**Field of Study Summary**

Priority	Term	Type	Field of Study	Department	Attached to Major
1	201502	Major	Theater Performance Track	Art, Music and Theatre	[icon]

QUESTION to Registrar: “Would it be possible to solve all the issues by using the notation lines available on transcripts to denote the 2nd major regardless of degree type? A single degree with major would be submitted at the time of graduation (which would be on the transcript obviously), but the transcript would also indicate the student completed the requirements for a second major (e.g, DOUBLE MAJOR: BS in Ed (Math Education) or DOUBLE MAJOR: BS w Major in Math (Teacher Ed). The transcript would substantiate the student’s claim of a double major on job applications and resumes. Also, I understand that we control the PSR and should be able to include two lines for majors and advisors. This would also serve as a method for crediting departments and programs.”

Answer: “Yes, a comment can be added to the transcript. However, a comment cannot be tracked. So keeping up with who was awarded a double major would be manual. I also think we need to define the difference between the double major policy and the minor. In our original meeting it was mentioned that we would remove the double major category and only use minor and dual degree. There has never been a clear policy on what is required to earn a double major and branching out to allowing a double major under two different degree programs would require a specific policy (in my opinion).”

Currently if a student earns a double major, the student's transcript will show as follows:

Degree Awarded: Bachelor of Arts

Major: English

Major: Art

If a student earns a dual degree:

Degree Awarded: Bachelor of Arts

Major: English

Degree Awarded: Bachelor of Science

Major: Chemistry