

# Change Undergraduate Course

000001

## Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 2190  
**Effective Term:** Spring 2016  
**Title:** Agribusiness and Food Systems

**Honors Course:**

Add Honors Course:

**Last Term Course was taught:** 201408

### Brief Statement of Change Based on Assessment Results:

This course relies on extensive calculations and thus a prerequisite of MATH 1020 or 1060 provides the students with an adequate math background to complete the required coursework.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

**From** none.  
**To** Prereq MATH 1020 or 1060

## Form

**User ID:** privett    **Name:** Charles Privette  
**Date:** 10/07/2015    **Number:** 8218

000002

*[Handwritten Signature]*

9/28/15

Chair, Department Curriculum Committee

Date

*Radmical Zuzochi*

28/Sept 2015

Department Chair

Date

*Robert J. Kocinski*

10/8/15

Chair, College Curriculum Committee

Date

*Jed Whitbeck*

10/8/15

College Dean

Date

Director, Calhoun

Date

*John D. Stiff*

10/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert S. Jones*

2/11/2016

Provost

Date

President

Date

# Change Undergraduate Course

000003

## Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 3010  
**Effective Term:** Spring 2016  
**Title:** Soil Water Conserv

Honors Course:

Add Honors Course:

Last Term Course was taught: 201408

### Brief Statement of Change Based on Assessment Results:

Students get a complete course on irrigation design and irrigation topics have not been covered in this course for sometime. We are only proposing to delete one word (irrigation) from the catalog description.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Just changing course description by deleting irrigation from list of topics since irrigation is a course into itself.

## Change Catalog Description

**From** Soil and water management is studied by applying principles of mathematics, fluid flow, hydrology, and soil characteristics as related to soil-water-vegetation complexes in runoff, erosion control, channel design, water conservation, drainage, irrigation, stormwater best management practices and stream restoration.

**To** Soil and water management is studied by applying principles of mathematics, fluid flow, hydrology, and soil characteristics as related to soil-water-vegetation complexes in runoff, erosion control, channel design, water conservation, drainage, stormwater best management practices and stream restoration.

## Learning Objectives

Water and soil management are studied by applying principles of mathematics, fluid flow, and hydrology as they relate to soil-water-vegetation complexes in erosion prevention, sediment control, water conservation, and drainage. Topics include: USLE, terracing, open channels, vegetated waterways, surface water storage, water quality, surface drainage, subsurface drainage, evapotranspiration, water measurement, stream restoration and stormwater best management practices (as time permits).

## Topical Outline

1 - Introduction 2 - Meteorology and Rainfall 3 - Runoff 3 - Runoff 4 - Soil Erosion by Water and USLE - Part I 5 - Soil Erosion by Water and USLE - Part II 6 - Soil-Water Relations and Evapotranspiration 7 - Water Quality (Physical, Chemical, Biological) 8 - Water Quality (Sediment And Turbidity) Unit 1 Buffer Class Period Test #1: Classes 2-8 9 - Contouring, Strip Cropping, Terracing 10 - Planning, Building and Maintaining Terraces 11 - Open Channels and Open Channel Flow 12 - Channel Velocity and Erosion Control 13 - Surface Water Storage 13 - Surface Water Storage 14 - Surface Drainage Unit 2 Buffer Class Period Test #2: Classes 9-14 15 - Regulations and Water Law 16 - Construction Regulations and Construction Site Erosion Prevention 17 - Construction Site Sediment Control 18 - Construction Plan Review (In-Class Exercise) 19 - Bioretention 20 - Stream Restoration 21 - Urban BMPs (Constructed Wetlands, Sand Filters, Biosvales) 21 - Urban BMPs (Constructed Wetlands, Sand Filters, Biosvales) Unit 3 Buffer Class Period Final Exam

000004

**Evaluation**

Undergraduate

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F < 60

Homework 20% Test #1 22.5% Test #2 22.5% Final Exam 25% Attendance 10%

**Syllabus**

Upload File: AGM 3010 Syllabus (F'15)-20150916151155.docx

Description: AGM 3010

**Form**

User ID: privett Name: Charles Privette

Date: 10/07/2015 Number: 8221

*M. S. Zell* 9/28/15 990005  
Chair, Department Curriculum Committee Date

*Patricia Zuzohi* 28 Sept 2015  
Department Chair Date

*Robert J. Kowinski* 10/8/15  
Chair, College Curriculum Committee Date

*Jed Whitcomb* 10/8/15  
College Dean Date

Director, Calhoun Honors College Date

*John D. Stiff* 10/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

*Robert S. Jones* 2/11/2016  
Provost Date

President Date

000006

## Change Undergraduate Course

### Change a Course

Subject: AGM-Agricultural Mechanization  
 Number: 3030  
 Effective Term: Spring 2016  
 Title: Cal for Mech Ag  
 Honors Course:  
 Add Honors Course:  
 Last Term Course was taught: 201501

#### Brief Statement of Change Based on Assessment Results:

This course is a sophomore level course and thus a sophomore numeric is more appropriate than a 3000 level numeric.

### Change Number

To 2200

### Change Prerequisite(s) / Corequisite(s)

From Prereq PHYS 2000 or 2070. Coreq 3031  
 To Prereq PHYS 2000, 2070 or 1220. Coreq 2201.

### Learning Objectives

This course is designed to develop and enhance the problem solving ability of the student and to acquaint each with a range of problems requiring an understanding and application of basic engineering principles. Basic principles of solid mechanics, electricity, fluid mechanics, heat transfer, and psychrometric properties of air will be applied in solving problems. Systematic problem solving techniques which include neat, accurate, and well-organized presentation of the solution will be emphasized. Laboratory time will be used to introduce students to problem analysis using MS Excel spreadsheet software.

### Topical Outline

W1 1. Introduction to Course and Systematic Problem Solving Procedures W2 2. Systems of Units, Unit Conversions, Unit Factors W2 3. Applications of Extended Unit Factor Method W3 ----- MLK Holiday ----- W3 4. Simple Machines and Introduction to Vectors W4 5. Vectors - Applications of Method of Components. W4 6. Mechanical Principles: Static Equilibrium, Energy, Torque, Power, and System Efficiency W5 7. Free body diagrams, Work against Gravity (WG) W5 8. Work against Friction (WF) on Horizontal and Inclined plane W6 9. Work Against Friction and Gravity on an Inclined Plane W6 10. Work Against Rolling Resistance (WRR) on Horiz. and Inclined Surfaces W7 11. \*\*\*Hour Test No. 1\*\*\* W7 12. Catch-up and Questions and Answers Relative to Test No. 1 W8 13. Power Requirements for Rolling Resist, on Horiz. and Inclined Surfaces W8 14. Aerodynamic Forces; Terminal Velocity W9 15. Work and Power Requirements Against Elastic and Pressure Forces W9 16. Work and Power Requirements Against Inertial Forces W10 17. Conservation of Energy - Application to Mechanical Systems W10 18. Conservation of Energy - Application to Mechanical Systems W11 ----- Spring Break ----- W11 ----- Spring Break ----- W12 19. Calculations Involving Handling, Moisture Mgt., and Storage W12 20. \*\*\*Hour Test No. 2\*\*\* W13 21. Catch-up and Questions and Answers Relative to Test No. 2 W13 22. Insulation and Heat Flow Calculations W14 23. Properties of Air-Water Vapor Mixtures and Use of Psychrometric Chart W14 24. Heat Balance for Buildings Housing Livestock W15 25. Selection of Structural Members W15 26. Principles of Electricity W16 27. DC Circuits and Circuit Component; Resistor Network W16 28. Course Summary & Review

### Evaluation

#### Undergraduate

A 90 - 100  
 B 80 - 89  
 C 70 - 79  
 D 60 - 69  
 F < 60

Quizzes and homeworks (30%); Labs (20%); Hour Exams (30%); Final exam (20%).

### Syllabus

Upload File: AGM\_3030\_HanY\_Spring\_2016-20150814132758.docx

Description: 2200 Syllabus

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**Form**

**User ID:** privett    **Name:** Charles Privette  
**Date:** 09/16/2015    **Number:** 8211

*Mr. [Signature]*

9/28/15 000008

Chair, Department Curriculum Committee

Date

*Patricia J. Zingari*

28 Sept 2015

Department Chair

Date

*Robert J. Kowinski*

10/8/15

Chair, College Curriculum Committee

Date

*Joel Whitcomb*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

10/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert W. Jones*

2/11/16

Provost

Date

President

Date



000009

### Change Undergraduate Course

**Change a Course**

**Subject:** AGM-Agricultural Mechanization  
**Number:** 3031  
**Effective Term:** Spring 2016  
**Title:** Cal for Mech Ag Lab  
**Honors Course:**  
 Add Honors Course:  
**Last Term Course was taught:** 999999

**Brief Statement of Change Based on Assessment Results:**

This is a sophomore level lab and thus a sophomore numeric (2000 level) is more appropriate than a 3000 level identifier.

**Change Number**

**To** 2201

**Change Prerequisite(s) / Corequisite(s)**

**From** Coreq 3030  
**To** Coreq 2200

**Learning Objectives**

This lab enhances the problem solving ability of the student and exposes them to a range of problems requiring an understanding of electricity, fluid mechanics, heat transfer, and psychrometric properties of air. Systematic problem solving techniques which include neat, accurate, and well-organized presentation of the solution will be emphasized. Laboratory time will be used to introduce students to problem analysis using MS Excel spreadsheet software.

**Topical Outline**

W1 1. Excel Tutorial Exercise W2 2. Calculation of Pressure Drop Across a Steel Pipe W3 3. Calculation of Vectors by Method of Components W4 4. Calculation of Miscellaneous Facts W5 5. Calculation of Drawbar Power and Fuel Required for Moldboard Plowing at Different Speeds W6 6. Calculation of Work and Power Required for a Combination of Forces - Part I W7 7. Calculation of Work and Power Required for a Combination of Forces - Part II W8 8. Unit and Number Conversion W9 9. Least-Cost Configuration of Cylindrical Storage Tank W10 ----- Spring Break ----- W11 10. Calculation of Heat Gain or Loss Through Building Components W12 11. Fitting Curves to Experimental Data Points W13 12. Calculation of Heat Balance for Mechanically Ventilated Turkey Rearing Structure W14 13. Calculation of Loan and Mortgage W15 14. Programming Macros and VBA

**Evaluation**

Undergraduate

**A** 90 - 100  
**B** 80 - 89  
**C** 70 - 79  
**D** 60 - 69  
**F** < 60

Each week's lab assignments will be weighted equally.

**Syllabus**

Upload File: AGM\_3030\_HanY\_Spring\_2016-20150814134229.docx

**Description:** AGM 2200 Syllabus

**Form**

**User ID:** privett **Name:** Charles Privette  
**Date:** 10/09/2015 **Number:** 8212

*[Handwritten Signature]*

9/28/15 000010

Chair, Department Curriculum Committee

Date

*Patricia Zungohi*

28 Sept 2015

Department Chair

Date

*Robert J. Kowinski*

10/19/15

Chair, College Curriculum Committee

Date

*Zed Whittevel*

10/16/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert S. Jones*

2/11/2016

Provost

Date

President

Date

# Change Undergraduate Course

000011

## Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 4020  
**Effective Term:** Spring 2016  
**Title:** Landscape Drainage and Irrig  
**Honors Course:**  
 Add Honors Course:  
**Last Term Course was taught:** 201501

### Brief Statement of Change Based on Assessment Results:

Since AGM 3010 no longer covers irrigation topics, this prerequisite is no longer needed. However, due to the extensive calculations involved, junior /senior level standing is required. This allows additional majors to be able to take this course as requested.

### Change Catalog Title

**From** Land Drainage and Irrigation  
**To** Irrigation System Design

### Change Transcript Title

**From** Landscape Drainage and Irrig  
**To** Irrigation System Design

### Change Catalog Description

**From** Use basic soil-water-plant relationships to determine the need for and methods of irrigation and drainage. Topics include irrigation methods, drainage needs and drainage methods.  
**To** Use basic soil-water-plant relationships to determine the need for and methods of irrigation. Topics include irrigation methods, irrigation requirements, system components including pipe and pump sizing, and system design.

### Change Prerequisite(s) / Corequisite(s)

**From** Prereq AGM 3010. Coreq AGM 4021  
**To** Prereq junior/senior standing. Coreq AGM 4021.

### Learning Objectives

The student will demonstrate ability to: • Perform calculations as related to pipe flow, friction loss, pipe sizing, and pump selection. • Design irrigation systems for various uses such as residential lawns and landscaping, turf grass, agricultural crops, etc. • Identify various components of an irrigation system.

### Topical Outline

Week Lab Exercise Lab Location Tuesday Thursday Jan 7th Introduction to Course Jan 12-14 Ch 1 Irrigation Systems (Turf) Ch 1 Irrigation Systems (Ag) Jan 19-22 No Lab – MLK Day Ch 2 Soil Properties Ch 2 Soil Properties Jan 26-29 Lab 1: Soil Moisture Ch 2 Plant Requirements Evapotranspiration Feb 2-5 Lab 2: Soil Properties Ch 3 Water Sources & Precipitation Rates Ch 4 Efficiency and Uniformity Feb 9-12 Lab 3: Soil Infiltration Ch 6 Irrigation Components 'EST' 1 Feb 16-19 Lab 4: Uniformity Ch 7 Irrigation Pipe Types Ch 8 Hydraulics of Irrigations Systems – Terms and Energy Feb 23-26 Lab 5: Product Identification Hydraulics of Irrigations Systems –Friction Loss Hydraulics of Irrigations Systems –Friction Loss Mar 2-5 Lab 6: Drip/Micro Systems Hydraulics of Irrigations Systems –Pipe Sizing Hydraulics of Irrigations Systems –Pipe Sizing - Examples Mar 9-12 Field trip #1: TBA Hydraulics of Irrigations Systems –Pipe Sizing - Examples Ch 9 Pumps – Types and Terms Mar 16-19 Spring Break Mar 23-26 Lab 7: Sprinkler Systems Pumps – Sizing Pumps – Sizing Example Mar 31-Apr 3 Field Trip #2: TBA Test 2 Hydraulics and Pumps Systems Design Apr 6-9 Lab 8: Hydraulics/Pumps/ System Systems Design Ch 10 Wire Sizing/Controllers Apr 13-16 Field Trip #3: TBA Ch 5 Irrigation Scheduling Misc. Topics (Chemigation, Fertigation, Filters etc) Apr 20-23 Semester Project Presentations Finals Review Semester Project Presentations Apr 27- Finals Week – Final Exam Friday May 1, 7:30 PM

### Evaluation

**Undergraduate**  
**A** 90 - 100  
**B** 80 - 89  
**C** 70 - 79  
**D** 60 - 69  
**F** < 60

10% - Class participation, Attendance, Homework, Quizzes 20% - Semester Project 45 % Hour tests/final exam 25 % Lab

000012

**Syllabus**

Upload File: AGM 402 Syllabus 2016-20150814134117.docx

Description: AGM 4020

**Form**

User ID: privett Name: Charles Privette

Date: 10/07/2015 Number: 8209

*M. D. Paul*

9/28/15 03013

Chair, Department Curriculum Committee

Date

*Patricia Zucchi*

28 Sept 2015

Department Chair

Date

*Robert J. Kasinski*

10/8/15

Chair, College Curriculum Committee

Date

*Zed Whitman*

10/8/15

College Chair

Date

Director, Calhoun Honors College

Date

*John D. Hill*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert G. Jones*

2/11/16

Provost

Date

President

Date

303014

## Change Undergraduate Course

### Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 4050  
**Effective Term:** Spring 2016  
**Title:** Env Cont in Anim Str

**Honors Course:**

Add Honors Course:

**Last Term Course was taught:** 201408

#### Brief Statement of Change Based on Assessment Results:

These prerequisites provide the students with a basis for problem solving and computer calculation skills required of this course.

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Change Prerequisite(s) / Corequisite(s)

**From** Prereq AGM 3030 or AVS 3010. Coreq  
AGM 4051  
**To** Prereq AGM 2190 and 2200. Coreq  
AGM 4051

### Form

**User ID:** privett    **Name:** Charles Privette  
**Date:** 09/16/2015    **Number:** 8217

*M. S. Zil*

9/28/15 100015

Chair, Department Curriculum Committee

Date

*Spencer Zuzoli*

28 Sept 2015

Department Chair

Date

*Robert J. Kowinski*

10/8/15

Chair, College Curriculum Committee

Date

*Jed Whitmer*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert W. Jones*

2/11/2016

Provost

Date

President

Date

300016

## Change Undergraduate Course

### Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 4060  
**Effective Term:** Spring 2016  
**Title:** Mech & Hydraulic Sys  
**Honors Course:**

Add Honors Course:

**Last Term Course was taught:** 201408

#### Brief Statement of Change Based on Assessment Results:

Students may take PHYS 1220 instead of 2070. By adding this "or" prerequisite, it allows for students to take this course without having to provide overrides since they took the more advanced version of Physics.

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Change Prerequisite(s) / Corequisite(s)

**From** Prereq AGM 2060 and PHYS 2000 or 2070,  
Coreq 4061  
**To** Prereq AGM 2060 and PHYS 2000, 2070, or  
1220, Coreq 4061

### Form

**User ID:** privett    **Name:** Charles Privette  
**Date:** 09/16/2015    **Number:** 8216



*[Handwritten Signature]*

9/28/15 ~~JUN~~ 017

Chair, Department Curriculum Committee

Date

*[Handwritten Signature]*

28 Sept 2015

Department Chair

Date

*[Handwritten Signature]*

10/8/15

Chair, College Curriculum Committee

Date

*[Handwritten Signature]*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*[Handwritten Signature]*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*[Handwritten Signature]*

2/11/16

Provost

Date

President

Date

000018

## Change Undergraduate Course

### Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 4520  
**Effective Term:** Spring 2016  
**Title:** Mobile Power

**Honors Course:**

Add Honors Course:

**Last Term Course was taught:** 201501

#### Brief Statement of Change Based on Assessment Results:

Students may take PHYS 1220 instead of 2070. By adding this "or" prerequisite, it allows for students to take this course without having to provide overrides since they took the more advanced version of Physics.

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Change Prerequisite(s) / Corequisite(s)

**From** Prereq PHYS 2000 or 2070, Coreq  
AGM 4521  
**To** Prereq PHYS 2000, 2070 or 1220,  
Coreq AGM 4521

### Form

**User ID:** privett **Name:** Charles Privette  
**Date:** 09/16/2015 **Number:** 8215

*[Handwritten Signature]*

9/28/15 100019

Chair, Department Curriculum Committee Date

*Patricia Zuppi*

28 Sept 2015

Department Chair Date

*Robert J. Kowinski*

10/8/15

Chair, College Curriculum Committee Date

*Jed Whitman*

10/8/15

College Dean Date

Director, Calhoun Honors College Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

*Robert M. Jones*

2/11/16

Provost Date

President Date

303020

## Change Undergraduate Course

### Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 4600  
**Effective Term:** Fall 2016  
**Title:** Electrical Systems  
**Honors Course:**  
 Add Honors Course:  
**Last Term Course was taught:** 201408

#### Brief Statement of Change Based on Assessment Results:

This course involves extensive calculations used in agricultural electrical system designs. This prerequisite course provides the students with extensive calculation and problem solving skills required by AGM 4600.

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
  - Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Change Prerequisite(s) / Corequisite(s)

**From** Prereq junior standing Coreq 4601  
**To** Prereq junior standing, AGM 2200,  
Coreq 4601

### Form

**User ID:** privett    **Name:** Charles Privette  
**Date:** 09/16/2015    **Number:** 8213

*[Handwritten Signature]*

9/28/15 000021

Chair, Department Curriculum Committee

Date

*Patricia Zuppi*

28 Sept 2015

Department Chair

Date

*Robert J. Kocinski*

10/8/15

Chair, College Curriculum Committee

Date

*Jed Whitner*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert M. Jones*

2/11/2016

Provost

Date

President

Date

# Change Undergraduate Course

000022

## Change a Course

**Subject:** AGM-Agricultural Mechanization  
**Number:** 4720  
**Effective Term:** Spring 2016  
**Title:** Capstone

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

Since this is the Capstone design course for the Agricultural Mechanization and Business Program, these fundamental AGM courses are required for successfully completing the Capstone Course.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

**From** Coreq AGM 4721  
**To** Preq AGM 3010, 4000, 4020, 4050, 4060, 4520, and  
4600 Coreq 4721

## Form

**User ID:** privett    **Name:** Charles Privette  
**Date:** 10/07/2015    **Number:** 8210

*Max Paul*

9/28/15 000023

Chair, Department Curriculum Committee Date

*Patricia Zupoli*

28 Sept 2015

Department Chair Date

*Robert J. Kaminicki*

10/8/15

Chair, College Curriculum Committee Date

*Jed Whitwell*

10/8/15

College Dean Date

Director, Calhoun Honors College Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

*Robert T. Jones*

2/11/2016

Provost Date

President Date

000024

Change Major

Major Name: Agricultural Mech and Business

Degree: Bachelor of Science

Effective Catalog Year: 2016-2017

- Change Major Name to: AGME Curriculum Map: AGM 2016 Curriculum-20150827074044.docx
- Change Degree to: Bachelor of Science
- Change Curriculum Requirements Description: Proposed new curriculum reflecting changes.
- Change General Education Requirements
- Add, Change, or Delete Concentration(s) Additional Information:
- Add, Change, or Delete Emphasis Area(s) Description:

Summary/Explanation

We are proposing adding a "C" requirement on all AGM required courses and MTHSC 1020. Within the existing curriculum, we are switching the order of COMM requirement and STAT 2300. We are also switching AGM 4050 and 4600 to streamline when students take these courses. We are also dropping AGM 4190 from the curriculum as an option to AGM 4720. The last change is replacing AGM 3030 to AGM 2200 to reflect the course number change we have made with this course.

Rationale for Change Major

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Form

User ID: privett Name: Charles Privette  
Date: 09/16/2015 Number:



*[Handwritten signature]*

9/28/15 000025

Chair, Department Curriculum Committee

Date

*Patricia Zuzopli*

28 Sept 2015

Department Chair

Date

*Robert J. Kaminicki*

10/16/15

Chair, College Curriculum Committee

Date

*Jeal Whitman*

10/16/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert S. Jones*

2/11/16

Provost

Date

President

Date

test

**Agricultural Mechanization and Business 2016-17**

**Freshman Year**

First Semester			Second Semester		
AGM 1010	Intro. To Ag. Mech. and Business	1	ACCT 2010	Financial Accounting Concepts	3
AGM 2050	Principles of Fabrication	3	BIOL 1040	General Biology II	3
AGRB 2020	Agricultural Economics or	3	BIOL 1060	General Biology Lab. II	1
ECON 2110	Principles of Microeconomics <sup>1</sup>	3	STAT 2300	Statistical Methods I <sup>1</sup>	3
BIOL 1030	General Biology I	3	ENGL 1030	Accelerated Composition	3
BIOL 1050	General Biology Lab. I	1	Elective		3
MATH 1020	Intro. to Mathematical Analysis	3			
Semester Hours: 14			Semester Hours: 16		

**Sophomore Year**

First Semester			Second Semester		
AGM 2190	Agribusiness and Food Systems	3	AGM 2060	Machinery Management	3
AGM 2210	Surveying	3	AGM 2200	Calculations for Mechanized Agric.	3
CH 1010	General Chemistry	4	CH 1020	General Chemistry	4
ENGR 2080	Engineering Graphics and Machine Design or	2	Arts and Humanities (Literature) Requirement		
ENGR 2090	Introduction to Engineering Computer Graphics or	2	Plant/Crop Science Requirement <sup>2</sup>		
ENGR 2100	Comp. Aided Design/Engr. Apps.	2			
PHYS 2000	Introductory Physics or	4			
PHYS 2070	General Physics I and	3			
PHYS 2090	General Physics I Lab.	1			
Semester Hours: 16			Semester Hours: 16		

Comment [p1]: Course number change from AGM 303 to AGM 2200.

**Junior Year**

First Semester			Second Semester		
AGM 3010	Soil and Water Conservation	3	AGM 4020	Drainage and Irrigation	3
AGM 3190	Agribusiness Decision Analysis	3	AGM 4520	Mobile Power	3
AGM 4600	Electrical Systems	3			
AGM 4050	Environmental Control in Animal Structures	3	COMM 1500	Intro. to Human Comm. or	3
AGRB 3020	Economics of Farm Management or	3	COMM 2500	Public Speaking	3
MGT 2010	Principles of Management <sup>1,3</sup>	3	Arts and Humanities (Non-Lit.) Requirement <sup>4</sup>		
PES 2020	Soils	4	Minor Requirement <sup>5</sup>		
Semester Hours: 16			Semester Hours: 15		

Comment [p2]: Switched COMM requirement and STAT 2300 requirement.

**Senior Year**

First Semester			Second Semester		
AGM 4000	Senior Seminar in Agricultural Mechanization and Business	1	AGM 4100	Precision Agriculture Technology	3
AGM 4060	Mechanical and Hydraulic Systems	3	AGM 4720	Capstone or	3
AGM 4050	Environmental Control in Animal Structures	3			
AGM 4600	Electrical Systems	3	AGM 4190	Agribusiness Innov./Entrepre. <sup>6</sup>	3
AGRB 3190	Agribusiness Management or	3	Minor Requirement <sup>3</sup>		
MGT 2010	Principles of Management <sup>1,3</sup>	3	Plant/Crop <sup>2</sup> or Soil Science <sup>7</sup> Requirement		
MKT 3010	Principles of Marketing <sup>1</sup> or	3	Social Science Requirement <sup>4</sup>		
APEC 3090	Econ. of Agricultural Marketing	3			
Minor Requirement <sup>5</sup>					

Comment [p3]: Deleted AGM 419 Agribusiness Course as option.

Formatted Table

---

Semester Hours: 16

Semester Hours: 15

---

**Total – 124 Total Semester Hours**

**Note: All required AGM courses and MTHSC 1020 require a grade of "C" or better.**

<sup>1</sup> Required for students minoring in Business Administration.

<sup>2</sup> HORT 1010, 2100, 2110, 2120, 4050, (PES) 4330, 4550, 4560, PES 1040, 4050, 4210, 4220, 4230, (AGRB) 4260, PLPA 3100, 4060, 4110, or 4590. If applicable, these courses may also be used to satisfy minor requirement.

<sup>3</sup> MGT 2010 can count for either of the AGRB 3020 or 3190 requirement but not for both.

<sup>4</sup> See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness and three must satisfy the Science and Technology in Society Requirements.

<sup>5</sup> See CAFLS approved minors. If requirements for an approved minor have already been satisfied, this course may be any 3000-level (or higher) course from an approved program. Any required course in the curriculum can also be used to count towards minor requirements.

<sup>6</sup> AGM 4190 is a fall-only course. Students electing to take AGM 4190 must switch the course order with a fall listing.

<sup>7</sup> PES 4030, 4460, 4520, 4850, or 4900. If applicable, these courses may also be used to satisfy minor requirement.

000028

### Change 4000/6000 Course

#### Change a Course

**Subject:** PLPA-Plant Pathology  
**Number:** 4110/6110  
**Effective Term:** Summer 2016  
**Title:** Plant Disease Diagnosis I

Honors Course:  
 Add Honors Course:

**Last Term Course was taught:** 201505

**Brief Statement of Change Based on Assessment Results:**  
 Delete the "I" from the title as there is no "II".

#### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)  
correct title

**Change Catalog Title**

**From** Plant Disease Diagnosis I  
**To** Plant Disease Diagnosis

**Change Transcript Title**

**From** Plant Disease Diagnosis I  
**To** Plant Disease Diagnosis

#### Learning Objectives

Students will learn techniques for diagnosis of diseases of crops of economic importance in South Carolina. Diagnosis of important diseases of cotton, ornamental crops, peach, peanut, tobacco, forests, turfgrass, soybean, and vegetables will be covered.

#### Topical Outline

Introduction Plant Problem Clinic & Diagnosis Procedures Diseases of Ornamental Crops Diseases caused by Virus Diseases of Tomato & Cucurbits Disease of Peach Molecular Diagnostics Diseases of Forest Trees Diseases of Turfgrass Diseases of Tobacco Diseases of Soybean, Peanut, Cotton and Sorghum

#### Evaluation

4000

- A** 90 - 100
- B** 80 - 89
- C** 70 - 79
- D** 60 - 69
- F** < 60

Each unit is graded individually (10% each). Lab report (3-page) and presentation.

6000

- A** 90 - 100
- B** 80 - 89
- C** 70 - 79
- F** < 70

Each unit is graded individually (10% each). Lab report (5-page) and presentation.

**Syllabus**

Upload File: Syllabus 2015 Plant Disease Diagnosis final-20150911084016.pdf

**Description:** syllabus

000029

**Form**

**User ID:** pagudel    **Name:** Paula Agudelo

**Date:** 09/11/2015    **Number:** 10097

*[Handwritten Signature]*

9/28/15 10:30

Chair, Department Curriculum Committee

Date

*[Handwritten Signature]*

28 Sept 2015

Department Chair

Date

*[Handwritten Signature]*

10/8/15

Chair, College Curriculum Committee

Date

*[Handwritten Signature]*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*[Handwritten Signature]*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*[Handwritten Signature]*

2/11/2016

Provost

Date

President

Date

000031

## Change 4000/6000 Course

### Change a Course

**Subject:** PLPA-Plant Pathology  
**Number:** 4111/6111  
**Effective Term:** Summer 2016  
**Title:** Plant Disease Diagnosis I Lab  
 Honors Course:  
 Add Honors Course:  
**Last Term Course was taught:** 999999

**Brief Statement of Change Based on Assessment Results:**  
 Eliminate the "I" from the course title as there is no "II".

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)  
correct title

### Change Catalog Title

**From** Plant Disease Diagnosis I Lab  
**To** Plant Disease Diagnosis Lab

### Change Transcript Title

**From** Plant Disease Diagnosis I Lab  
**To** Plant Disease Diagnosis Lab

### Learning Objectives

Students will learn techniques for diagnosis of diseases of crops of economic importance in South Carolina. Diagnosis of important diseases of cotton, ornamental crops, peach, peanut, tobacco, forests, turfgrass, soybean, and vegetables will be covered.

### Topical Outline

Introduction Plant Problem Clinic & Diagnosis Procedures Diseases of Ornamental Crops Diseases caused by Virus Diseases of Tomato & Cucurbits Disease of Peach Molecular Diagnostics Diseases of Forest Trees Diseases of Turfgrass Diseases of Tobacco Diseases of Soybean, Peanut, Cotton and Sorghum

### Evaluation

4000

**A** 90 - 100  
**B** 80 - 89  
**C** 70 - 79  
**D** 60 - 69  
**F** < 60

Each unit is graded individually (10% each). Lab report (3-page) and presentation.

6000

**A** 90 - 100  
**B** 80 - 89  
**C** 70 - 79  
**F** < 70

Each unit is graded individually (10% each). Lab report (5-report) and presentation.

**Syllabus**

Upload File: Syllabus 2015 Plant Disease Diagnosis final-20150911084929.pdf

**Description:** syllabus

000032

**Form**

**User ID:** pagudel    **Name:** Paula Agudelo

**Date:** 09/11/2015    **Number:** 10101



*M. Full*

9/28/15 000033

Chair, Department Curriculum Committee

Date

*Patricia Zucapli*

28 Sept 2015

Department Chair

Date

*Robert J. Kowinski*

10/8/15

Chair, College Curriculum Committee

Date

*Ed Whitwell*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert R. Jones*

2/11/16

Provost

Date

President

Date

**Change Major**

**Major Name:** Conservation Biology  
**Degree:** Bachelor of Science  
**Effective Catalog Year:** 2016-2017

000034

- Change Major Name to:** CONB
- Change Degree to:** Bachelor of Science
- Change Curriculum Requirements**
- Change General Education Requirements**
- Add, Change, or Delete Concentration(s)**
- Add, Change, or Delete Emphasis Area(s)**

**Curriculum Map:** proposed-ENR-CB 2016-17 Curriculum Map-20150909105658.docx

**Description:** proposed 2016-17 curriculum map with changes highlighted

**Additional Information:** current-ENR-CB 2015-16 Curriculum Map-20150909105658.docx

**Description:** current 2015-16 curriculum map with entries to be changed highlighted

**Summary/Explanation**


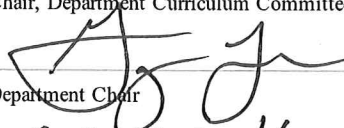


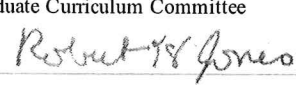
One of the current options for meeting the economics requirement, AGRB 2570 (formerly APEC 2570), is being deleted. We are changing our curriculum to allow AGRB 2020 instead, which covers fundamental concepts relevant to natural resource economics. Alternatively, students continue to have the option of taking ECON 2110. Either option satisfies the prerequisite for AGRB 3570 (formerly APEC 3570), which is required. We are updating our curriculum to show the current AGRB prefix for all former APEC courses.

**Rationale for Change Major**

- Strengthen Program Requirement(s)**
- Alignment of Student Learning Outcomes**
- Alternative Delivery of Content**
- Improve Time to Degree**
- Evolution of the Discipline**
- Changing Prerequisites**
- Address DWF Rates**
- General Education Modifications**
- Other (Please specify.)**

**Form**

**User ID:** alanj      **Name:** Alan Johnson  
**Date:** 09/09/2015      **Number:**

	Sept 24, 2015
Chair, Department Curriculum Committee	Date
	000035 9/24/15
Department Chair	Date
Robert J. Kowinski	10/16/15
Chair, College Curriculum Committee	Date
	10/8/15
College Dean	Date
Director, Calhoun Honors College	Date
	11/6/2015
Chair, Undergraduate Curriculum Committee	Date
Chair, Graduate Curriculum Committee	Date
	2/11/2016
Provost	Date
President	Date

Freshman Year					
First Semester			Second Semester		
BIOL 1030	General Biology I	3	BIOL 1040	General Biology II	3
BIOL 1050	General Biology Lab. I	1	BIOL 1060	General Biology Lab. II	1
CH 1010	Chemistry Requirement	4	CH 1020	Chemistry Requirement	4
MATH 1020	Intro. to Mathematical Analysis	3	STAT 2300	Statistical Methods I	3
ENR 1010	Intro to Environment & Natural Resources	1	ENGL 1030	Accelerated Composition	3
Oral Communication Requirement <sup>1</sup>		3	FNR 1020	FNR Freshman Portfolio	1
Semester Hours: 15			Semester Hours: 15		
Sophomore Year					
First Semester			Second Semester		
AGRB 2020 OR ECON 2110	Agricultural Economics Principles of Microeconomics	3	GEN 3000	Fundamental Genetics	3
BIOL 3200 + BIOL 3201	Field Botany	4	WFB 3130	Conservation Biology	3
OR		2	Physical Environment Requirement <sup>2</sup>		
FOR 2050 AND FOR 2210	Dendrology Forest Biology	3	Taxonomy/Habitat Requirement <sup>3</sup>		
FNR 2040 OR PES 2020	Soil Information Systems Soils	4	Arts and Humanities (Literature) Requirement <sup>1</sup>		
CH 2230	Organic Chemistry	3			
Semester Hours: 15			Semester Hours: 15		
Junior Year					
First Semester			Second Semester		
BIOL 3350	Evolutionary Biology	3	ENGL 3140	Technical Writing	3
Arts and Humanities (non-literature) Requirement <sup>1</sup>		3	ENR 3020	Natural Resources Measurements	3
Ecology Requirement <sup>4</sup>		3	Ecology Requirement <sup>4</sup>		
Natural Resource Economics Requirement <sup>5</sup>		3	Physiology Requirement <sup>6</sup>		
Taxonomy/Habitat Requirement <sup>3</sup>		3	Taxonomy/Habitat Requirement <sup>3</sup>		
Semester Hours: 15			Semester Hours: 15		
Senior Year					
First Semester			Second Semester		
Social Science Requirement <sup>1</sup>		3	ENR 4130	Restoration Ecology	3
FOR 4340	GIS for Landscape Planning	3	ENR 4500	Conservation Issues	3
Conservation Policy/Law Requirement <sup>7</sup>		3			
Internship, Creative Inquiry or Directed Research <sup>8</sup>		3	Taxonomy/Habitat Requirement <sup>3</sup>		
Taxonomy/Habitat Requirement <sup>3</sup>		3	Elective		
Semester Hours: 15			Semester Hours: 15		

**120 Total Semester Hours**

<sup>1</sup> See General Education Requirements. Three of these credits must also satisfy the Cross-Cultural Awareness Requirement. (Note: Social Science Requirement must be in an area other than economics or applied economics)

<sup>2</sup> GEOL 1010, or PHYS 2400

<sup>3</sup> AGM 3010, BIOL 3020/3060, 3030/3070, 3040/3080, 3050/3090, 3200, 4060/4070, 4100/4110, 4170, 4420, 4640, 4680, 4720, 4770, 4860, ENT (BIOL) 3010, (ENT, WFB) 4690, FOR 2510, 4060, GEOL 1120,

1140, 2100, 4030, MICRO 4030, WFB 3000, 4180, 4400, 4620 or 4760. At least four of the courses must be laboratories or courses with a required laboratory component.

<sup>4</sup> BIOL 4410, 4420, 4430, 4460, 4700, or FNR 4660

<sup>5</sup> AP EC 4750, CRD (AP EC) 3570, or FOR 3040

<sup>6</sup> AVS 3010+3011, BIOL 4010/4020, 4580, 4750, or (AVS) 4800

<sup>7</sup> ENR 4290, FOR 4160 or WFB 4300

<sup>8</sup> Internship (FNR 4900), Creative Inquiry (FNR 4700), Directed Research (WFB 4630) or FNR 4910 Senior Honors Thesis

**Environmental and Natural Resources – Conservation Biology Concentration**

2015-16

Freshman Year					
First Semester			Second Semester		
BIOL 1030	General Biology I	3	BIOL 1040	General Biology II	3
BIOL 1050	General Biology Lab. I	1	BIOL 1060	General Biology Lab. II	1
CH 1010	Chemistry Requirement	4	CH 1020	Chemistry Requirement	4
MATH 1020	Intro. to Mathematical Analysis	3	STAT 2300	Statistical Methods I	3
ENR 1010	Intro to Environment & Natural Resources	1	ENGL 1030	Accelerated Composition	3
Oral Communication Requirement <sup>1</sup>		3	FNR 1020	FNR Freshman Portfolio	1
Semester Hours: 15			Semester Hours: 15		
Sophomore Year					
First Semester			Second Semester		
AP EC 2570 OR ECON 2110	Natural Resources, Environment & Economics Principles of Microeconomics	3	GEN 3000	Fundamental Genetics	3
BIOL 3200 + BIOL 3201	Field Botany	4	WFB 3130	Conservation Biology	3
OR			Physical Environment Requirement <sup>2</sup>		
FOR 2050 AND FOR 2210	Dendrology Forest Biology	2 3	Taxonomy/Habitat Requirement <sup>3</sup>		
FNR 2040 OR PES 2020	Soil Information Systems Soils	4	Arts and Humanities (Literature) Requirement <sup>1</sup>		
CH 2230	Organic Chemistry	3			
Semester Hours: 15			Semester Hours: 15		
Junior Year					
First Semester			Second Semester		
BIOL 3350	Evolutionary Biology	3	ENGL 3140	Technical Writing	3
Arts and Humanities (non-literature) Requirement <sup>1</sup>		3	ENR 3020	Natural Resources Measurements	3
Ecology Requirement <sup>4</sup>		3	Ecology Requirement <sup>4</sup>		
Natural Resource Economics Requirement <sup>5</sup>		3	Physiology Requirement <sup>6</sup>		
Taxonomy/Habitat Requirement <sup>3</sup>		3	Taxonomy/Habitat Requirement <sup>3</sup>		
Semester Hours: 15			Semester Hours: 15		
Senior Year					
First Semester			Second Semester		
Social Science Requirement <sup>1</sup>		3	ENR 4130	Restoration Ecology	3
FOR 4340	GIS for Landscape Planning	3	ENR 4500	Conservation Issues	3
Conservation Policy/Law Requirement <sup>7</sup>		3			
Internship, Creative Inquiry or Directed Research <sup>8</sup>		3	Taxonomy/Habitat Requirement <sup>3</sup>		
Taxonomy/Habitat Requirement <sup>3</sup>		3	Elective		
Semester Hours: 15			Semester Hours: 15		

**120 Total Semester Hours**

<sup>1</sup> See General Education Requirements. Three of these credits must also satisfy the Cross-Cultural Awareness Requirement. (Note: Social Science Requirement must be in an area other than economics or applied economics)

<sup>2</sup> GEOL 1010, or PHYS 2400

<sup>3</sup> AGM 3010, BIOL 3020/3060, 3030/3070, 3040/3080, 3050/3090, 3200, 4060/4070, 4100/4110, 4170, 4420, 4640, 4680, 4720, 4770, 4860, ENT (BIOL) 3010, (ENT, WFB) 4690, FOR 2510, 4060, GEOL 1120,

1140, 2100, 4030, MICRO 4030, WFB 3000, 4180, 4400, 4620 or 4760. At least four of the courses must be laboratories or courses with a required laboratory component.

<sup>4</sup> BIOL 4410, 4420, 4430, 4460, 4700, or FNR 4660

<sup>5</sup> AP EC 4750, CRD (AP EC) 3570, or FOR 3040

<sup>6</sup> AVS 3010+3011, BIOL 4010/4020, 4580, 4750, or (AVS) 4800

<sup>7</sup> ENR 4290, FOR 4160 or WFB 4300

<sup>8</sup> Internship (FNR 4900), Creative Inquiry (FNR 4700), Directed Research (WFB 4630) or FNR 4910 Senior Honors Thesis

**Change Major**

**Major Name:** Natural Resources Management

000040

**Degree:** Bachelor of Science

**Effective Catalog Year:** 2016-2017

**Change Major Name to:** NRMG

**Curriculum Map:** proposed-ENR-NRM 2016-17 Curriculum Map-20150909110517.docx

**Change Degree to:** Bachelor of Science

**Description:** proposed 2016-17 curriculum map with change highlighte

**Change Curriculum Requirements**

**Additional Information:** current-ENR-NRM 2015-16 Curriculum Map-20150909110517.docx

**Change General Education Requirements**

**Description:** current 2015-16 curriculum map with item to be changed highlighted

**Add, Change, or Delete Concentration(s)**

**Add, Change, or Delete Emphasis Area(s)**

**Summary/Explanation**

One of the current course options for meeting the economics requirement, AGRB 2570 (formerly APEC 2570), is being deleted. We are changing our curriculum to allow AGRB 2020 instead, which covers fundamental concepts relevant to natural resource economics. Alternatively, students continue to have the option of taking ECON 2110.

**Rationale for Change Major**

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

**Form**

**User ID:** alanj      **Name:** Alan Johnson  
**Date:** 09/09/2015      **Number:**



*[Signature]*  
Chair, Department Curriculum Committee      *Sept 24 2015*  
**000041**      Date

*[Signature]*  
Department Chair      *9/24/15*      Date

*[Signature]*  
Chair, College Curriculum Committee      *10/8/15*      Date

*[Signature]*  
College Dean      *10/8/15*      Date

Director, Calhoun Honors College      Date

*[Signature]*  
Chair, Undergraduate Curriculum Committee      *11/6/2015*      Date

Chair, Graduate Curriculum Committee      Date

*[Signature]*  
Provost      *2/11/2016*      Date

President      Date

# Environmental and Natural Resources – Natural Resources Management Concentration

2016-17 (proposed)

Freshman Year					
First Semester			Second Semester		
BIOL 1030	General Biology I	3	BIOL 1040	General Biology II	3
BIOL 1050	General Biology Lab. I	1	BIOL 1060	General Biology Lab. II	1
CH 1050 OR 1010	Chemistry Requirement <sup>1</sup>	4	CH 1060 OR 1020	Chemistry Requirement <sup>1</sup>	4
MATH 1020	Intro. to Mathematical Analysis	3	STAT 2300	Statistical Methods I	3
ENR 1010	Intro to Environment & Natural Resources I	1	ENGL 1030	Accelerated Composition	3
Oral Communication Requirement <sup>2</sup>		3	FNR 1020	FNR Freshman Portfolio	1
Semester Hours: 15			Semester Hours: 15		
Sophomore Year					
First Semester			Second Semester		
FNR 2040+2041 OR PES 2020+2021	Soil Information Systems Soils	4	ENR 3020	Natural Resources Measurements	3
FOR 2050+2051	Dendrology	2	FOR 2060	Forest Ecology	3
FOR 2210	Forest Biology	3	WFB 3500	Principles of Fish & Wildlife Biology	3
WFB 3000	Wildlife Biology	3	Arts and Humanities (Non-Lit) Requirement <sup>2</sup>		3
Arts and Humanities (Literature) Requirement <sup>2</sup>		3	Social Science Requirement <sup>2</sup>		3
Semester Hours: 15			Semester Hours: 15		
Junior Year					
First Semester			Second Semester		
AGRB 2020 OR ECON 2110	Agricultural Economics Principles of Microeconomics	3	AGRB 3570	Natural Resources Economics	3
BIOL 3200 OR BIOL 4060 AND BIOL 4070	Field Botany Introductory Plant Taxonomy Plant Taxonomy Lab	4 3 1	GEOL 1010	Physical Geology	3
ENR 4290 OR	Environmental Law and Policy	3	GEOL 1030	Physical Geology Laboratory	1
Elective		3	WFB 3130	Conservation Biology	3
Minor <sup>3</sup>		3	Minor <sup>3</sup>		6
Semester Hours: 16			Semester Hours: 16		
Senior Year					
First Semester			Second Semester		
FOR 4160	Forest Policy and Admin.	3	ENGL 3140	Technical Writing	3
FOR 4340	GIS for Landscape Planning	3	ENR 4500	Conservation Issues	3
Internship, Creative Inquiry or Directed Research <sup>4</sup>		3	FOR 4060	Forested Watershed Management	2
Elective		3			
Minor <sup>3</sup>		3			
Semester Hours: 15			WFB 4620	Wetland Wildlife Biology	3
			Minor <sup>3</sup>		3
			Semester Hours: 14		

### 121 Total Semester Hours

<sup>1</sup> Conservation Biology Concentration or students planning on taking organic chemistry must take CH 1010 and CH 1020 and must satisfy the General Education Science and Technology in Society Requirement through another course.

<sup>2</sup> See General Education Requirements. Three of these credits must also satisfy the Cross-Cultural Awareness Requirement. (Note: Social Science Requirement must be in an area other than economics or applied economics.)

1140, 2100, 4030, MICRO 4030, WFB 3000, 4180, 4400, 4620 or 4760. At least four of the courses must be laboratories or courses with a required laboratory component.

<sup>4</sup> BIOL 4410, 4420, 4430, 4460, 4700, or FNR 4660

<sup>5</sup> AGRB 4750, AGRB 3570, or FOR 3040

<sup>6</sup> AVS 3010+3011, BIOL 4010/4020, 4580, 4750, or (AVS) 4800

<sup>7</sup> ENR 4290, FOR 4160 or WFB 4300

<sup>8</sup> Internship (FNR 4900), Creative Inquiry (FNR 4700), Directed Research (WFB 4630) or FNR 4910 Senior Honors Thesis

- <sup>3</sup> Minor: A minor is req. & must be selected from the following: Biochem.; Biol. Sci.; Chem.; Crop & Soil Env. Sci.; Env. Sci. & Pol.; For, Res. Mgmt.; Geol.; Hort.; Legal Studies; Microbiol.; Nat. Res. Econ.; Nonprofit Leadership; Park & Protected Area Mgmt.; Therapeutic Rec.; Travel & Tourism; Urban For.; Wildlife & Fisheries Biol.
- <sup>4</sup> Internship (FNR 4900), Creative Inquiry (FNR 4700), or Directed Research (WFB 4630 or FNR 4910)

# Change Undergraduate Course

000045

## Change a Course

Subject: BIOL-Biology  
Number: 1010  
Effective Term: Fall 2016  
Title: Frontiers in Biology I

Honors Course:

Add Honors Course:

Last Term Course was taught: 201408

### Brief Statement of Change Based on Assessment Results:

We wish to alter the course description to reflect recent content, and we wish to add prerequisites for the course.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Catalog Description

**From** Introduces Biological Sciences majors to University career and library services, evaluation of computer program proficiency, Web page development, Biological Sciences emphasis areas, and Biological Sciences faculty. Students initiate their own Web-based student portfolios, which showcase their skills and experiences (e.g., résumés, accomplishments, and work samples) during their undergraduate programs.

**To** Introduces Biological Sciences majors to the Biological Sciences Advising Center, curricula, pre-professional health advisors, University career services, and the department's faculty.

## Change Prerequisite(s) / Corequisite(s)

**From** None

**To** Preq or concurrent enrollment: BIOL 1030 and BIOL 1050; or BIOL 1100.

## Learning Objectives

1. Students will demonstrate proficiency using Excel.
2. Students will demonstrate the ability to critically analyze topics in biology.

## Topical Outline

Introduction, Critical Thinking Assessment Test (CAT), how to analyze a scientific paper, how to analyze experimental data, Blackboard, medical schools, Bio Sci Advising Center, Bookhart Student Services Center, Bio Sci faculty presentations.

## Evaluation

Undergraduate

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F < 60

12 quizzes, each 1/12 of the grade.

## Syllabus

Upload File: BIOL 1010 Syllabus-20150914164521.pdf

**Description:** BIOL 1010 Syllabus

**Form**

**User ID:** rjksn      **Name:** Robert Kosinski

**Date:** 09/14/2015      **Number:** 10289

000046

*Robert J. Kasinski*  
Chair, Department Curriculum Committee

9/22/15

000047

Date

*Robert Cohn*

9/22/15

Department Chair

Date

*Robert J. Kasinski*  
Chair, College Curriculum Committee

10/8/15

Date

*Zed Whitwell*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert V. Jones*

2/11/2016

Provost

Date

President

Date



# Change Undergraduate Course

000048

## Change a Course

**Subject:** BIOL-Biology  
**Number:** 3040  
**Effective Term:** Spring 2016  
**Title:** Biology of Plants

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are changing prerequisites to ensure that the lecture (BIOL 3040) and lab (BIOL 3080) are taken together, and that students cannot drop the lab and remain in the lecture.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

**From** BIOL 1040 and 1060; or BIOL 1110. Preq. or concurrent enrollment; BIOL 3080.  
**To** BIOL 1040 and 1060; or BIOL 1110. Coreq: BIOL 3080.

## Form

**User ID:** rjksn      **Name:** Robert Kosinski  
**Date:** 09/21/2015      **Number:** 10659



*Robert J. Kosinski* 9/22/15  
Chair, Department Curriculum Committee 000049 Date

*R. D. Cohn* 9/22/15  
Department Chair Date

*Robert J. Kosinski* 10/8/15  
Chair, College Curriculum Committee Date

*Dee Whitman* 10/8/15  
College Dean Date

Director, Calhoun Honors College Date

*John D. Hoff* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

*Robert Y. Jones* 2/11/2016  
Provost Date

President Date



# Change Undergraduate Course

000050

## Change a Course

Subject: BIOL-Biology  
Number: 3080  
Effective Term: Spring 2016  
Title: Biology of Plants Practicum

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are changing prerequisites to ensure that the lecture (BIOL 3040) and lab (BIOL 3080) are taken together, and that students cannot drop the lab and remain in the lecture.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

From Preq. or concurrent enrollment: BIOL 3040.  
To Coreq: BIOL 3040.

## Form

User ID: rjksu Name: Robert Kosinski  
Date: 09/21/2015 Number: 10662

Robert J. Kocinski

Chair, Department Curriculum Committee

9/22/15

Date

Robert Cohn

JO.051  
9/22/15

Department Chair

Date

Robert J. Kocinski

Chair, College Curriculum Committee

10/8/15

Date

Jill Whitwell

College Dean

10/8/15

Date

Director, Calhoun Honors College

Date

John D. Stiff

11/6/2015

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

Robert S. Jones

2/11/16

Provost

Date

President

Date



# Change Undergraduate Course

000052

## Change a Course

**Subject:** BIOL-Biology  
**Number:** 2300  
**Effective Term:** Fall 2016  
**Title:** Emergency Medical Responder

Honors Course:

Add Honors Course:

**Last Term Course was taught:** 201501

### Brief Statement of Change Based on Assessment Results:

We wish to add a requirement that students secure the permission of the instructor before registering for the course.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

**From** BIOL 103, 104, 105, and 106; or BIOL 1100 and 1110  
**To** BIOL 103, 104, 105, and 106; or BIOL 1100 and 1110. Enrollment requires permission of the instructor.

## Form

**User ID:** rjksn      **Name:** Robert Kosinski  
**Date:** 10/16/2015      **Number:** 11990

*Robert J. Kosinski*  
Chair, Department Curriculum Committee

10/6/15

Date

000053

*Robert Oplum*  
Department Chair

10/7/15

Date

*Robert J. Kosinski*  
Chair, College Curriculum Committee

10/16/15

Date

*Zed Weitzel*  
College Dean

10/15/15

Date

Director, Calhoun Honors College

Date

*John D. Hill*  
Chair, Undergraduate Curriculum Committee

11/6/2015

Date

Chair, Graduate Curriculum Committee

Date

*Robert W. Jones*  
Provost

2/11/2016

Date

President

Date



# Change Undergraduate Course

00054

## Change a Course

**Subject:** BIOL-Biology  
**Number:** 3200  
**Effective Term:** Fall 2016  
**Title:** Field Botany

Honors Course:

Add Honors Course:

**Last Term Course was taught:** 201501

### Brief Statement of Change Based on Assessment Results:

We wish to add prerequisites and change the description to reflect the fact that the course no longer has weekend field trips.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Catalog Description

**From** Introductory study of the taxonomy, ecology, and evolution of plants in their natural environment with an emphasis on identification and characteristics of representative species and plant communities in the Carolinas. Includes one or two required Saturday field trips.  
**To** Introductory study of the taxonomy, ecology, and evolution of plants in their natural environment with an emphasis on identification and characteristics of representative species and plant communities in the Carolinas.

## Change Prerequisite(s) / Corequisite(s)

**From** Coreq: BIOL 3201  
**To** Preq: BIOL 1040 and BIOL 1060 or BIOL 1110.  
Coreq: BIOL 3201

## Learning Objectives

The student will: § Identify the morphological features of plants used in plant identification. § Apply their knowledge of the parts of the plant to develop identification skills. § Apply their knowledge of dichotomous keys. § Develop an understanding of the binomial system of plant nomenclature. § Apply their identification skills to properly identify plant communities of the region. § Recognize prominent plant families in the flora of South Carolina

## Topical Outline

Vegetative Terminology, Flower Morphology, Taxonomic Keys, Fruits, Seeds and Seed Dispersal, Evolution of Plants, Botanical Nomenclature, Representative Plant Communities of SC, Representative Plant Families of SC. Previews of trips to Lake Issaqueena, Stumphouse Tunnel, Whiteside Mountain, Station Cove, Whitewater Falls, Buzzard's Roost, Chau Ram County Park, Glassy Mountain.

## Evaluation

Undergraduate

**A** 90 - 100  
**B** 80 - 89  
**C** 70 - 79  
**D** 60 - 69  
**F** < 60

Four exams, each 25% of the grade. An optional comprehensive final can replace one grade.

## Syllabus

Upload File: BIOL 3200 Syllabus-20150914171138.pdf

000055

**Form**

**User ID:** rjksn      **Name:** Robert Kosinski

**Date:** 09/14/2015      **Number:** 10291

*Robert J. Kocinski* 9/22/15  
Chair, Department Curriculum Committee Date

*Robert Cyhan* 000056  
Department Chair Date  
9/22/15

*Robert J. Kocinski* 10/15/15  
Chair, College Curriculum Committee Date

*Jed Whitman* 10/8/15  
College Dean Date

Director, Calhoun Honors College Date

*John D. Stiff* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

*Robert S. Jones* 2/11/16  
Provost Date

President Date





# Change Undergraduate Course

000057

## Change a Course

**Subject:** BIOL-Biology  
**Number:** 3400  
**Effective Term:** Fall 2016  
**Title:** Medical Botany

Honors Course:

Add Honors Course:

Last Term Course was taught: 201505

**Brief Statement of Change Based on Assessment Results:**  
We are adding BIOL 1110 to the possible list of prerequisites.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

**From** BIOL 1040 and BIOL 1060 and CH 1020.  
**To** BIOL 1040 and BIOL 1060; or BIOL 1110;  
and CH 1020.

## Form

**User ID:** rjksn      **Name:** Robert Kosinski  
**Date:** 09/14/2015      **Number:** 10296

*Robert J. Kowinski* 9/22/15  
Chair, Department Curriculum Committee Date

*Robert Cohen* 000058  
9/22/15  
Department Chair Date

*Robert J. Kowinski* 10/8/15  
Chair, College Curriculum Committee Date

*Geel Whitbeck* 10/8/15  
College Dean Date

Director, Calhoun Honors College Date

*John D. Hillpi* 11/6/2018  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

*Robert W. Jones* 2/11/16  
Provost Date

President Date



# Change Undergraduate Course

000059

## Change a Course

Subject: BIOL-Biology  
Number: 3510  
Effective Term: Fall 2016  
Title: Biological Anthropology

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are adding BIOL 1040 and 1060 to the prerequisite option list.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

## Change Prerequisite(s) / Corequisite(s)

From: Preq: ANTH 2010 or BIOL 1100.  
To: Preq: ANTH 2010; or BIOL 1040 and BIOL 1060;  
or BIOL 1100.

## Form

User ID: rjksn Name: Robert Kosinski  
Date: 09/21/2015 Number: 10297

*Robert J. Kasinski*  
Chair, Department Curriculum Committee  
000060 9/22/15 Date

*Robert Cohen*  
Department Chair  
9/22/15 Date

*Robert J. Kasinski*  
Chair, College Curriculum Committee  
10/8/15 Date

*Zed Whitwell*  
College Dean  
10/8/15 Date

Director, Calhoun Honors College  
Date

*John D. Hillfi*  
Chair, Undergraduate Curriculum Committee  
11/6/2015 Date

Chair, Graduate Curriculum Committee  
Date

*Robert S. Jones*  
Provost  
2/11/16 Date

President  
Date



# Change Undergraduate Course

000061

## Change a Course

**Subject:** BIOL-Biology  
**Number:** 4910  
**Effective Term:** Fall 2016  
**Title:** Undergrad Research in Biol Sci

Honors Course:

Add Honors Course:

**Last Term Course was taught:** 201505

### Brief Statement of Change Based on Assessment Results:

We are correcting an error in the published contact hours. BIOL 4910 is a lab course, and has 1-4 credit hours. It should have 3-12 contact hours instead of the published 1-6 contact hours.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Correcting an error in the published contact hours.

## Change of Credit

From

Fixed Credit Course

**Credit Hrs Contact Hrs**

Variable Credit Course

Credit Hrs Contact Hrs

**Min Max Min Max**

1 4 1 6

To

Fixed Credit Course

**Credit Hrs Contact Hrs**

Variable Credit Course

Credit Hrs Contact Hrs

**Min Max Min Max**

1 4 3 12

## Learning Objectives

1) Understand and discuss the global importance and virulence mechanisms of *Entamoeba histolytica*... 2) Understand the general workings of a scientific research laboratory... 3) Perform tasks related to general laboratory maintenance (see below)... 4) Use sterile technique to maintain a culture of *Entamoeba*

## Topical Outline

In the project example below, the student was expected to work with other laboratory personnel to hone skills in lab maintenance tasks such as pipette tip racking, autoclave sterilization of consumables, dishwashing, biohazard waste disposal, water bath maintenance, inventory, management of -80 freezer, shower, eye-wash records, laboratory safety. The overall goal of his research project was to profile polyribosomes during stress in *E. histolytica*. The student also developed an abstract to be submitted for presentation at the third annual Cell Biology of Eukaryotic Pathogens conference.

## Evaluation

Undergraduate

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F < 60

000062

Because of the qualitative evaluation necessary, the grading scale was given as: A: EXCEPTIONAL PERFORMANCE; EXCEEDS EXPECTATIONS... B: SUCCESSFUL PERFORMANCE; MEETS EXPECTATIONS... C-D: PERFORMANCE NEEDS IMPROVEMENT... F (NP): UNSATISFACTORY PERFORMANCE

**Syllabus**

Upload File: BIOL 4910 Syllabus-20150921163042.pdf

**Form**

User ID: rjksn Name: Robert Kosinski

Date: 09/21/2015 Number: 10677

*Robert J. Kasinski* 9/22/15  
Chair, Department Curriculum Committee Date

*Robert Cohen* 000063  
Department Chair 9/22/15 Date

*Zed Whitbeck* 10/8/15  
Chair, College Curriculum Committee Date

*Robert J. Kasinski*  
College Dean Date

Director, Calhoun Honors College Date  
*John D. Stiffi* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date  
*Robert S. Jones* 2/11/16  
Provost Date

President Date



# Change Undergraduate Course

000064

## Change a Course

Subject: BIOL-Biology  
Number: 4950  
Effective Term: Fall 2016  
Title: Service Learning in Biology

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are correcting an error in the published contact hours. BIOL 4950 is always one contact hour but 2-4 credits. The companion lab is always zero credits but 3-9 contact hours. This totals to 2-4 credits for BIOL 4950, which is correct in the catalog. However, we wish to correct the contact hours of BIOL 4950 to 1. BIOL 4951's credits and contact hours are correct in the catalog.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications

Other (Please specify.)

Correcting an error in the published contact hours.

## Change of Credit

From

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

2 4 1 2

To

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

2 4 1 1

## Learning Objectives

In the section of BIOL 4950 whose syllabus appears below, the objectives were: To provide experience as an instructor in biology by having students assist with the laboratory course Biological Sciences 3070, the lab complement the Vertebrate Biology lecture course (Biosc 3030). This experience will allow students to achieve the following learning outcomes: • Learn how to provide guidance and answer questions on biological content... • Refine and reinforce knowledge of vertebrate diversity, form, function, and evolution by preparation and activities of an instructor.

## Topical Outline

Students in this case assisted the laboratory instructor with the lab activities in Vertebrate Biology.

## Evaluation



Undergraduate

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F < 60

78% from a weekly TA assessment...22% from an end-of-term reflective writing assignment

000065

**Syllabus**

Upload File: BIOL 4950 Syllabus-20150921175343.pdf

**Description:** Sample BIOL 4950 Syllabus

**Form**

**User ID:** rjksn      **Name:** Robert Kosinski

**Date:** 09/21/2015      **Number:** 10686

*Robert J. Kowinski* 9/22/13  
Chair, Department Curriculum Committee Date

*Robert Cohen* 9/22/15  
Department Chair Date

*Robert J. Kowinski* 10/8/15  
Chair, College Curriculum Committee Date

*Paul Whitwell* 10/8/15  
College Dean Date

Director, Calhoun Honors College  
*John D. Hippi* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee  
*Robert S. Jones* 2/11/16  
Provost Date

President Date



# Change Undergraduate Course

000067

## Change a Course

Subject: MICR-Microbiology  
Number: 4910  
Effective Term: Fall 2016  
Title: Research in Micro

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are correcting a mistake in the published contact hours. MICR 4910 is a lab course with 1-4 credits. It should have 3-12 contact hours per week, not 1-4 contact hours.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Correcting an error in the published contact hours.

## Change of Credit

From

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

1 4 1 4

To

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

1 4 3 12

## Learning Objectives

Learn the basics of microbiological research, including safety precautions, how to keep a laboratory notebook, how to make steady progress on a research project, participate in lab meetings and Journal Club, and present research in both oral and poster formats.

## Topical Outline

The topical outline will vary with the project selected, and will not be changing due to this contact hour change.

## Evaluation

Undergraduate

A 90 - 100

**B** 80 - 89

**C** 70 - 79

**D** 60 - 69

**F** < 60

000068

Due to the qualitative assessment necessary in research, the evaluation was described as follows: ...A - Excellent performance in lab and adherence to above requirements... B - Good performance in lab and adherence to above requirements... C - Satisfactory performance in lab and adherence to above requirements... D - Barely adequate performance in lab and adherence to above requirements... F - Poor performance in lab and adherence to above requirements

### Syllabus

Upload File: MICR 4910 Syllabus-20150921164451.pdf

**Description:** Sample Syllabus for MICR 4910

### Form

**User ID:** rjksn **Name:** Robert Kosinski

**Date:** 09/21/2015 **Number:** 10679

*Robert J. Kocinski* 9/22/15  
Chair, Department Curriculum Committee Date

*R Nat Cohen* 000069  
9/22/15 Date

Department Chair  
*Robert J. Kocinski* 10/8/15  
Chair, College Curriculum Committee Date

*Del Whitmore* 10/8/15  
College Dean Date

Director, Calhoun Honor College  
*John D. Stiffi* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee  
*Robert W. Jones* 2/11/16  
Provost Date

President

# Change Undergraduate Course

000070

## Change a Course

Subject: MICR-Microbiology

Number: 4920

Effective Term: Fall 2016

Title: Internship

Honors Course:

Add Honors Course:

Last Term Course was taught: 201408

### Brief Statement of Change Based on Assessment Results:

We are correcting an error in the published contact hours to make the Microbiology internship consistent with the Biological Sciences internship. We award 1 credit for every 45 hours of work in an approved internship, or about 1 credit per 3 hours per week. Therefore, on a weekly basis, the contact hours will be 3-12 hours for 1-4 credits. The credits are 0-4 because some students doing summer internships cannot afford to pay for summer credits.

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Correcting an error in the published contact hours.

### Change of Credit

From

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

0 4 1 4

To

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

0 4 3 12

### Learning Objectives

To apply the student's biological knowledge to real-world problems in a workplace setting. To reflect on how an employment experience has broadened his or her biological education.

### Topical Outline

Microbiology internships are extremely varied, and could range from time spent working in a dentist's office to working in a microbrewery. In all cases, the student will: locate an internship and prepare a list of objectives for the internship, make contact with a mentor at the internship site and agree on student duties, prepare a contract listing these duties with the mentor and forward the signed contract to Biological Sciences, carry out the internship, and submit a written final report evaluating which study plan objectives were achieved and what the student learned. The mentor must also submit an evaluation of the student, along with the mentor's suggestion on whether the student should pass or fail the internship.

**Evaluation**

Undergraduate

**A** 90 - 100**B** 80 - 89**C** 70 - 79**D** 60 - 69**F** < 60

0.071

The course is pass-fail. If the student files a contract, completes the study plan and the final report with adequate quality, and the mentor agrees, the grade will be "pass."

**Syllabus**

Upload File: Internship Contract 2015-20150921171515.pdf

**Description:** MICR Internship Contract**Form****User ID:** rjksn      **Name:** Robert Kosinski**Date:** 09/21/2015      **Number:** 10682

*Robert J. Kowinski* 9/22/15  
Chair, Department Curriculum Committee J00072 Date

*Robert Cohen* 9/22/15  
Department Chair Date

*Robert J. Kowinski* 10/8/15  
Chair, College Curriculum Committee Date

*Dee Whitwell* 10/8/15  
College Dean Date

Director, Calhoun Honors College  
*John D. Stiff* 11/6/2015 Date

Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee  
*Robert W. Jones* 2/11/16 Date

Provost Date

President Date





# Change Undergraduate Course

000073

## Change a Course

Subject: MICR-Microbiology

Number: 3940

Effective Term: Spring 2016

Title: Creative Inquiry I

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are correcting an error in the published contact hours. MICR 3940 (representing both lecture and lab) is 2-3 credits, but always one contact hour. MICR 3941 is zero credits but either 3 or 6 contact hours. This adds up to 2-3 credits. MICR 3941's contact hours are correct in the catalog.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Correcting an error in the published contact hours.

## Change of Credit

From

Fixed Credit Course

**Credit Hrs Contact Hrs**

Variable Credit Course

Credit Hrs Contact Hrs

**Min Max Min Max**

2 3 2 3

To

Fixed Credit Course

**Credit Hrs Contact Hrs**

Variable Credit Course

Credit Hrs Contact Hrs

**Min Max Min Max**

2 3 1 1

## Learning Objectives

Learn the basics of microbiological research, including safety precautions, how to keep a laboratory notebook, how to make steady progress on a research project, participate in lab meetings and Journal Club, and present research in both oral and poster formats.

## Topical Outline

The topical outline will vary with the project selected, and will not be changing due to this contact hour change.

## Evaluation

Undergraduate

A 90 - 100

B 80 - 89  
C 70 - 79  
D 60 - 69  
F < 60

000074

The syllabus contains published standards. For example, an A student will show excellent adherence to lab rules, will present data at 13-15 lab meetings, will have positive interactions with all lab members, will present at an SC ASM Branch Meeting, and will have an excellent research presentation. The other grades have progressively less performance as compared with this standard.

#### Syllabus

Upload File: MICR 3940 Syllabus-20150914180706.pdf

Description: Sample MICR 3940 Syllabus

#### Form

User ID: rjksn Name: Robert Kosinski  
Date: 09/21/2015 Number: 10301

*Robert J. Koumaki*  
Chair, Department Curriculum Committee

9/22/15

Date

*Robert Cohen*

000075  
9/22/15

Department Chair

Date

*Robert J. Koumaki*  
Chair, College Curriculum Committee

10/8/15

Date

*Zed Whitbeck*

10/8/15

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Hoff*  
Chair, Undergraduate Curriculum Committee

11/6/2015

Date

Chair, Graduate Curriculum Committee

Date

*Robert S. Jones*

2/11/16

Provost

Date

President

Date



# Change Undergraduate Course

000076

## Change a Course

Subject: MICR-Microbiology  
Number: 4940  
Effective Term: Fall 2016  
Title: Sel Topics in Creative Inq II

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are correcting an error in the published contact hours. MICR 4940 (representing both lecture and lab) is 2-3 credits, but always one contact hour. MICR 4941 is zero credits but either 3 or 6 contact hours. This adds up to 2-3 credits. MICR 4941's contact hours are correct in the catalog.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Correcting an error in the published contact hours.

## Change of Credit

From

Fixed Credit Course

**Credit Hrs Contact Hrs**

Variable Credit Course

Credit Hrs Contact Hrs

**Min Max Min Max**

2 3 1 3

To

Fixed Credit Course

**Credit Hrs Contact Hrs**

Variable Credit Course

Credit Hrs Contact Hrs

**Min Max Min Max**

2 3 1 1

## Learning Objectives

Learn the basics of microbiological research, including safety precautions, how to keep a laboratory notebook, how to make steady progress on a research project, participate in lab meetings and Journal Club, and present research in both oral and poster formats.

## Topical Outline

The topical outline will vary with the project selected, and will not be changing due to this contact hour change.

## Evaluation

Undergraduate

A 90 - 100

**B** 80 - 89

**C** 70 - 79

**D** 60 - 69

**F** < 60

000077

The syllabus contains published standards. For example, an A student will show excellent adherence to lab rules, will present data at 13-15 lab meetings, will have positive interactions with all lab members, will present at an SC ASM Branch Meeting, and will have an excellent research presentation. The other grades have progressively less performance as compared with this standard.

### Syllabus

Upload File: MICR 4940 Syllabus-20150921161716.pdf

**Description:** Sample MICR 4940 Syllabus

### Form

**User ID:** rjksn      **Name:** Robert Kosinski

**Date:** 09/21/2015      **Number:** 10674

*Robert J. Kowinski* 9/22/15  
Chair, Department Curriculum Committee 00078 Date

*Robert Cohen* 9/22/15  
Department Chair Date

*Robert J. Kowinski* 10/8/15  
Chair, College Curriculum Committee Date

*Ed Weitzner* 10/8/15  
College Dean Date

Director, Calhoun Honors College Date  
*John D. Hippi* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date  
*Robert S. Jones* 2/11/16  
Provost Date

President Date



# Change Undergraduate Course

0079

## Change a Course

Subject: MICR-Microbiology  
Number: 4950  
Effective Term: Fall 2016  
Title: Service Learning

Honors Course:

Add Honors Course:

Last Term Course was taught: 201501

### Brief Statement of Change Based on Assessment Results:

We are correcting an error in the published contact hours. MICR 4950 is always one contact hour but 2-4 credits. The companion lab is always zero credits but 3-9 contact hours. This totals to 2-4 credits for MICR 4950, which is correct in the catalog. However, we wish to correct the contact hours of MICR 4950 to 1. MICR 4951's credits and contact hours are correct in the catalog.

## Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

Correcting an error in the published contact hours.

## Change of Credit

From

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

2 4 1 2

To

Fixed Credit Course

Credit Hrs Contact Hrs

Variable Credit Course

Credit Hrs Contact Hrs

Min Max Min Max

2 4 1 1

## Learning Objectives

Students will gain teaching experience and improve their knowledge of microbiology by assisting in the teaching of MICR 3050 laboratories.

## Topical Outline

In the section of MICR 4950 described below, students assisted the lab instructor in MICR 3050 (General Microbiology). The duties of the student include: a. helping with the lab set-up and organization... b. distributing (when appropriate), organizing, and monitoring supplies... c. presenting pertinent information to the class... d. answering student questions... e. helping students with lab procedures when appropriate... f. enforcing lab disposal and safety procedures... g. ensuring the cleanliness of the lab... h. modeling appropriate lab behavior at all times... i. being enthusiastic about the material... j. being approachable and available to students... k. frequently asking the GTA for ways in which he/she can help.

## Evaluation

Undergraduate

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F < 60

00080

The syllabus below says that students will be evaluated on performance of their duties, attendance, preparation, five class presentations, an analysis of the lab activities for each lab, and student and GTA evaluations. No numerical breakdown of how these would be weighted was provided. However, this change to contact hours will not affect the evaluation scheme.

**Syllabus**

Upload File: MICR 4950 Syllabus-20150921181114.docx

**Description:** Sample MICR 450 Syllabus

**Form**

**User ID:** rjksn      **Name:** Robert Kosinski

**Date:** 09/21/2015      **Number:** 10687



*Robert J. Kasinski* 9/22/15  
Chair, Department Curriculum Committee Date

*Robert C. Her* 000081  
9/22/15  
Department Chair Date

*Robert J. Kasinski* 10/8/15  
Chair, College Curriculum Committee Date

*Joe Aebischer* 10/8/15  
College Dean Date

Director, Calhoun Honors College Date  
*John D. Hippi* 11/6/2015  
Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date  
*Robert W. Jones* 2/10/16  
Provost Date

President Date



# Change Undergraduate Course

0082

## Change a Course

**Subject:** AVS-Animal and Vet Sciences

**Number:** 4060

**Effective Term:** Fall 2015

**Title:** Seminars & Related Topics

Honors Course:

Add Honors Course:

**Last Term Course was taught:** 201501

### Brief Statement of Change Based on Assessment Results:

Please change contact hours to 2. Please delete the second sentence in the course catalog description. Removing second sentence would allow more focus on improving quality of scientific writing. This is in alignment with improved student learning outcomes and advice from stakeholders on improving writing skills. The contact hour change would more accurately match credit hours, as this is a lecture-only course that meets for two lecture hours.

### Rationale for Changing a Course

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Change of Credit

From

Fixed Credit Course

Credit Hrs	Contact Hrs
2	3

Variable Credit Course

Credit Hrs	Contact Hrs		
Min	Max	Min	Max

To

Fixed Credit Course

Credit Hrs	Contact Hrs
2	2

Variable Credit Course

Credit Hrs	Contact Hrs		
Min	Max	Min	Max

### Change Catalog Description

**From** AVS 4060 - Seminars and Related Topics Students conduct in-depth library research on current topics related to animal science and give formal presentations using multimedia technology. Students also prepare scientific posters, learn interviewing skills, prepare resumes, and observe professional speakers. Preq: Senior standing.

**To** AVS 4060 - Seminars and Related Topics Students conduct in-depth library research on current topics related to animal science and give formal presentations using multimedia technology. Preq: Senior standing.

### Change In Student Learning Objectives

AVS stakeholders have indicated that high quality scientific writing is an important competency for maximizing success of graduates. The proposed new learning objectives listed below would more tightly focus on helping students improve the quality of their scientific writing.

## Learning Objectives

Student competency goals: Upon successful completion of this course, students will be able to: 1. Demonstrate good teamwork skills. 2. Identify a controversial topic question in the fields of animal and veterinary science. 3. Use available library resources to find relevant original investigation scientific articles that provide evidence on both sides of the controversial topic. 4. Use Refworks software to assemble articles into a reference library, insert citations into a paper, and create a list of references cited using Journal of Animal Science (JAS) output style. 5. Use Microsoft Word formatting, reviewing, and editing tools to generate drafts, revise drafts, address reviewer feedback and use reviewer feedback to improve writing quality. 6. Use Turnitin originality checking tools to screen for plagiarism. 7. Use Microsoft Powerpoint tools for developing and presenting high quality summaries and critiques of original investigation scientific articles. 8. Write and present a high quality position paper style literature review that summarizes the evidence for both sides of the controversial issue. 9. Provide rigorous, specific, and constructive peer evaluations for oral presentations and literature review drafts.

## Topical Outline

Please see syllabus for table of topics. Table content below. 1 Course overview, academic honesty, teamwork 2 Turnitin, pre-test 3 Writing Center Writing center resources, choosing a topic question for a position paper style literature review 4 JAS guidelines; Microsoft word tools for document formatting, inserting comments, and displaying revisions in paper drafts 1. Literature review title page 1st draft 5 Reference librarian. Using library resources to access relevant papers and refine topic question choices 6 Using Refworks bibliographic software to create a reference library; sharing reference libraries 2. Literature review title page 2nd draft 7 Using Refworks bibliographic software to insert citations into a Word document and create a Bibliography in JAS format 8 Revising Refworks library entries to ensure bibliographies meet JAS requirements; using Dropbox to share documents 3. Literature review reference list 1st draft 9 Writing a high quality introduction for a position paper style literature review 10 Peer review and publication process for original investigation papers 4. Literature review reference list 2nd draft 11 Writing a high quality summary and critique for an original investigation paper 12 Presenting a high quality summary and critique for an original investigation paper 5. Literature review introduction 1st draft 13 Writing a high quality body for a position paper style literature review 14 Original investigation article presentations #1 6. Literature review introduction 2nd draft 15 Original investigation article presentations #2 16 Original investigation article presentations #3 7. Literature review body 1st draft 17 Original investigation article presentations #4 18 Original investigation article presentations #5 8. Literature review body 2nd draft 19 Writing a high quality conclusion for a position paper style literature review 20 Presenting a high quality position paper style literature review 9. Literature review conclusion 1st draft 21 Refining database searches, assessing the quality of an original investigation article 22 Writing a high quality peer evaluation for a literature review 10. Literature review conclusion 2nd draft 23 Literature review presentations #1 24 Literature review presentations #2 25 Literature review presentations #3 11. Literature review 1st draft 26 Literature review presentations #4 27 Literature review presentations #5 12. Literature review peer evaluation 28 Post-test 29 Optional: Make ups for students with excused absences 13. Literature review final draft

## Evaluation

Undergraduate

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F < 60

Please see syllabus for details and rubrics. Writing homework assignments 1-10 = 200 points; Writing homework assignments 11-13 = 120 points; Original investigation article presentation = 20 points; Literature review presentation = 40 points; Pre-test and post-test = 20 points; Teamwork peer evaluation = 10 points; Total points possible = 410

## Syllabus

Upload File: AVS4060.SYLLABUS.fall.001.080615-20150810143658.docx



Description: revised syllabus

## Form

User ID: jerylj Name: Jeryl Jones

Date: 10/07/2015 Number: 7070

*Kuote Vann*

000084

Chair, Department Curriculum Committee

Date

*James R. Stuckland*

*9/30/15*

Department Chair

Date

*Robert J. Kucinski*

*10/8/15*

Chair, College Curriculum Committee

Date

*Zed Whitwell*

*10/8/15*

College Dean

Date

Director, Calhoun Honors College

Date

*John D. Stiff*

*11/6/2015*

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

Date

*Robert S. Jones*

*2/11/16*

Provost

Date

President

Date

## Change Major

Major Name: Animal and Veterinary Sc

Degree: Bachelor of Science

000085

Effective Catalog Year: 2016-2017

- Change Major Name to: AVS Curriculum Map: AVS\_Equine\_Business\_2016-2017-20150924100019.doc
- Change Degree to: Bachelor of Science
- Change Curriculum Requirements Description: Equine Business Concentration
- Change General Education Requirements Additional
- Add, Change, or Delete Concentration(s) Information:
- Add, Change, or Delete Emphasis Area(s) Description:

### Summary/Explanation

The Animal and Veterinary Sciences department, as part of our strategic plan, is changing its curricular requirements to create more flexibility for the students, reduce its number of required AVS courses, and allow a curriculum that can fit the interests of each individual. This request is for the Equine Business Concentration. Changes include: Removing the following curriculum requirements - AVS 1000, AVS 3090, AVS 3750, AVS 4530, AVS 3100, AVS 4060, AVS 4150, AVS 4000, and AVS 4170; removing PES 4230; and removing the AVS Techniques and AVS Based Experience Requirements. Instead, the curriculum will now offer these AVS courses (excluding AVS 1000 and PES 4230) as options in new categories - AVS Hands-On Courses, Advanced AVS Nutrition/Physiology Courses, an Animal-Human Interaction Course, and a Capstone Course. Additionally, GEN 3000 can also be used to fulfill the genetics requirement (or they can take AVS 4700 from the old curriculum); students will take an STS course (if they no longer choose AVS 4150 for their capstone course), a general COMM course (instead of a required Equine Evaluation and Senior Seminar courses), and a Business Elective (3000- or 4000-level course in ACCT, ECON, MKT, MGT, LAW, FIN or AGRB). Additional free electives were added to the curriculum and the total number of hours for the degree was reduced by 1 credit hour. To accommodate the balance of 30 credit hours per academic year, AVS 4100 was moved from spring of senior year to fall of Senior year.

### Rationale for Change Major

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Form

User ID: kvernon Name: Kristine Vernon  
Date: 10/08/2015 Number:

Chair, Department Curriculum Committee

Kristine Veyron

9-24-15

Date

Department Chair

Jane E. Shepherd

000086  
9/24/15

Date

Chair, College Curriculum Committee

Robert J. Kosinski

10/8/15

Date

College Dean

Jed Whitmore

10/8/15

Date

Director, Calhoun Honors College

John D. Hill

11/6/2015

Date

Chair, Undergraduate Curriculum Committee

Chair, Graduate Curriculum Committee

Robert S. Jones

2/11/16

Date

Provost

Date

President

Date

test

### AVS Equine Business Concentration 2016-2017

Freshman			
Fall		Spring	
Arts and Humanities (Non-Lit.) Requirement <sup>1</sup>	3	BIOL 1040 General Biology II <i>and</i>	3
AVS 1500 Introduction to Animal Science	3	BIOL 1060 General Biology Lab II <i>or</i>	1
AVS 1510 Intro to Animal Science Lab	1	BIOL 1110 Principles of Biology II	5
BIOL 1030 General Biology I <i>and</i>	3	CH 1020 General Chemistry	4
BIOL 1050 General Biology Lab I <i>or</i>	1	ENGL 1030 Accelerated Composition	3
BIOL 1100 Principles of Biology I	5	MTHSC 1010 Essen. Math. Informed Soc. <i>or</i>	3
CH 1010 General Chemistry	4	MTHSC 1020 Intro. To Math. Analysis <i>or</i>	3
		MTHSC 1060 Calculus of One Variable	4
		Free Elective	1
<b>TOTAL</b>	15-16	<b>TOTAL</b>	15-17

Sophomore			
Fall		Spring	
ACCT 2010 Financial Accounting Concepts	3	Social Science Requirement <sup>1</sup>	3
MGT 2010 Principles of Management	3	ECON 2110 Principles of Microeconomics	3
STAT 2300 Elem Statistical Inference	3	FIN 3060 Corporation Finance	3
Oral Communication Requirement <sup>2</sup>	3	Arts and Humanities (Literature) requirement <sup>1</sup>	3
AVS 2040 Horse Care Techniques	2	Free Electives	3
Free Electives	1		
<b>TOTAL</b>	15	<b>TOTAL</b>	15

Junior			
Fall		Spring	
AVS 3010 Anat. & Phys. of Domestic Anim.	4	LAW 3220 Legal Environment of Business	3
AVS 3700 Principles of Animal Nutrition	3	MKT 3010 Principles of Marketing	3
AVS 4700 Animal Genetics <i>or</i>	3	Advanced AVS Nutrition/Physiology <sup>4,5</sup>	3
GEN 3000 Molecular/General Genetics <sup>3</sup>			
ECON 2120 Principles of Macroeconomics	3	Animal-Human Interaction Course <sup>5,6</sup>	3
Free Electives	3	AVS Hands-On Course <sup>5,7</sup>	2
<b>TOTAL</b>	16	<b>TOTAL</b>	14

Senior			
Fall		Spring	
Advanced AVS Nutrition/Physiology <sup>4,5</sup>	3	Free Elective	2
Capstone Course Requirement <sup>5,8</sup>	3	AVS 4120 Advanced Equine Management	4
STS Requirement <sup>5,9</sup>	3	Business Elective <sup>5,10</sup>	3
AVS 4100 Domestic Animal Behavior	3	AVS Hands-On Course <sup>5,7</sup>	2
AVS 4160 Equine Exercise Physiology	4	Advanced AVS Nutrition/Physiology <sup>4,5</sup> <i>or</i>	3
		Animal-Human Interaction Course <sup>5,6</sup>	
<b>TOTAL</b>	16	<b>TOTAL</b>	14

**TOTAL 120-123**

**AVS Equine Business Concentration**

<sup>1</sup>See General Education Requirements. Social Science cannot be AGRB or ECON. Three of the credit hours must satisfy the Cross-Cultural Awareness requirement.

<sup>2</sup>Oral communication requirement can be met by:

COMM 1500  
COMM 2500

<sup>3</sup>May take GEN 3000 in either semester of the Junior year. AVS 4700 is only taught in the fall semester.

<sup>4</sup>Select from:

AVS 3750/3751 Applied Animal Nutrition  
AVS (BIOL, MICR) 4140 Basic Immunology  
AVS 4530/4531 Animal Reproduction  
AVS 4650 Animal Physiology I  
AVS 4670 Animal Physiology II  
AVS 4700 Animal Genetics  
AVS (BIOL) 4800 Vertebrate Endocrinology

<sup>5</sup>Course can be taken either fall or spring semester.

<sup>6</sup>Select from:

AVS 3100 Animal Health  
AVS 3150 Animal Welfare  
AVS 3850 Equine Behavior and Training

<sup>7</sup>Select from:

AVS 2000/2001 Beef Cattle Techniques  
AVS 2010/2011 Poultry Techniques  
AVS 2030/2031 Dairy Techniques  
AVS 2040/2041 Equine Techniques  
AVS 2050/2051 Horsemanship Techniques  
AVS 2060/2061 Swine Techniques  
AVS 2080/2081 Teaching Horsemanship  
AVS 2090/2091 Livestock Exhibition Techniques  
AVS 2110/2111 Meat Processing Techniques  
AVS 2120/2121 Small Ruminant Techniques  
AVS 3020/3021 Livestock Selection and Evaluation  
AVS 3090 Principles of Equine Evaluation  
AVS 3110/3111 Dairy Cattle Selection  
AVS 3230 Poultry and Poultry Products Evaluation  
AVS 4550/4551 Animal Reproductive Management  
AVS 3600 Internship  
AVS 3900 Practicum



AVS 4410 Teaching Experience  
AVS 4420 Extension Experience  
AVS 4910 Undergraduate Research Experience

<sup>8</sup>Select from:

AVS 4060 Seminars and Related Topics  
AVS 4150 Contemporary Issues in Animal Science  
AVS 4170 Animal Agribusiness Development  
AVS 4000 Professional Development in Animal Sciences  
AVS 2020/2021 CAFLS Plus

<sup>9</sup>See STS Requirements in the Undergraduate Announcements

<sup>10</sup>Select from:

Any 3000- or 4000-level non-required course in ACCT, ECON, MKT,  
MGT, LAW, FIN, or AGRB

## Change Major

Major Name: Animal and Veterinary Sc  
Degree: Bachelor of Science  
Effective Catalog Year: 2016-2017

000090

- Change Major Name to: AVS Curriculum Map: Pre-Vet 2016-2017-20150924095549.docx  
 Change Degree to: Bachelor of Science  
 Change Curriculum Requirements Description: Pre Veterinary Concentration  
 Change General Education Requirements Additional  
 Add, Change, or Delete Concentration(s) Information:  
 Add, Change, or Delete Emphasis Area(s) Description:

### Summary/Explanation

The Animal and Veterinary Sciences department, as part of our strategic plan, is changing its curricular requirements to create more flexibility for the students, reduce its number of required AVS courses, and allow a curriculum that can fit the interests of each individual. This request is for the Pre-Veterinary Sciences Concentration. The specific changes include: removing the following curriculum requirements - AVS 1000, 3100, 3750, 4530, 4060, 4130, 4150, and 4000; AVS Techniques Requirements, AVS Experience Based Activities, and Departmental Requirements. Instead, the curriculum will now offer these AVS courses (except AVS 1000) as options in new categories - AVS Hands-On courses, Advanced AVS Nutrition/Physiology courses, a Capstone course, an Animal-Human interaction course, and an AVS Products or Production course. Additionally, General Advanced Science Courses will be included from any 3000-level or higher graded course in GEN, BCHM, BIOL, MICR, WFB or any of the AVS Advanced Physiology/Nutrition courses. STS Requirements will be met by general education course (if they no longer choose AVS 4150 for their Capstone course). Additional free electives were included and the total hours for the degree was reduced by 2 credits. To accommodate the balance of 30 credit hours per academic year, some courses were reshuffled including AVS 4100 moving from spring of senior year to fall of senior year; and Social Science Requirements moving from fall of sophomore and spring of senior years to spring of junior and fall of senior years.

### Rationale for Change Major

- Strengthen Program Requirement(s)  
 Alignment of Student Learning Outcomes  
 Alternative Delivery of Content  
 Improve Time to Degree  
 Evolution of the Discipline  
 Changing Prerequisites  
 Address DWF Rates  
 General Education Modifications  
 Other (Please specify.)

### Form

User ID: kvernon Name: Kristine Vernon  
Date: 10/08/2015 Number:

Chair, Department Curriculum Committee

*Kristine Veinon*

9.24.15

Date

000091

Department Chair

*Just Shellen*  
*Robert J. Kinnicki*

9/24/15

Date

Chair, College Curriculum Committee

*Robert J. Kinnicki*

Date

College Dean

*Robert J. Kinnicki*  
*Jim Whitcomb*

10/8/15

Date

Director, Calhoun Honors College

*John D. Hoff*

11/6/2015

Date

Chair, Undergraduate Curriculum Committee

Date

Chair, Graduate Curriculum Committee

*Robert J. Kinnicki*

2/11/16

Date

Provost

Date

President

Date

test

## AVS Pre-Veterinary & Science Concentration 2016-2017

000092

Freshman			
Fall		Spring	
Arts and Humanities (Non-Lit.) Requirement <sup>1</sup>	3	BIOL 1040 General Biology II and	3
AVS 1500 Introduction to Animal Science	3	BIOL 1060 General Biology Lab II or	1
AVS 1510 Intro to Animal Science Lab	1	BIOL 1110 Principles of Biology II	5
BIOL 1030 General Biology I and	3	CH 1020 General Chemistry	4
BIOL 1050 General Biology Lab I or	1	ENGL 1030 Accelerated Composition	3
BIOL 1100 Principles of Biology I	5	MTHSC 1020 Intro. To Math. Analysis or	3
CH 1010 General Chemistry	4	MTHSC 1060 Calculus of One Variable I	4
		Free Elective	1
<b>TOTAL</b>		15-16	<b>TOTAL</b>
			15-17

Sophomore			
Fall		Spring	
CH 2230 Organic Chemistry	3	CH 2240 Organic Chemistry	3
CH 2270 Organic Chemistry Lab.	1	CH 2280 Organic Chemistry Lab.	1
PHYS 2070 General Physics I	3	PHYS 2080 General Physics II	3
PHYS 2090 General Physics I Lab.	1	PHYS 2100 General Physics II Lab.	1
Arts and Humanities (Literature) Req. <sup>1</sup>	3	Oral Communication Requirement <sup>4</sup>	3
AVS Hands-On Course <sup>2,3</sup>	2	STAT 2300 Elem Statistical Inference	3
Free Elective	2	Free Elective	1
<b>TOTAL</b>		15	<b>TOTAL</b>
			15

Junior			
Fall		Spring	
AVS 3010 Anat. and Phys. Domestic Anim.	4	Advanced AVS Nutrition/Physiology <sup>6</sup>	3
General Advanced Science Course <sup>5</sup>	3	Animal-Human Interaction Course <sup>3,7</sup>	3
AVS 3700 Principles of Animal Nutrition	3	GEN 3000 Molecular/General Genetics <sup>3</sup>	3
BCHM 3010 <sup>3</sup> Molecular Biochemistry or	3	MICR 3050 General Microbiology <sup>3</sup>	4
BCHM 3050 <sup>3</sup> Ess. Elem. Biochemistry or	3	Social Science Requirement <sup>1</sup>	3
BCHM 4060 <sup>3</sup> Physiological Chemistry	3		
Free Elective	2		
<b>TOTAL</b>		15	<b>TOTAL</b>
			16

Senior			
Fall		Spring	
Capstone Course Requirement <sup>3,8</sup>	3	AVS Products or Production Course <sup>3,10</sup>	3
Social Science Requirement <sup>1</sup>	3	Advanced AVS Nutrition/Physiology <sup>6</sup>	3
General Advanced Science Course <sup>3</sup>	3	Free Elective	3
STS Requirement <sup>9</sup>	3	General Advanced Science Course <sup>5</sup>	3
AVS 4100 Domestic Animal Behavior	3	AVS Hands-On Course <sup>2,3</sup>	2
<b>TOTAL</b>		15	<b>TOTAL</b>
			14

**TOTAL 120-123**

## AVS Pre-Veterinary & Science Concentration

000093

<sup>1</sup>See General Education Requirements. Social Science courses must be selected from two differer fields. AGRB and ECON are considered the same field. Three of these general education credits must satisfy the Cross-Cultural Awareness requirement.

<sup>2</sup>Select from:

- AVS 2000/2001 Beef Cattle Techniques
- AVS 2010/2011 Poultry Techniques
- AVS 2030/2031 Dairy Techniques
- AVS 2040/2041 Equine Techniques
- AVS 2050/2051 Horsemanship Techniques
- AVS 2060/2061 Swine Techniques
- AVS 2080/2081 Teaching Horsemanship
- AVS 2090/2091 Livestock Exhibition Techniques
- AVS 2110/2111 Meat Processing Techniques
- AVS 2120/2121 Small Ruminant Techniques
- AVS 3020/3021 Livestock Selection and Evaluation
- AVS 3090 Principles of Equine Evaluation
- AVS 3110/3111 Dairy Cattle Selection
- AVS 3230 Poultry and Poultry Products Evaluation
- AVS 4550/4551 Animal Reproductive Management
- AVS 3600 Internship
- AVS 3900 Practicum
- AVS 4410 Teaching Experience
- AVS 4420 Extension Experience
- AVS 4910 Undergraduate Research Experience

<sup>3</sup>May take course in either Fall or Spring semester.

<sup>4</sup>Oral communication requirement can be met by:

- COMM 1500
- COMM 2500

<sup>5</sup>Select from:

Any 3000-level or higher graded course in GEN, BCHM, BIOL, MICR, WFB or any course listed in footnote 6

<sup>6</sup>Select from:

- AVS 3750/3751 Applied Animal Nutrition
- AVS (BIOL, MICR) 4140 Basic Immunology
- AVS 4160/4161 Equine Exercise Physiology
- AVS 4530/4531 Animal Reproduction
- AVS 4650 Animal Physiology I
- AVS 4670 Animal Physiology II
- AVS 4700 Animal Genetics
- AVS (BIOL) 4800 Vertebrate Endocrinology

<sup>7</sup>Select from:

- AVS 3100 Animal Health
- AVS 3150 Animal Welfare
- AVS 3850 Equine Behavior and Training

<sup>8</sup>Select from:

- AVS 4060 Seminars and Related Topics
- AVS 4150 Contemporary Issues in Animal Science
- AVS 4170 Animal Agribusiness Development
- AVS 4000 Professional Development in Animal Sciences

<sup>9</sup>STS Requirements in the Undergraduate Announcements

<sup>10</sup>Select from:

- AVS 4010/4011 Beef Production
- AVS 4110 Animal Growth and Development
- AVS 4120/4121 Advanced Equine Management
- AVS 4130/4131 Animal Products
- AVS 4200 Poultry Science On-line
- AVS 4500/4501 Sustainable Livestock Production Systems

## Change Major

Major Name: Animal and Veterinary Sc

000095

Degree: Bachelor of Science

Effective Catalog Year: 2016-2017

Change Major Name to: AVS

Curriculum Map: AVS\_AnimalAg\_2016-2017-20150924102409.doc

Change Degree to: Bachelor of Science

Description: Animal Agribusiness Concentration

Change Curriculum Requirements

Change General Education Requirements

Additional Information:

Add, Change, or Delete Concentration(s)

Description:

Add, Change, or Delete Emphasis Area(s)

### Summary/Explanation

The Animal and Veterinary Sciences department, as part of our strategic plan, is changing its curricular requirements to create more flexibility for the students, reduce its number of required AVS courses, and allow a curriculum that can fit the interests of each individual. This request is for the Animal Agribusiness Concentration. Specific changes include: Removing the following curriculum requirements - AVS 1000, 3750, 4130, 4530, 3100, 4150, 4000, 4060, 4170; PES 4230; AVS Techniques Requirements, AVS Evaluation Requirement, AVS Experience-Based Activities, and Production Class. Instead, these courses (except AVS 1000 or PES 4230) will be offered as options in new categories - AVS Hands-On courses, Advanced AVS Nutrition/Physiology courses, a Capstone Course, AVS Products or Production courses, and an Animal-Human Interaction Course. Additionally, GEN 3000 can also be used to fulfill the genetics requirement (or they can take AVS 4700 from the old curriculum); students will take an STS course (if they no longer choose AVS 4150 for their capstone course), a general COMM course (instead of a required Evaluation and Senior Seminar courses), and a Business Elective (3000- or 4000-level course in ACCT, ECON, MKT, MGT, LAW, FIN or AGRB). Additional free electives were added to the curriculum and the total number of hours for the degree was reduced by 3 credits. To accommodate the balance of 30 credit hours per academic year, some courses were reshuffled including MTK 3010 moving from Fall of senior year to Spring of Junior year, and AVS 4100 moving from spring of senior year to fall of Senior year.

### Rationale for Change Major

- Strengthen Program Requirement(s)
- Alignment of Student Learning Outcomes
- Alternative Delivery of Content
- Improve Time to Degree
- Evolution of the Discipline
- Changing Prerequisites
- Address DWF Rates
- General Education Modifications
- Other (Please specify.)

### Form

User ID: kvernon Name: Kristine Vernon

Date: 10/08/2015 Number:

Chair, Department Curriculum Committee

*Kristine Keenan*

9-24-15

Date

Department Chair

*Jan R. Hecker*

000096  
9/24-15

Date

Chair, College Curriculum Committee

*Robert J. Kucinich*

10/8/15

Date

College Dean

*Zed Whitman*

10/8/15

Date

Director, Calhoun Honors College

*John D. Stiff*

11/6/2015

Date

Chair, Undergraduate Curriculum Committee

Chair, Graduate Curriculum Committee

*Robert Y. Jones*

2/11/16

Date

Date

Provost

Date

President

Date

test



**AVS Animal Agribusiness Concentration 2016-2017**

<b>Freshman</b>			
<b>Fall</b>		<b>Spring</b>	
Arts and Humanities (Non-Lit.) Requirement <sup>1</sup>	3	BIOL 1040 General Biology II <i>and</i>	3
AVS 1500 Introduction to Animal Science	3	BIOL 1060 General Biology Lab II <i>or</i>	1
AVS 1510 Intro to Animal Science Lab	1	BIOL 1110 Principles of Biology II	5
BIOL 1030 General Biology I <i>and</i>	3	CH 1020 General Chemistry	4
BIOL 1050 General Biology Lab I <i>or</i>	1	ENGL 1030 Accelerated Composition	3
BIOL 1100 Principles of Biology I	5	MTHSC 1010 Essen. Math. Informed Soc. <i>or</i>	3
CH 1010 General Chemistry	4	MTHSC 1020 Intro. To Math. Analysis <i>or</i>	3
		MTHSC 1060 Calculus of One Variable	4
		Free Electives	1
<b>TOTAL</b>	15-16	<b>TOTAL</b>	15-17

<b>Sophomore</b>			
<b>Fall</b>		<b>Spring</b>	
ACCT 2010 Financial Accounting Concepts	3	Social Science Requirement <sup>1</sup>	3
MGT 2010 Principles of Management	3	ECON 2110 Principles of Microeconomics	3
STAT 2300 Elem Statistical Inference	3	FIN 3060 Corporation Finance	3
Oral Communication Requirement <sup>2</sup>	3	Arts and Humanities (Literature) requirement <sup>1</sup>	3
AVS Hands-On Course <sup>3,4</sup>	2	Free Electives	3
Free Elective	1		
<b>TOTAL</b>	15	<b>TOTAL</b>	15

<b>Junior</b>			
<b>Fall</b>		<b>Spring</b>	
AVS 3010 Anat. & Phys. of Domestic Anim.	4	LAW 3220 Legal Environment of Business	3
AVS 3700 Principles of Animal Nutrition	3	MKT 3010 Principles of Marketing	3
AVS 4700 Animal Genetics <i>or</i>	3	Advanced AVS Nutrition/Physiology <sup>4,6</sup>	3
GEN 3000 Molecular/General Genetics <sup>5</sup>			
ECON 2120 Principles of Macroeconomics	3	Animal-Human Interaction Course <sup>4,7</sup>	3
Free Electives	3	AVS Hands-On Course <sup>3,4</sup>	2
<b>TOTAL</b>	16	<b>TOTAL</b>	14

<b>Senior</b>			
<b>Fall</b>		<b>Spring</b>	
Advanced AVS Nutrition/Physiology <sup>4,6</sup>	3	Free Elective	4
Capstone Course Requirement <sup>4,8</sup>	3	AVS Products or Production Course <sup>4,10</sup>	3
STS Requirement <sup>4,9</sup>	3	Business Elective <sup>4,11</sup>	3
AVS 4100 Domestic Animal Behavior	3	AVS Hands-On Course <sup>3,4</sup>	2
AVS Products or Production Course <sup>4,10</sup>	3	Advanced AVS Nutrition/Physiology <sup>4,6</sup> <i>or</i>	3
		Animal-Human Interaction Course <sup>4,7</sup>	
<b>TOTAL</b>	15	<b>TOTAL</b>	15

**TOTAL 120-123**

**AVS Animal Agribusiness Concentration**

<sup>1</sup>See General Education Requirements. Social Science cannot be AGRB or ECON. Three of the credit hours must satisfy the Cross-Cultural Awareness requirement.

<sup>2</sup>Oral communication requirement can be met by:

COMM 1500

COMM 2500

<sup>3</sup>Select from:

AVS 2000/2001 Beef Cattle Techniques  
AVS 2010/2011 Poultry Techniques  
AVS 2030/2031 Dairy Techniques  
AVS 2040/2041 Equine Techniques  
AVS 2050/2051 Horsemanship Techniques  
AVS 2060/2061 Swine Techniques  
AVS 2080/2081 Teaching Horsemanship  
AVS 2090/2091 Livestock Exhibition Techniques  
AVS 2110/2111 Meat Processing Techniques  
AVS 2120/2121 Small Ruminant Techniques  
AVS 3020/3021 Livestock Selection and Evaluation  
AVS 3090 Principles of Equine Evaluation  
AVS 3110/3111 Dairy Cattle Selection  
AVS 3230 Poultry and Poultry Products Evaluation  
AVS 4550/4551 Animal Reproductive Management  
AVS 3600 Internship  
AVS 3900 Practicum  
AVS 4410 Teaching Experience  
AVS 4420 Extension Experience  
AVS 4910 Undergraduate Research Experience

<sup>4</sup>Course can be taken either fall or spring semester.

<sup>5</sup>May take GEN 3000 in either semester of the Junior year. AVS 4700 is only taught in the fall semester.

<sup>6</sup>Select from:

AVS 3750/3751 Applied Animal Nutrition  
AVS (BIOL, MICR) 4140 Basic Immunology  
AVS 4160/4161 Equine Exercise Physiology  
AVS 4530/4531 Animal Reproduction  
AVS 4650 Animal Physiology I  
AVS 4670 Animal Physiology II  
AVS 4700 Animal Genetics  
AVS (BIOL) 4800 Vertebrate Endocrinology

<sup>7</sup>Select from:

AVS 3100 Animal Health  
AVS 3150 Animal Welfare  
AVS 3850 Equine Behavior and Training

<sup>8</sup>Select from:

AVS 4060 Seminars and Related Topics  
AVS 4150 Contemporary Issues in Animal Science  
AVS 4170 Animal Agribusiness Development  
AVS 4000 Professional Development in Animal Sciences  
AVS 2020/2021 CAFLS Plus

<sup>9</sup>See STS Requirements in the Undergraduate Announcements

<sup>10</sup>Select from:

AVS 4010/4011 Beef Production  
AVS 4110 Animal Growth and Development  
AVS 4120/4121 Advanced Equine Management  
AVS 4130/4131 Animal Products  
AVS 4200 Poultry Science On-line  
AVS 4500/4501 Sustainable Livestock Production Systems

<sup>11</sup>Select from:

Any 3000- or 4000-level non-required course in ACCT, ECON, MKT,  
MGT, LAW, FIN, or AGRB