Add Undergraduate Course

Course Attributes

Subject Abbreviation: AVS-Animal and Vet Sciences
Course Number: 2020
Effective Term: Fall 2015
College: Agric, Forestry and Life Sci
Department: Animal & Veterinary Sciences

Catalog Title: CAFLS Plus ☐ **Additional Fee?**
Transcript Title: CAFLS Plus Lecture Justification
Cross-reference(s):
Grade Mode: Standard Letter

Form

User ID: trscott **Name:** Thomas Scott
Date: 04/16/2015 **Number:** 7450

Syllabus

Upload File: cafls+syllabus-20150416082410.doc

Description: AVS 2020 CAFLS Plus Course Syllabus

Hours

Fixed Credit Course

Credit Hrs	Contact Hrs
3	2

Variable Credit Course

Credit Hrs		Contact Hrs	
Min	Max	Min	Max

Rationale for Add 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.)

Leadership and professional development course for sophomores and juniors.

Schedule Types

- ○ Field Course
- ○ Independent Study
- ○ Internship
- ○ Lab No Fee
- ○ Lab With Fee
- ◉ Lecture
- ○ Other
- ○ Seminar
- ○ Studio
- ○ Tutorial

Projected Enrollment

Year 1: 30
Year 2: 30
Year 3: 30
Year 4: 30

Evaluation

Undergraduate

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

Participation in Discussions/Exercises, 40%, Writing Assignment 1, 15%; Writing Assignment 2, 15%; Writing Assignment 3 15%; Writing Assignment 4, 15%; These components of the overall grade (lecture & lab) represent 75% of the total.

Catalog Description

A professional development course intended for CAFLS sophomores and juniors who plan to complete an internship, co-op or other external learning experience. Emphasis is placed on understanding personality assessments, leadership styles, negotiation techniques, team dynamics and etiquette. A seminar-style course with laboratory exercises.

☐ **Prerequisite(s)** ☑ **Corequisite(s)**

AVS 2021

Required course for students in

This is not a required course for AVS or other students in CAFLS.

Statement of need and justification based on assessment of student learning outcomes

A critical component of success with critical thinking application is to introduce students to fundamental professional development techniques before they embark on an external learning experience. Many undergraduate students have participated as members of organizations and clubs, but many have not been instructed in the principles and practice of interpersonal success skills. A 2011 Association of Public and Land Grant Universities (APLU) and University Industry Consortium (UIC) report (Comparative Analysis of Soft Skills: What is Important for New Graduates. Crawford, Lang, Fink, Dalton and Fielitz, 2011) documented through analysis of nationwide surveys of employers, alum, faculty and students the need for more formal instruction in this area for success during (internships, co-ops) and after (professional/graduate schools, careers) the college experience. Students will be evaluated for personality types and understanding of professionalism before and after exposure to the course content. This course should serve as a stepping stone for entry into senior-level professional development courses in respective CAFLS curricula.

Textbook(s)

It Factor Leadership - Become a Better Leader in 13 Steps by C. Fernandez and R. Fernandez, ISBN 978-0-9893966-0-8.

Learning Objectives

1. Explore and further develop professionalism, 2. Learn soft skills and expectations of employers, 3. Enhance the skills necessary for long-term success and lifelong learning, and 4. Build a professional network and gain the skills to improve one's professional image.

Topical Outline

The course outline is as follows for the semester in which the course will be offered: Orientation and course objectives, Introduction to True Colors exercise, Benchmark exercise, True Colors Personality Assessment exercise, Effective Communication, Dress for Success, Mocktail Event and Networking with Business Representatives, Discussion of It Factor Leadership Discussion 1, Innovation in the Workplace, Money Management,

Alumni Panels, Teamwork - Paper Airplane Exercise, Improve Your Written Communication Skills, Leading a Balanced Life, Resumes, It-Factor Leadership Discussion 2, Etiquette Dinner. In each case, the lecture hour is used to introduce the concepts underpinning the topic and to discuss the importance and relevance for success in a career. The subsequent laboratory period is used to put into practice through exercises methods for deeper understanding of how topics are put into application for career success. Refer to syllabus (included) for lecture schedule.

Kristin Vernon — 4-16-15
Chair, Department Curriculum Committee — Date

[signature] — 4/16/15
Department Chair — Date

Robert J. Kosinski — 4/16/15
Chair, College Curriculum Committee — Date

[signature] — 4/16/15
College Dean — Date

Director, Calhoun Honors College — Date

Janice W. Musgrave — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H Jones — 7/14/15
Provost — Date

President — Date

Syllabus

AVS 2020 – CAFLS Plus
1 Credit (2,2)
Fall 20XX/Spring 20XX
Building, Room and Time[1]: TBA

Course Description: This course is designed to provide a foundation for individuals "to get to know themselves better" in the context of their needed professional soft skill set based on their personal career objective. Examination and application of leadership characteristics, personality traits, motivation, personal professional vision, career networking, personal finance, etiquette and other concepts will encourage students to develop a better understanding of their own soft skill competences and self perceptions. In addition, students will determine their own personality style, and learn how to best use this style when engaging others for deeper exploration into the students' chosen career fields so that they may develop into global ready citizens.

Textbook and Resources: It Factor Leadership- Become a Better Leader in 13 Steps by C. Fernandez & R. Fernandez, ISBN 978-0-9893966-0-8. Copies of this book are available at Amazon.com (Kindle and paperback). Three of the four paper assignments for the course grade will be related to topics covered in this book[2].

Instructor:	Dr. Tom Scott, trscott@clemson.edu 124 P&A Building
Co-Instructor:	Dr. Jeff Rhodehamel, jrhode@clemson.edu 223 P&A Building
Course Coordinators:	Paula Beecher - APEC 4900, pbeeche@clemson.edu Joseph Thames - BCHM 4900, jthames@clemson.edu F153 P&A, CAFLS Student Services Center
Office Hours:	By appointment for Instructors and Coordinators.

Course Objectives:

- Students will explore and further develop their leadership style.
- Students will learn about soft skills and expectations of employers when entering their professional career.
- Students will enhance the skills necessary for long-term success and lifelong learning.
- Students will build their professional network and gain the skills to improve their professional image.

Learning Outcomes:

- Utilize benchmark exercises to measure personal growth throughout the semester.
- Apply the knowledge learned through the personality assessment and teamwork exercises to enhance your peer interactions and ultimately make you an optimal employee.
- Develop a greater appreciation for continual growth and learning throughout your career.

Grading and Evaluation:

Component		*% of final grade*
Participation in lecture/lab		40% (15%/25%)
Paper #1	**(Due MM DD)**	15%
[2]Paper #2	**(Due MM DD)**	15%
[2]Paper #3	**(Due MM DD)**	15%
[2]Paper #4	**(Finals Week)**	15%

(Paper assignments will be discussed in detail the first day of class)

Grading Scale:

A - 90% +
B - 80-89%
C - 70-79%
D - 60-69%
F - less than 60%

Attendance:

Your attendance and participation in this course is required for you to receive the most benefit. There will be some classes that will run longer than the allotted time and some alternate meeting dates/times. These dates are all set and listed below under "Topical Outline." **If you have a conflict with any of the dates/times, you must talk to your instructor within the first two weeks of class to discuss alternative plans.** Failure to attend any event or class will affect your overall attendance/participation grade.

Student Expectations:

- Students are expected to be in class on time and prepared for the class topics.
- Cell phones, laptop computers and other electronic devices are to be turned off and only used when appropriate or requested.
- Be respectful at all times of classmates, guest speakers and instructors.
- Be engaged! This course is structured and its content is different from most of your other courses. You will truly get out of this course what you put into it!
- Turn in all assignments on time. Late work will have a penalty of 10% reduction in points each day it is late.

Topical Outline:

Dates	Topics	Speaker (s)
MM DD	• Orientation and course objectives	Tom Scott
MM DD	• Introduction of True Colors exercise • Benchmark Exercise	Tom Scott
MM DD	• True Colors Personality Assessment exercise • Effective Communications	Grace Gorrell, Leadership Studies, Univ. of Kentucky
MM DD	• Discussion of *It*-Factor Leadership • *Leadership that gets results*	Tom Scott Jeff Rhodehamel
MM DD	• Dress for Success	*Guest Experts from:* MH Frank & Emily's
MM DD	• Building your network *Mocktails Event	Ashley Collins, AgCareers.Com
MM DD	• Discussion of *It*-Factor Leadership continued • Innovation in the workplace	Tom Scott Matt Franken, CEO, Aunt Fannies
MM DD	• Negotiations	Jack Hopkins/Carter McElveen
MM DD	*Alumni Panels	Schedules TBD
MM DD	• Improve your written communication skills	Meredith McCarroll
MM DD	• Teamwork- Paper Airplanes Exercise	Johanna Johnson Tom Scott
MM DD	• Leading a Balanced Life	Jeff Rhodehamel
MM DD	• Resume Recap • *It*-Factor Leadership final discussion	Paula Beecher Tom Scott
MM DD	*Money Management	Kerri McMillian
MM DD	• Etiquette Dinner	Madren Center

*These classes will be opened to all CAFLS students and will meet in alternate rooms. Room locations will be given in class prior to events and available online at http://www.clemson.edu/cafls/caflsplus/.

DISABILITY SERVICES (from University Announcements)
Student Disability Services coordinates the provision of reasonable accommodations for students with physical, emotional, or learning disabilities. Accommodations are individualized, flexible, and confidential based on the nature of the disability and the academic environment, in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

ACADEMIC INTEGRITY (from University Announcements)
As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

I. Academic Integrity Policy

A. Any breach of the principles outlined in the Academic Integrity Statement is considered an act of academic dishonesty.
B. Academic dishonesty is further defined as:

1. Giving, receiving, or using unauthorized aid on any academic work;
2. Plagiarism, which includes the copying of language, structure, or ideas of another and attributing the work to one's own efforts;
3. Attempts to copy, edit, or delete computer files that belong to another person or use of Computer Center account numbers that belong to another person without the permission of the file owner, account owner or file number owner;

C. All academic work submitted for grading contains an implicit pledge and may contain, at the request of an instructor, an explicit pledge by the student that no unauthorized aid has been received.
D. It is the responsibility of every member of the Clemson University community to enforce the Academic Integrity Policy.

503019

Add Undergraduate Course

Course Attributes

Subject Abbreviation: AVS-Animal and Vet Sciences
Course Number: 2021
Effective Term: Fall 2015
College: Agric, Forestry and Life Sci
Department: Animal & Veterinary Sciences

Catalog Title: CAFLS Plus Laboratory ☐ Additional Fee?
Transcript Title: CAFLS Plus ~~Practicum~~ Laboratory Justification
Cross-reference(s):
Grade Mode: Standard Letter

Form

User ID: trscott **Name:** Thomas Scott
Date: 04/16/2015 **Number:** 7458

Syllabus

Upload File: AVS 2021 syllabus-20150416090050.doc

Description: AVS 2021 CAFLS Plus Syllabus

Hours

Fixed Credit Course

Credit Hrs	Contact Hrs
0	2

Variable Credit Course

Credit Hrs Min	Credit Hrs Max	Contact Hrs Min	Contact Hrs Max

Rationale for Add 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.)**

Leadership and professional development laboratory for sophomores and juniors.

Schedule Types

- ○ **Field Course**
- ○ **Independent Study**
- ○ **Internship**
- ○ **Lab No Fee**
- ◉ **Lab With Fee**
- ○ **Lecture**
- ○ **Other**
- ○ **Seminar**
- ○ **Studio**
- ○ **Tutorial**

Projected Enrollment

Year 1: 30
Year 2: 30
Year 3: 30
Year 4: 30

Evaluation

Undergraduate

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

Participation in laboratory exercises, 40%; True Colors Assessment, 10%; Dress for Success, 10%; Mocktail/Networking, 10%; Paper Airplane Exercise, 20%; Etiquette Dinner, 10%. This portion of the overall course grade represents 25% of the total.

Catalog Description

A required laboratory/practicum experience for student co-enrolled in AVS 2020. Students will put into practice concepts introduced and discussed during AVS 2020 lectures.

☐ **Prerequisite(s)** ☑ **Corequisite(s)**

AVS 2020

Required course for students in

Not required for AVS or other CAFLS students.

Statement of need and justification based on assessment of student learning outcomes

Added exercises that complement the course objectives of AVS 2020, which are to introduce students to fundamental professionalism techniques before they embark on an external learning experience such as an internship or co-op. Students will be evaluated for personality types and their understanding of professionalism before and after exposure to the course content.

Textbook(s)

It Factor Leadership - Become a Better Leader in 13 Steps by C. Fernandez and R. Fernandez, ISBN 978-0-9893966-0-8.

Learning Objectives

In alignment with AVS 2020, 1) explore through exercises various techniques for developing professionalism, 2) practice in mock settings with professionals the proper approaches to networking, negotiating and etiquette, 3) participate in skill building exercises that re-enforce concepts for building life-long learning for career success, and 4) exposure to team building and workplace methods for organizational success.

Topical Outline

Aligned with the outline for AVS 2020 topics in order to provide a platform for application of the principles and theory covered during the lecture hour on personality traits, communications skills (written and oral), dress and etiquette, negotiations, professional networking, team building, and money/investment management strategies. As a concept is presented and discussed in lecture, a laboratory exercise will follow in which the students will put into practice the principles discussed in class. All aspects of the lecture portion are designed to transition the students into an actual application of theory in a method practice on the topics listed above. Students will report on their results in a group setting with feedback and personal assessment by instructors and other students in the class.

Chair, Department Curriculum Committee — Date 4-16-15

Department Chair — Date 4/16/15

Chair, College Curriculum Committee — Date 4/16/15

College Dean — Date 4/16/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

Syllabus

AVS 2021: CAFLS Plus Practicum
1 Credit (0,2)
Fall 20XX/Spring 20XX
Building, Room and Time[1]: TBA

Course Description: This course is designed to complement AVS 2020 as a practicum to practice and employ through exercises and technique the concepts delivered in lecture. Students will conduct individual and group activities pertaining to personal assessments and leadership skills. Active involvement in the practicum exercises will re-enforce and allow practice of personal assessment evaluation, negotiations, networking techniques, etiquette, and generally accepted professional development skills.

Textbook and Resources: *It* Factor Leadership- Become a Better Leader in 13 Steps by C. Fernandez & R. Fernandez, ISBN 978-0-9893966-0-8. Copies of this book are available at Amazon.com (Kindle and paperback).

Instructor:	Dr. Tom Scott, trscott@clemson.edu 124 P&A Building
Co-Instructor:	Dr. Jeff Rhodehamel, jrhode@clemson.edu 223 P&A Building
Course Coordinators:	Paula Beecher - APEC 4900, pbeeche@clemson.edu Joseph Thames - BCHM 4900, jthames@clemson.edu F153 P&A, CAFLS Student Services Center
Office Hours:	By appointment for Instructors and Coordinators.

Course Objectives:

- Students will explore and further develop their leadership style through practice of techniques.
- Students will discuss and employ soft skills through exercise-simulated situations in staged employer settings/environments.
- Students will strengthen the skills necessary for long-term success and lifelong learning through role-playing.
- Students will be exposed to methods to build their professional network and improve the skills for portraying a professional image.

Learning Outcomes:

- Utilize benchmark exercises to measure personal growth throughout the semester.
- Apply the knowledge learned through the personality assessment and teamwork exercises to enhance your peer interactions and ultimately make you an optimal employee.
- Develop a greater appreciation for continual growth and learning throughout your career.

Grading and Evaluation:

Component	*% of final grade*
Participation in Scheduled Exercises	100% (25% of course total)

Grading Scale:

A - 90% +
B - 80-89%
C - 70-79%
D - 60-69%
F - less than 60%

Attendance:

Your attendance and participation in this course is required for you to receive the most benefit. There will be some classes that will run longer than the allotted time and some alternate meeting dates/times. These dates are all set and listed below under "Topical Outline." **If you have a conflict with any of the dates/times, you must talk to your instructor within the first two weeks of class to discuss alternative plans.** Failure to attend any event or class will affect your overall attendance/participation grade.

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- Be respectful at all times of classmates, guest speakers and instructors.
- Be engaged! This course is structured and its content is different from most of your other courses. You will truly get out of this course what you put into it!
- Turn in all assignments on time. Late work will have a penalty of 10% reduction in points each day it is late.

Topical Outline:

Dates	Topics	Speaker (s)
MM DD	• Orientation and course objectives	Tom Scott
MM DD	• Introduction of True Colors exercise • Benchmark exercise	Tom Scott
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MM DD	• *Leadership that gets results* exercise	Jeff Rhodehamel
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MM DD	• Building your network exercise *Mocktails Event	Ashley Collins, AgCareers.Com
MM DD	• Innovation in the workplace exercise	Matt Franken, CEO, Aunt Fannies
MM DD	• Negotiations exercise	Jack Hopkins/Carter McElveen
MM DD	*Alumni Panels	Schedules TBD
MM DD	• Improve your written communication skills exercise	Meredith McCarroll
MM DD	• Teamwork- Paper Airplane exercise cont.	Johanna Johnson Tom Scott
MM DD	• Leading a Balanced Life exercise	Jeff Rhodehamel
MM DD	• Resume recap exercise	Paula Beecher
MM DD	*Money Management exercise	Kerri McMillian
MM DD	• Etiquette Dinner	Madren Center

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2. Plagiarism, which includes the copying of language, structure, or ideas of another and attributing the work to one's own efforts;
3. Attempts to copy, edit, or delete computer files that belong to another person or use of Computer Center account numbers that belong to another person without the permission of the file owner, account owner or file number owner;

C. All academic work submitted for grading contains an implicit pledge and may contain, at the request of an instructor, an explicit pledge by the student that no unauthorized aid has been received.
D. It is the responsibility of every member of the Clemson University community to enforce the Academic Integrity Policy.

000025

Change Undergraduate Course

Change a Course

Subject: BCHM-Biochemistry
Number: 3010
Effective Term: Fall 2015
Title: Molecular Biochem
Honors Course:
☐ Add Honors Course:
Last Term Course was taught: 201401
Brief Statement of Change Based on Assessment Results:
we would like to change the organic chemistry prereq to prereq or concurrent enrollment. We find that students who take organic chemistry at the same time as this course do not seem to be at a disavantage and we allowed a number or prereq overrides to help keep students on track in their curriculum.

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 1100 and CH 2230, each with C or better.
To Preq: BIOL 1100 with C better. Preq or coreq: CH 2230.

Evaluation

Undergraduate
A 90 - 100
B 80 - 90
C 70 - 80
D 60 - 70
F < 60
Weighted percentages of exams (91%) and homework (9%)

Syllabus

Upload File: cheryli41952spring2015-20150413112913.pdf

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 04/13/2015 **Number:** 7377

Chair, Department Curriculum Committee — Date: 4-3-2015

Department Chair — Date: 4-3-2015

Chair, College Curriculum Committee — Date: 4/10/15

College Dean — Date: 4/10/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date: 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date: 7/14/15

President — Date

000027

Change Undergraduate Course

Change a Course

Subject: BCHM-Biochemistry
Number: 3050
Effective Term: Fall 2015
Title: Essen Elements Bioch
Honors Course:
☐ Add Honors Course:
Last Term Course was taught: 201408
Brief Statement of Change Based on Assessment Results:
We would like to change the organic chemistry prereq to prereq or coreq enrollment. We find that students who take organic chemistry at the same time as this course do not seem to be at a disadvantage and we have allowed a large number or overrides to this prereq to help keep students on track in their curriculum.

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: CH 2010 or CH 2230; BIOL 1030 or BIOL 1100.
To Preq: BIOL 1030 or BIOL 1100; Preq or ~~coreq~~ concurrent enrollment: CH 2010 or CH 2230.

Evaluation

Undergraduate

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

Weighted percentages of exams (80%) and online homework (20%).

Syllabus

Upload File: liangjw41804spring2015-20150413110610.pdf

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 04/13/2015 **Number:** 7379

Chair, Department Curriculum Committee — Date: 4-3-2015

Department Chair — Date: 4-3-2015

Chair, College Curriculum Committee — Date: 4/10/15

College Dean — Date: 4/10/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date: 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date: 7/14/15

President — Date

Change Undergraduate Course

000029

Change a Course

Subject: MICR-Microbiology
Number: 4501
Effective Term: Fall 2015
Title: Adv Micro Lab I
Honors Course:
☐ Add Honors Course:
Last Term Course was taught: 999999
Brief Statement of Change Based on Assessment Results:
MICR 4500-4501 was intended to consist of 1 contact hour of lecture and 3 contact hours of laboratory, but it was erroneously proposed as a 2(1,2) course. We wish to leave the credits of both 4500 and 4501 as they are but change the contact hours of MICR 4501 to 3 hours per week.

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.)**

Fixing a previous error.

Learning Objectives

1. Students will acquire an understanding of the interactions of microorganisms with the environment and their impacts on it. 2. Students will use the correct method of collection, storage and transport of environmental specimens for microbiological investigations. 3. Students will plan and interpret laboratory investigations for the sampling, collection, and identification of environmental microorganisms. 4. Students will be familiar with the normal microbial populations in various environments, including soil, aquatic, and marine habitats. 5. Students will be introduced to bioinformatics programs and become proficient in the use of Excel to store and analyze data, PowerPoint for the communication of data, and graphics programs to properly display results

Topical Outline

This course is divided into four topic areas: Microbial ecology and diversity, metabolism and physiology, interactions and impact of microbes in the environment, and soil, marine, and environmental microbiology. Some modules will cover multiple topic areas, some modules will occur concurrently. Contact hours are listed in parenthesis after the module title. Module 1: Microbial Ecology and Diversity (12) Week 1: Lecture: In situ assessment of microbial environmental samples, in situ nucleic acid collection Lab: Sample collection; Rossi-Cholodry slides / Winogradski columns Week 2: Lecture: Isolation of nucleic acid from enriched cultures Lab: Nucleic acid isolation from environmental samples Week 3: Lecture: Enrichment of environmental samples Lab: Media preparation and inoculation of ecological samples Week 4: Lecture: Use of Excel for data storage and analysis, PowerPoint and graphics software for data presentation Lab: Samples prepared for sequencing Module 2: Applied / Environmental Microbiology (12) Week 1: Lecture: Environmental sampling techniques/recording observations (pH, temperature at the surface and at depth, available water, Redox, soil type) Lab: Collection of environmental samples Week 2: Lecture: Enrichments – metabolic groups – biogeochemical cycles of carbon and nitrogen Lab: Sample enrichments to isolate methane oxidizers Week 3: Lecture: isolation techniques – dilutions, pour plates, isolation streaks Lab: Isolation of organisms from enrichment through various methods Week 4: Lecture: Primary literature analysis and interpretation Lab: Samples prepared for sequencing Module 3: Nucleic acid profiling and analysis (12) Week 1: Lecture: Restriction Fragment Length Polymorphism techniques and uses Lab: RFLP – in situ and enrichment cultures Week 2: Lecture: Denaturing Gradient Gel Electrophoresis techniques and uses Lab: DGGE – in situ and enrichment cultures Week 3: Lecture: Biogeochemical cycles--iron and manganese (inorganic) Lab: Enrichment cultures Week 4: Lecture: Next Gen Sequencing: genome and transcriptome analyses Lab: Samples prepared for sequencing Module 4: Bioinformatics (3) Week 1: Lecture: Bioinformatics – BLAST searches; Alignments and

Credits remain the same.
Contact hours 2 → 3.

sequence comparisons Lab: BLAST search and alignments of sequence data from Modules 1, 2, and 3

Evaluation

Undergraduate

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

Final Grades will be calculated as follows: Final Exam: 20% Quizzes: 15% Informative speech: 20% Lab Reports: 20% Excel/PowerPoint Assignment: 10% Bioinfomatics Assignment: 15%

Syllabus

Upload File: Syllabus MICR 4500-4501-20150330130928.docx

Description: MICR 4500-4501 Syllabus

Form

User ID: rjksn **Name:** Robert Kosinski
Date: 03/30/2015 **Number:** 6883

Robert J. Kosinski — 3/30/15
Chair, Department Curriculum Committee — Date

Department Chair — 3/30/15
Date

Robert J. Kosinski — 4/9/15
Chair, College Curriculum Committee — Date

College Dean — 4/9/15
Date

Director, Calhoun Honors College — Date

Jessica W. Mathews — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert T. Jones — 7/14/15
Provost — Date

President — Date

000032

Change Undergraduate Course

Change a Course

Subject: MICR-Microbiology
Number: 4511
Effective Term: Fall 2015
Title: Adv Micro Lab II
Honors Course:
☐ Add Honors Course:
Last Term Course was taught: 999999
Brief Statement of Change Based on Assessment Results:
MICR 4510-4511 was intended to consist of 1 contact hour of lecture and 3 contact hours of laboratory, but it was erroneously proposed as a 2(1,2) course. We wish to leave the credits of both 4510 and 4511 as they are but change the contact hours of MICR 4511 to 3 hours per week.

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.)**

Fixing a previous error.

Learning Objectives

1. Students will acquire a complete understanding of microbial cell structure and function through advanced microscopy techniques and analysis of various cultures. Students will properly analyze and present laboratory data to the class in poster format. 2. Students will develop an understanding of how microbial species can be manipulated to produce a desired product for industrial purposes and the necessary steps for product purification, presenting the generated data in a press news release format. 3. Students will plan and interpret laboratory investigations for the production of biofuel from various sources of carbon, using the interpreted data to write a persuasive speech for the use of biofuels 4. Students will understand the importance of microbes in food production and spoilage with emphasis on proper handling and basic knowledge of common food-borne pathogens

Credits remain the same.

Contact hours 2 → 3.

Topical Outline

This course is divided into four topic areas: Microbial cell biology, microbial genetics, food and agricultural microbiology, and industrial microbiology. Some modules will cover multiple topic areas, some modules will occur concurrently. The number of contact hours per module is shown in parentheses. Module 1: Microbial Cell Biology and Advanced Microscopic Techniques (9) Week 1: Lecture: Microbial cell structure and function Lab: Sample preparation and Brightfield Microscopy Week 2: Lecture: Advanced MicroscopyTechniques Lab: Confocal and Fluorescent Microscopy Week 3: Lecture: Adv Microscopy (con't) and Microsoft Powerpoint poster basics Lab: SEM/TEM Module 2: Cloning, Purification and Analysis of Desired Product (12) Week 1: Lecture: DNA extraction and purification techniques Lab: Genomic DNA Extraction and PCR Week 2: Lecture: DNA gel electrophoresis and gel documentation basics Lab: DNA Agarose Gel & Gel purification Week 3: Lecture: DNA ligation and transformation procedures Lab: Ligation and Transformation Week 4: Lecture: Use of DNA kits / Communicating with the general public Lab: Plasmid miniprep and enzyme digestion Module 3: Production of Biofuels (6) Week 1: Lecture: Biofuel production – current research Lab: Design of experiment to produce biofuel using a waste carbon source and an organism of choice. Media preparation and inoculation of starter culture Week 2: Lecture: Feasibility of the widespread use of biofuels / Persuasive speech Lab: Biofuel experiment / verification of biofuel production and analysis of quality and quantity Module 4: Food Microbiology (12) Week 1: Lecture: Food handling, sampling, and preservation Lab: sampling and sample handling / aerobic plate count of ground beef Week 2: Lecture: Food-borne pathogens Lab: Coliform count / ground beef and isolation of Salmonella / chicken skin Week 3: Lecture: Food preservation through fermentation Lab: beer / wine production Week 4: Lecture: Food fermentations on an industrial scale Lab: beer / wine production – analysis of product for quality and quantity of ethanol

produced

Evaluation

Undergraduate
A 90 - 100
B 80 - 89
C 70 - 79
D 60 - 69
F < 60
Final Grades will be calculated as follows: Final Exam: 20% Quizzes: 15% Poster: 20% Lab Report: 20% News Release: 15% Persuasive Speech: 10%

Syllabus

Upload File: Syllabus MICR 4510-4511-20150330113703.docx

Description: MICR 4510-4511 Syllabus

Form

User ID: rjksn **Name:** Robert Kosinski
Date: 03/30/2015 **Number:** 6863

Robert J. Kaminski — 3/30/15 — 000034

Chair, Department Curriculum Committee — Date

Robert Calhoun — 3/30/15

Department Chair — Date

Robert J. Kaminski — 4/9/15

Chair, College Curriculum Committee — Date

Jed Whitwell — 4/9/15

College Dean — Date

Director, Calhoun Honors College — Date

Clarice W. Markham — 5/1/2015

Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H Jones — 7/14/15

Provost — Date

President — Date

Change Undergraduate Course

Change a Course

Subject: MICR-Microbiology
Number: 4521
Effective Term: Fall 2015
Title: Adv Micro Lab III
Honors Course:
☐ Add Honors Course:
Last Term Course was taught: 999999
Brief Statement of Change Based on Assessment Results:
MICR 4520-4521 was intended to consist of 1 contact hour of lecture and 3 contact hours of laboratory, but it was erroneously proposed as a 2(1,2) course. We wish to leave the credits of both 4520 and 4521 as they are but change the contact hours of MICR 4521 to 3 hours per week.

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.)**

Fixing a previous error.

Learning Objectives

1. The student will acquire a foundation in the biology of bacteria, viruses, fungi, and parasites that will serve as a basis for his/her continuing understanding of infectious diseases 2. Students will be able to list and describe the normal flora and infective microorganisms of the human body and describe the host-pathogen relationship in multiple contexts. 3. Students will use the correct method of collection, storage and transport of clinical specimens for microbiological investigations 4. Students will plan and interpret laboratory investigations for the diagnosis of infectious diseases and to correlate the clinical manifestations with the aetiologic agents. 5. Students will apply the methods of sterilization and disinfection to prevent and control infection. 6. Students will use modern multimedia tools to present and communicate a topic in medical microbiology to the class.

Credits remain the same.

Contact hours 2 → 3.

Topical Outline

This course is divided into five topic areas: Pathogenic Bacteriology, Parasitology, Virology, Immunology and Mycology. Some modules will cover multiple topic areas; some modules will occur concurrently. Each week will consist of a lecture period to introduce the topic, followed by the practical experience. Module 1: Pathogen-Environment-Human Interactions "Legionella: An environmental pathogen in your shower." Week 1: Lecture: Legionella and related water borne pathogens - Isolation and Identification Lab: Isolating pathogens from water sources; basic identification of Legionella species; Week 2: Lecture: Diagnostic protocols - Key characteristics; How to choose Lab: Quick Tests for Legionella; PCR analysis: Urine Antigen Tests Week 3: Lecture: Immunologic response to intracellular pathogens Lab: Serology for immune response; agglutination assays Week 4: Lecture: Clinical molecular microbiology - direct fluorescent antibody assays Lab: Direct Fluorescent Antibody Analysis Module 2: Influenza: Eggs, cell culture, vaccines Week 1: Lecture: Vaccine production in eggs - why and how (concurrent with Wk 4, Module 1) Lab: Culture of influenza in eggs Week 2: Lecture: Cell Culture - How to / Advantages and Disadvantages Lab: Isolation from eggs, cell culture basics Week 3: Lecture: Viral Analyses Lab: Plaque assays Week 4: Lecture: Immunology of Viruses Lab: ELISA / Western Blots Module 3: Malaria – from mice to men Week 1: Lecture: Animal Welfare/Models/Handling Lab: Mice handling, tail vein sampling, inoculation Week 2: Lecture: Field Diagnostics for parasites Lab: Blood smears / microscopy for parasites Week 3: Lecture: Immunology of malaria Lab: Serology, Antibody titers Week 4: Lecture: Clinical Diagnostics - Real time PCR Lab: qPCR Module 4: Infectious Fungi Week 1: Lecture:Identification and culture of yeasts and fungi Lab: Identification and culture of yeasts and fungi Week 2: Lecture: Fungal disease and immune response Lab: Fungal Immunoserology

Evaluation

Undergraduate
A 90 - 100
B 80 - 89
C 70 - 79
D 60 - 69
F < 60
Final Grades will be calculated as follows: Final Exam: 20% Quizzes: 15% Podcast: 20% Lab Reports: 20% Grant proposal: 25%

Syllabus

Upload File: Syllabus MICR 4520-4521-20150330123154.docx

Description: MICR 4520-4521 Syllabus

Form

User ID: rjksn **Name:** Robert Kosinski
Date: 03/30/2015 **Number:** 6865

000037

Robert J. Kosinski — 3/30/15

Chair, Department Curriculum Committee — Date

Robert Olen — 3/30/15

Department Chair — Date

Robert J. Kosinski — 4/9/15

Chair, College Curriculum Committee — Date

Ed Whitmire — 4/9/15

College Dean — Date

Director, Calhoun Honors College — Date

Clarice W. Mathews — 5/1/2015

Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H Jones — 7/14/15

Provost — Date

President — Date

000038

Delete Undergraduate Course

Delete a Course

Subject: GEN-Genetics
Number: 3010
Effective Term: Fall 2015
Title: Fundamental Gen Lab
☐ Delete Honors Course:
Last Term Course was taught: 200808
Brief Statement of Change Based on Assessment Results:
GEN 3010 has not been offered in years and will not be offered in the future.

Rationale for Delete 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.)**

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 03/30/2015 **Number:** 6885

000039

Chair, Department Curriculum Committee — Date 3-30-2015

Department Chair — Date 03/30/2015

Chair, College Curriculum Committee — Date 4/9/15

College Dean — Date 4/9/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/1/2016

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

000040

Delete Undergraduate Course

Delete a Course

Subject: BCHM-Biochemistry
Number: 3060
Effective Term: Fall 2015
Title: Essen Elem Bioch Lab
☐ Delete Honors Course:
Last Term Course was taught: 200808
Brief Statement of Change Based on Assessment Results:
BCHM 3060 has not been offered in years and will not be offered in the future.

Rationale for Delete 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.)

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 03/30/2015 **Number:** 6881

000041

Chair, Department Curriculum Committee — Date 3-30-2015

Department Chair — Date 03/30/2015

Chair, College Curriculum Committee — Date 4/9/15

College Dean — Date 4/9/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

Delete Undergraduate Course

Delete a Course

Subject: GEN-Genetics
Number: 3030
Effective Term: Fall 2015
Title: Molec & General Genetics Lab
☐ Delete Honors Course:
Last Term Course was taught: 201408
Brief Statement of Change Based on Assessment Results:
GEN 3030 was replaced with a new course, BCHM/GEN 3040, that will be offered in Fall 2015.

Rationale for Delete 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.)**

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 04/06/2015 **Number:** 7181

Chair, Department Curriculum Committee — Date 04/09/2015

Department Chair — Date 04/09/2015

Chair, College Curriculum Committee — Date 4/9/15

College Dean — Date 4/9/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

000044

Delete Undergraduate Course

Delete a Course

Subject: BCHM-Biochemistry
Number: 3020
Effective Term: Fall 2015
Title: Molec Bioch Lab
☐ Delete Honors Course:
Last Term Course was taught: 201401
Brief Statement of Change Based on Assessment Results:
BCHM 3020 was replace with a new course, BCHM/GEN 3040 that will be offered in Fall 2015.

Rationale for Delete 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.)**

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 04/06/2015 **Number:** 6878

Chair, Department Curriculum Committee — Date 04/09/2015

Department Chair — Date 4/09/2015

Chair, College Curriculum Committee — Date 4/9/15

College Dean — Date 4/9/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

000046

Change Undergraduate Course

Change a Course

Subject: BCHM-Biochemistry
Number: 4910
Effective Term: Fall 2015
Title: Dir Research in Biochemistry
Honors Course: BCHM 4910
☐ Add Honors Course:
Last Term Course was taught: 201408
Brief Statement of Change Based on Assessment Results:
We would like to lift the limit of credits that can be applied toward a degree. Many students take this research course for several semesters, and we would like them to be able to apply all credits earned toward degree requirements

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 Course Modifier

From

- ☐ **Variable Title**
- ☐ **Creative Inquiry**
- ☑ **Repeatable**

Max Credits: 8

To

- ☐ **Variable Title**
- ☐ **Creative Inquiry**
- ☑ **Repeatable**

Max Credits: 20

☑ Change Catalog Description

From Orientation in biochemical research (i.e., experimental planning, execution, and reporting). May be repeated for a maximum of eight credits. Includes Honors sections. Preq: Consent of instructor.

To Orientation in biochemical research (i.e., experimental planning, execution, and reporting). May be repeated. Includes Honors sections. Preq: Consent of instructor.

Evaluation

Undergraduate

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

30% Laboratory Notebook 35% Laboratory Technique and Citizenship 25% Formal Presentation of Research 10% Meeting Deadlines and Attendance at Research Symposium (at discretion of 4910 Coordinator and Research Mentor)

Syllabus

Upload File: Syllabus for BCHM 4910-S2015-20150327161249.pdf

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 04/06/2015 **Number:** 6862

Chair, Department Curriculum Committee — Date 04/09/2015

Department Chair — Date 4/09/2015

Chair, College Curriculum Committee — Date 4/9/15

College Dean — Date 4/9/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/1/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

000048

Change Undergraduate Course

Change a Course

Subject: GEN-Genetics
Number: 4910
Effective Term: Fall 2015
Title: Dir Res in Genetics
Honors Course: BCHM 4910
☐ Add Honors Course:
Last Term Course was taught: 201408
Brief Statement of Change Based on Assessment Results:
We would like to lift the limit of credits that can be applied toward a degree. Many students take this research course for several semesters, and we would like them to be able to apply all credits earned toward degree requirements

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 Course Modifier

From

- ☐ **Variable Title**
- ☐ **Creative Inquiry**
- ☑ **Repeatable**

Max Credits: 8

To

- ☐ **Variable Title**
- ☐ **Creative Inquiry**
- ☑ **Repeatable**

Max Credits: 20

☑ Change Catalog Description

From Orientation in biochemical research (i.e., experimental planning, execution, and reporting). May be repeated for a maximum of eight credits. Includes Honors sections. Preq: Consent of instructor.
To Orientation in biochemical research (i.e., experimental planning, execution, and reporting). May be repeated. Includes Honors sections. Preq: Consent of instructor.

Evaluation

Undergraduate
A 90 - 100
B 80 - 89
C 70 - 79
D 60 - 69
F < 60
30% Laboratory Notebook 35% Laboratory Technique and Citizenship 25% Formal Presentation of Research 10% Meeting Deadlines and Attendance at Research Symposium (at discretion of 4910 Coordinator and Research Mentor)

Syllabus

Upload File: Syllabus for GEN 4910-S2015-20150330103058.pdf

Form

User ID: msehorn **Name:** Michael Sehorn
Date: 04/06/2015 **Number:** 6861

Chair, Department Curriculum Committee — Date 04/09/2015

Department Chair — Date 4/9/2015

Chair, College Curriculum Committee — Date 4/9/15

College Dean — Date 4/9/15

Director, Calhoun Honors College — Date

Chair, Undergraduate Curriculum Committee — Date 5/04/2015

Chair, Graduate Curriculum Committee — Date

Provost — Date 7/14/15

President — Date

CLEMSON UNIVERSITY **Curriculum and Course Change System - Print Change/Delete Course Form** 000050

X **Change a Course - Abbrev & Number: FDSC- 2010**
Corresponding Lab Course: --
Corresponding Honors course: --
.. **Add Honors course:** --
Corresponding Graduate course: --
.. **Add Graduate course:** --
Course Title: ~~**Man and His Food**~~ Introduction to Food

Brief Statement of Change:
The current Nutrition and Dietetics concentration which is intended to meet the RD track for students is not fully in compliance with the 2012 ACEND accreditation standards for those students planning to become Registered Dietitians. This course will provide coverage of the following accreditation requirement: Course content to include techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.

Last Term taught: 200308	.. **Change Abbrev to:**
Effective Term: 08/2016	.. **Change Number to:**
X **Change Catalog Title:**	X **Change Transcript Title:**
from: Man and His Food	from: Man and His Food
to: Intro to Food	to: Intro to Food

X **Change of Credit**	From: Fixed Credit: 2 (2,0) Variable Credit: - (-), (-)	To: Fixed Credit: 3 (2,3) Variable Credit: - (-),(-)

.. **Add cross-listing with the following child course(s):**
.. **Delete cross-listing with the following child course(s):**
.. **Reverse Parent/Child relationship with:**

X **Change Method of Instruction**		.. **Change Course Modifier**		.. **Change General Education Designation**	
from:	to:	from:	to:	from:	to:
X A-Lecture Only	..	.. Pass/Fail Only	..	.. Creative Inquiry	..
.. B-Lab (w/fee)	..	X Graded	..	.. English Composition	..
.. D-Seminar	..	.. Variable Title	..	.. Oral Communication	..
.. E-Independent Study	..	.. Creative Inquiry	..	.. Mathematics	..
.. F-Tutorial (w/fee)	..	.. Repeatable	..	.. Natural Science w/Lab	..
.. G-Studio	..	maximum credits		.. Natural Science w/Lab	..
.. H-Field course	..	from:		.. Math or Science	..
.. I-Study Abroad	..	to:		.. A&H (Literature)	..
.. L-Lab (no/fee)	..			.. A&H (Non-Literature)	..
.. N/B-Lecture/Lab(w/fee)	X			.. Social Science	..
.. N/L-Lecture/Lab(no fee)	..			.. CCA	..
				.. STS	..

X **Change Catalog Description:**
from: Study of food and food products emphasizing nutrients, nutrients needs and the relationship between nutrient intake and health. Also discusses food additives, nutritional awareness (including nutritional labeling), food protection and the influence of food processing on nutritional quality of food.
to: Explores the functions of food components and ingredients on the quality of prepared food. Procedures safe food production and proper use of equipment in a typical healthcare/foodservice organization will be demonstrated. Students will prepare and evaluate different food products to understand how ingredient substitutions and interactions affect food.

X **Change Prerequisite(s):**
from: none
to: Prereq. CH 1020; Coreq FDSC 2011

Learning Objectives: • Provide a brief overview of food laws and regulations affecting the production, marketing, and sale of food goods to consumers.
• Identify the classification, nutrient composition, and physical and chemical properties of conventional foods within the major food groups.
• Explain how to select and store foods to maintain nutritive value, quality, and safety.
• Employ appropriate food safety and sanitation techniques in the preparation of food.
• Demonstrate basic techniques of food preparation.
• Identify appropriate ingredient substitutions to modify recipes for improved healthfulness and dietary compliance while maintaining product quality, consumer acceptability, and affordability.
• Analyze a recipe to identify ingredient functionality.
• Evaluate the organoleptic properties of food to determine consumer acceptability.
• Briefly describe the impact of food technology, including food processing, preservation, and packaging, on food quality, affordability, accessibility, and nutritive value.

Topical Outline: Class Topical Outline:

• Methods and testing for product specifications and product quality – 2 hours
• Government regulations, labeling, marketing/terms – 2 hours
• Food safety and sanitation – 2 hours
• Food preparation basics – 2 hours

- Basic food chemistry and composition – 2 hours
- Meat, fish, and poultry – cuts, cooking methods, tenderization, yields – 2 hours
- Milk, cheese, and eggs – functional properties of eggs, cooking with eggs and dairy – 2 hours
- Nutritive and non-nutritive sweeteners – uses in cooking – 2 hours
- Fruits and vegetables – classification, identification, purchasing specifics, processing techniques and effects – 2 hours
- Grains and flour – gluten content and functions – 2 hours
- Principles of baking – leavenings, structure; functions of key ingredients – 2 hours
- Fats and oils – food chemistry and functionality – 2 hours
- Frozen desserts – 2 hours
- Overview of food processing, packaging, and preservation – 2 hours
- Exams – 2 hours

Evaluation: Requirements:
Exam 1 20%
Exam 2 20%
Quizzes 10%
Lab grade (FDSC 2011) = 50%

Grades: A – 90 to 100%; B – 80 to 89%; C – 70 to 79%; D – 60-69%; F - <59%.

Form Originator: KCOOKSE, Cooksey,Kay D **Date Form Created:** 3/31/2015
Form Last Updated by: KCOOKSE, Cooksey,Kay D **Date Form Last Updated:** 4/10/2015
Form Number: 8135

Approval

Kay Cooksey	4/10/15	[signature]	5/1/2015
Chair, Department Curriculum Committee	Date	Chair, Undergraduate Curriculum Committee	Date
[signature]	4/10/15		
Department Chair	Date	Chair, Graduate Curriculum Committee	Date
Robert J. Kaminski	4/10/15	[signature]	7/14/15
Chair, College Curriculum Committee	Date	Provost	Date
College Dean	Date	President	Date
Director, Calhoun Honors College	Date		

- Basic food chemistry and composition – 2 hours
- Meat, fish, and poultry – cuts, cooking methods, tenderization, yields – 2 hours
- Milk, cheese, and eggs – functional properties of eggs, cooking with eggs and dairy – 2 hours
- Nutritive and non-nutritive sweeteners – uses in cooking – 2 hours
- Fruits and vegetables – classification, identification, purchasing specifics, processing techniques and effects – 2 hours
- Grains and flour – gluten content and functions – 2 hours
- Principles of baking – leavenings, structure; functions of key ingredients – 2 hours
- Fats and oils – food chemistry and functionality – 2 hours
- Frozen desserts – 2 hours
- Overview of food processing, packaging, and preservation – 2 hours
- Exams – 2 hours

Evaluation: Requirements:
Exam 1 20%
Exam 2 20%
Quizzes 10%
Lab grade (FDSC 2011) = 50%

Grades: A – 90 to 100%; B – 80 to 89%; C – 70 to 79%; D – 60-69%; F - <59%.

Form Originator: KCOOKSE, Cooksey,Kay D **Date Form Created:** 3/31/2015
Form Last Updated by: KCOOKSE, Cooksey,Kay D **Date Form Last Updated:** 4/10/2015
Form Number: 8135

Approval

Kay Cooksey	4/10/15	Patricia W. Markovich	5/1/2015
Chair, Department Curriculum Committee	Date	Chair, Undergraduate Curriculum Committee	Date
E. Jeffrey Rodekohr	4/10/15		
Department Chair	Date	Chair, Graduate Curriculum Committee	Date
Robert J. Kaminski	4/10/15	Robert T. Jones	7/14/15
Chair, College Curriculum Committee	Date	Provost	Date
Jeff Whitsett	4/13/15		
College Dean	Date	President	Date
Director, Calhoun Honors College	Date		

CLEMSON UNIVERSITY **Curriculum and Course Change System - Print New Course Form**

Course Abbreviation & Number:
X **New Undergraduate Course:** FDSC- 2011
.. **New Honors Course:** --
.. **New Graduate Course:** -

Effective Term: 08/2016
Catalog Title: Introduction to Food Laboratory
Transcript Title: Intro to Food Lab
Fixed Credit Course: 0 (0,3)
Variable Credit Course: - (-), (-)

Method of Instruction	Course Modifier	General Education Designation
.. A-Lecture Only	.. Pass/Fail Only	.. Creative Inquiry
X B-Lab (w/fee)	X Graded	.. English Composition
.. D-Seminar	.. Variable Title	.. Oral Communication
.. E-Independent Study	.. Creative Inquiry	.. Mathematics
.. F-Tutorial (w/fee)	.. Repeatable	.. Natural Science No Lab
.. G-Studio	maximum credits:	.. Natural Science w/Lab
.. H-Field course		.. Math or Science
.. I-Study Abroad		.. A&H (Literature)
.. L-Lab (no/fee)		.. A&H (Non-Literature)
.. N/B-Lecture/Lab(w/fee)		.. Social Science
.. N/L-Lecture/Lab(no fee)		.. CCA
		.. STS

Add cross-listing with the following child course(s):

Catalog Description: This course is designed to demonstrate the functions of food components and ingredients of foods on the quality of final product as well as safe food production. Students will prepare and evaluate different food products to understand how ingredient substitutions and interactions affect the physical, chemical, and functional attributes of a foods nutritive value, quality, and consumer acceptability.

Prerequisite(s): Prereq.CH 1020; FDSC 2010

Projected Enrollment:
Year 1 - 20 Year 2 - 25 Year 3 - 30 Year 4 - 35

Required course for students in:

Statement of need and justification based on assessment results of student learning outcomes: The current Nutrition and Dietetics concentration which is intended to meet the RD track for students is not fully in compliance with the 2012 ACEND accreditation standards for those students planning to become Registered Dietitians. This course will provide coverage of the following accreditation requirement: Course content to include techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups

Textbook(s): Brown, A. Understanding Food: Principles & Preparation. Belmont, CA: Cengage; 2014.

Learning Objectives: • Provide a brief overview of food laws and regulations affecting the production, marketing, and sale of food goods to consumers and the foodservice industry.
• Identify the classification, nutrient composition, and physical and chemical properties of conventional foods within the major food groups.
• Explain how to select and store foods to maintain nutritive value, quality, and safety.
• Employ appropriate food safety and sanitation techniques in the preparation of food.
• Demonstrate basic techniques of food preparation.
• Identify appropriate ingredient substitutions to modify recipes for improved healthfulness and dietary compliance while maintaining product quality, consumer acceptability, and affordability.
• Analyze a recipe to identify ingredient functionality.
• Evaluate the organoleptic properties of food to determine consumer acceptability.
• Briefly describe the impact of food technology, including food processing, preservation, and packaging, on food quality, affordability, accessibility, and nutritive value.

Topical Outline: • Sensory evaluation – 3 hours
• Basic preparation skills – 6 hours
• Basic food chemistry – 3 hours
• Meat lab – 3 hours
• Dairy and egg lab – 3 hours
• Vegetables lab – 3 hours
• Sugars – 3 hours
• Grains and flour – 3 hours
• Leavening agents (baking) – 3 hours
• Fats and oils – 3 hours
• Frozen desserts – 3 hours

Evaluation: Lab reports (10x 5%) 50% of FDSC 2010
Exam 1 and 2 (40%) and Quizzes (10%) from FDSC 2010

Form Originator: KCOOKSE,Cooksey,Kay D **Date Form Created:** 4/7/2015
Form Last Updated by: KCOOKSE, Cooksey,Kay D **Date Form Last Updated:** 4/10/2015
Form Number: 8154

Approval

	4/7/15		5/1/2015
Chair, Department Curriculum Committee	Date	Chair, Undergraduate Curriculum Committee	Date
	4/7/15		
Department Chair	Date	Chair, Graduate Curriculum Committee	Date
	4/10/15		7/14/15
Chair, College Curriculum Committee	Date	Provost	Date
	4/10/15		
College Dean	Date	President	Date
Director, Calhoun Honors College	Date		

000055

Change Undergraduate Course

Change a Course

Subject: NUTR-Nutrition
Number: 2160
Effective Term: Fall 2016
Title: Evidence-Based Nutrition
Honors Course:
☐ Add Honors Course:
Last Term Course was taught:201408
Brief Statement of Change Based on Assessment Results:
As the field of nutrition continues to advance students must be able to decipher the literature and lay media to determine fact from fiction. Increasing the credit hours on this course will enhance their knowledge of the research process. Also ACEND requires "the curriculum must reflect the scientific basis of the dietetics profession and must include research methodology, interpretation of research literature and integration of research principles into evidence-based practice".

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**
1	1

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**

Learning Objectives

• Explain key research terms • Identify key ethical principles to conduct a research study • Identify different levels of evidence • Analyze a journal article

Topical Outline

• Introduction – 1 hour • Conduction research with human subjects – 2 hours • Types of research – 3 hours • Research terms (publications, hypothesis/research questions/design /measurement/data collection methods/target population and samples) – 13 hours • Statistics – 1 hour • Evidence analysis – 3 hours • Scientific writing – 2 hours • Ethics and IRB – 2 hours • Creative Inquiry – 1 hour • Testing – 2 hours

000056

Evaluation

Undergraduate

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

ASSIGNMENT 1: Nutrition-related problem statement 5% ASSIGNMENT 2: Hypothesis Statement 5% ASSIGNMENT 3: Responsible Conduct of Research certification 10% ASSIGNMENT 4: Evidence Analysis 5% ASSIGNMENT 5: Analysis of a Journal Article 10% ASSIGNMENT 6: Ethics in Research 10% ASSIGNMENT 7: Research certification 5% 5 quizzes @ 10 points each 50%

Syllabus

Upload File: NUTR 2160 - Evidence Nutr-20150302140254.docx

Description: NUTR 2160 syllabus

Form

User ID:rhln **Name:** Rita Haliena
Date: 03/02/2015 **Number:**6180

000057

Kay Cooksey — 3/31/15
Chair, Department Curriculum Committee — Date

E. Jeffrey Rhodeheaver — 3/31/15
Department Chair — Date

Robert J. Kosinski — 4/9/15
Chair, College Curriculum Committee — Date

Jeff Whitmeal — 4/9/15
College Dean — Date

Director, Calhoun Honors College — Date

Patricia W. Marrone — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H. Jones — 7/14/15
Provost — Date

President — Date

Add Undergraduate Course

Course Attributes

Subject Abbreviation: NUTR-Nutrition
Course Number: 3010
Effective Term: Fall 2016
College: Agric, Forestry and Life Sci
Department: Food, Nutrition & Package Sci
Catalog Title: Food and Culture ☐ **Additional Fee?**
Transcript Title: Food and Culture **Justification**
Cross-reference(s):
Grade Mode: Standard Letter

Form

User ID: rhln **Name:** Rita Haliena
Date: 03/30/2015 **Number:** 6895

Syllabus

Upload File: NUTR 3010 food and culture-20150302140522.doc

Description: Food and Culture syllabi

Hours

Fixed Credit Course

Credit Hrs	Contact Hrs
3	3

Variable Credit Course

Credit Hrs Min	Credit Hrs Max	Contact Hrs Min	Contact Hrs Max

Rationale for Add 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.)

To meet accreditation (ACEND) requirements

Schedule Types

- ○ Field Course
- ○ Independent Study
- ○ Internship
- ○ Lab No Fee
- ○ Lab With Fee
- ◉ Lecture
- ○ Other
- ○ Seminar
- ○ Studio
- ○ Tutorial

Projected Enrollment

Year 1: 55
Year 2: 55
Year 3: 55
Year 4: 55

Evaluation

Undergraduate

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

Exam 1 20% Exam 2 20% Exam 3 20% Ethnic Cuisine Report 10% Cultural Paper 10% Other Assignments 20% TOTAL 100%

Catalog Description

Study of global religions, cultures, traditions, and cuisines as they influence human diets, nutrient needs, health and disease, social interactions, and economic decisions. This course builds cultural competency in diet-related client/patient interactions and interventions.

☑ **Prerequisite(s)** ☐ **Corequisite(s)**

NUTR 2030

Required course for students in

Food Science degree with Nutrition Concentration

000059

Statement of need and justification based on assessment of student learning outcomes

Accreditation (ACEND) requires programs to meet the student outcome "students will be able to develop interventions to effect change and enhance wellness in DIVERSE individuals and groups". Also this concentration prepares students for careers in a variety of healthcare environments, thus being culturally competent is critical. This new course will prepare students to meet this competency.

Textbook(s)

Kittler PG, Sucher KP, Nelms MN. Food and Culture. 6th ed. Belmont, CA: Cengage-Wadsworth; 2012.

Learning Objectives

•Describe the importance of culture on diet-related beliefs, values, and behaviors. •Identify the key elements of cross-cultural communication skills. •Define cultural competence and how it impacts health outcomes. •Identify traditional foods and cuisines associated with global religions and cultures. •Integrate the cuisine and dietary observances of various global religions and cultures into dietary plans that promote health and enhance wellness in diverse individuals and groups.

Topical Outline

•Cultural competency – 9 hours •Major dietary rules in western and eastern religions – 6 hours •Food and Central, North and South America – 6 hours •Food and Europe – 6 hours •Food and Mediterranean/Middle East/North Africa – 3 hours •Food and East, West, and South Asia – 9 hours •Reports – 3 hours •Exams – 3 hours

Kay Cooksey — Chair, Department Curriculum Committee — 3/31/15 Date

E. Jeffrey Metzen — Department Chair — 3/31/15 Date

Robert J. Kominski — Chair, College Curriculum Committee — 4/9/15 Date

Ted Whitwell — College Dean — 4/9/15 Date

Director, Calhoun Honors College — Date

Carrie W. Thomas — Chair, Undergraduate Curriculum Committee — 5/1/2015 Date

Chair, Graduate Curriculum Committee — Date

Robert H Jones — Provost — 7/14/15 Date

President — Date

Add Undergraduate Course

Course Attributes

Subject Abbreviation: NUTR-Nutrition
Course Number: 3020
Effective Term: Fall 2016
College: Agric, Forestry and Life Sci
Department: Food, Nutrition & Package Sci

Catalog Title: Nutrition Assessment ☐ **Additional Fee?**
Transcript Title: Nutrition Assessment
Justification
Cross-reference(s):
Grade Mode: Standard Letter

Form

User ID: rhln **Name:** Rita Haliena
Date: 03/30/2015 **Number:** 6897

Syllabus

Upload File: NUTR 3020 nutri assess-20150330144609.doc

Description: NUTR 3020 Nutr Assessment

Hours

Fixed Credit Course

Credit Hrs	Contact Hrs
4	3

Variable Credit Course

Credit Hrs		Contact Hrs	
Min	Max	Min	Max

Rationale for Add 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.)**

To meet accreditation (ACEND) requirements

Schedule Types

- ○ **Field Course**
- ○ **Independent Study**
- ○ **Internship**
- ○ **Lab No Fee**
- ○ **Lab With Fee**
- ◉ **Lecture**
- ○ **Other**
- ○ **Seminar**
- ○ **Studio**
- ○ **Tutorial**

Projected Enrollment

Year 1: 55
Year 2: 55
Year 3: 55
Year 4: 55

Evaluation

Undergraduate

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

Lab Assignments: 4 reports @ 10% each 40% Other assignments: 15% Exam 1: 15% Exam 2: 15% Exam 3: 15%

Catalog Description

Overview of health, nutrition, and physical assessment principles and methods used in nutrition research and clinical nutrition care. Emphasis on dietary assessment, body composition, resting energy expenditure, biochemical testing, nutrition-focused physical exam, and physical performance testing.

☑ **Prerequisite(s)** ☑ **Corequisite(s)**

Pre-req: NUTR 2030; BIOL 2230 Co-requisite: NUTR 3021

Required course for students in

Nutrition Concentration of Food Science BS degree

000061

Statement of need and justification based on assessment of student learning outcomes

The Accreditation Council for Education in Nutrition and Dietetics (ACEND) requires programs to include principles and methods of assessment so graduates can implement nutrition related intervention strategies. Current coursework does not allow adequate coverage of these key concepts into the curriculum. Graduate and dietetic internship surveys indicate these concepts need strengthening in the program.

Textbook(s)

Jesch, E.D., C.J. Popp, D. Traylor, N. Najm (2014). Basics of Nutrition & Exercise Physiology Lab Manual. Provided by instructor. Pagana, K.D., and T.J. Pagana (2013). Mosby's Manual of Diagnostic and Laboratory Tests, 5th edition. Mosby.

Learning Objectives

• Apply scientific knowledge to assess health, nutrition, and physical state. • Assess nutrient intake using validated methods. • Conduct nutrient analysis. • Assess body composition. • Analyze specific health biomarkers. • Demonstrate proper techniques for conducting a nutrition-focused physical examination at the novice level. • Analyze physical conditioning. • Demonstrate proper exercise techniques

Topical Outline

• Introduction and overview – 1 hour • Medical terminology – 3 hours • Dietary assessment methods – 3 hours • Nutrient analysis methods – 3 hours • Calorie assessment – 3 hours • Biochemical testing – 3 hours • Body composition – 6 hours • Energy expenditure – 5 hours • Physical assessment – 3 hours • Strength and physical assessment – 6 hours • Nutrition-focused physical exam – 3 hours • Introduction to nutrition care process – 3 hours • Exams – 3 hours

Kay Cooksey — 3/31/15
Chair, Department Curriculum Committee — Date

E. Jeffrey Metallinos — 3/31/15
Department Chair — Date

Robert J. Kozinski — 4/9/15
Chair, College Curriculum Committee — Date

Jack Whitehead — 4/9/15
College Dean — Date

Director, Calhoun Honors College — Date

Clarice W. Marcus — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H. Jones — 7/14/15
Provost — Date

President — Date

000062

Add Undergraduate Course

Course Attributes

Subject Abbreviation: NUTR-Nutrition
Course Number: 3021
Effective Term: Fall 2016
College: Agric, Forestry and Life Sci
Department: Food, Nutrition & Package Sci

Catalog Title: Nutrition Assessment ☐ **Additional Fee?**
Transcript Title: Nutrition Assessment Justification
Cross-reference(s):
Grade Mode: Standard Letter

Form

User ID: rhln **Name:** Rita Haliena
Date: 04/07/2015 **Number:** 7219

Syllabus

Upload File: NUTR 3021 nutri assess lab-20150330145917.doc

Description: NUTR 3021 Nutr Assessment

Hours

Fixed Credit Course

Credit Hrs	Contact Hrs
0	3

Variable Credit Course

Credit Hrs Min	Credit Hrs Max	Contact Hrs Min	Contact Hrs Max

Rationale for Add 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.)**

To meet accreditation (ACEND) requirements

Schedule Types

- ○ **Field Course**
- ○ **Independent Study**
- ○ **Internship**
- ○ **Lab No Fee**
- ◉ **Lab With Fee**
- ○ **Lecture**
- ○ **Other**
- ○ **Seminar**
- ○ **Studio**
- ○ **Tutorial**

Projected Enrollment

Year 1: 55
Year 2: 55
Year 3: 55
Year 4: 55

Evaluation

Undergraduate

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

Lab Assignments: 4 reports @ 10% each 40% Other assignments: 15% Exam 1: 15% Exam 2: 15% Exam 3: 15%

Catalog Description

Overview of health, nutrition, and physical assessment principles and methods used in nutrition research and clinical nutrition care. Emphasis on dietary assessment, body composition, resting energy expenditure, biochemical testing, nutrition-focused physical exam, and physical performance testing.

☑ **Prerequisite(s)** ☑ **Corequisite(s)**

Pre-Requisites: NUTR 2030; BIOL 2230 Co-requisite: NUTR 3020

Required course for students in

Nutrition Concentration of Food Science BS degree

Statement of need and justification based on assessment of student learning outcomes

The Accreditation Council for Education in Nutrition and Dietetics (ACEND) requires programs to include principles and methods of assessment so graduates can implement nutrition related intervention strategies. Current coursework does not allow adequate coverage of these key concepts into the curriculum. Graduate and dietetic internship surveys indicate these concepts need strengthening in the program.

Textbook(s)

Jesch, E.D., C.J. Popp, D. Traylor, N. Najm (2014). Basics of Nutrition & Exercise Physiology Lab Manual. Provided by instructor. Pagana, K.D., and T.J. Pagana (2013). Mosby's Manual of Diagnostic and Laboratory Tests, 5th edition. Mosby.

Learning Objectives

• Apply scientific knowledge to assess health, nutrition, and physical state. • Assess nutrient intake using validated methods. • Conduct nutrient analysis. • Assess body composition. • Analyze specific health biomarkers. • Demonstrate proper techniques for conducting a nutrition-focused physical examination at the novice level. • Analyze physical conditioning. • Demonstrate proper exercise techniques

Topical Outline

• Laboratory introduction and safety guidelines – 3 hours • Implementation of dietary assessment methods – 6 hours • Applying dietary assessment methods and techniques to various populations – 3 hours • Calorie assessment – 3 hours • Measuring and interpreting laboratory and biochemical tests – 6 hours • Anthropometric measures to assess body composition – 6 hours • Calculating and measuring energy expenditure techniques – 3 hours • Applying physical examination and assessment techniques – 3 hours • Measuring strength and physical performance – 6 hours • Techniques for assessing clients using nutrition-focused physical exam procedures – 3 hours • Applying the Nutrition Care Process to case scenarios – 3 hours

Kay Cooksey — 4/7/15
Chair, Department Curriculum Committee — Date

E. Jeffrey Rhodehamel — 4/7/15
Department Chair — Date

Robert J. Kosinski — 4/10/15
Chair, College Curriculum Committee — Date

Ted Whitwell — 4/10/15
College Dean — Date

Director, Calhoun Honors College — Date

Clarissa W. Mostoller — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H. Jones — 7/14/15
Provost — Date

President — Date

000064

Change 4000/6000 Course

Change a Course

Subject: FDSC-Food Science
Number: 4070/6070
Effective Term: Fall 2016
Title: Quantity Food Production
Honors Course:
☐ Add Honors Course:
Last Term Course was taught: 201408
Brief Statement of Change Based on Assessment Results:
Increasing laboratory credit hours to allow adequate time for application of quantity food production principles as recommended by accrediting agency (ACEND).

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 Subject

To NUTR-Nutrition

☑ Change of Credit

From
Fixed Credit Course
Credit Hrs **Contact Hrs**
2 1
Variable Credit Course
Credit Hrs Contact Hrs
Min Max Min Max
To
Fixed Credit Course
Credit Hrs **Contact Hrs**
3 1
Variable Credit Course
Credit Hrs Contact Hrs
Min Max Min Max

☑ Change Catalog Description

From Principles of the production of food in quantity for use in food service systems. Emphasis will be on functions of components of foods and of ingredients in foods on the quality of the final product, on safe production of food, and on proper use of equipment.

To Principles of the production of food in quantity for use in food service systems. Emphasis will be placed on safe food preparation, proper use of equipment, menu and recipe development, ingredient scaling and procurement, quality of meal produced, meal supervision, and financial and time management.

☑ Change Prerequisite(s) / Corequisite(s)

From Pre-requisite: Food Science major or minor Co-requisite: FDSC 4071

To Pre-requisite: Food Science major or minor; FDSC 3060; NUTR 2030; FDSC 2010 or consent of instructor Co-requisite: NUTR 4071

Learning Objectives

• Apply safety principles related to food, personnel, and consumers. • Demonstrate techniques of food preparation. • Apply principles of food science and food systems to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.

Topical Outline

• Food safety and sanitation review – 1 hour • Quantity cooking equipment and methods – 1 hour • Meal/menu planning (staffing, environment, menu) – 3 hours • Recipe/ingredients – 2 hours • Production planning/kitchen organization/managerial oversight – 3 hours • Planning special diets – 1 hour • Team meal planning – 3 hours • Exam – 1 hour

Add course requirements for 6000-level courses

Graduate project related to subject matter worth 20% such as complete a facility design for a mock institution identifying specifications, vendors and pricing for 2 major pieces of equipment.

000065

F < 60
Assignments 10% Cycle Menus (2) 20% Meal Planning Progress Documents 20% Final Meal Planning Packet 30% ServSafe Exam 10% Final Exam 10%
6000
A 90 - 100
B 80 - 89
C 70 - 79
F < 70
Assignments 8% Cycle Menus (2) 16% Meal Planning Progress Documents 16% Final Meal Planning Packet 24% ServSafe Exam 8% Final Exam 8% Graduate project 20%

Syllabus

Upload File: NUTR 4070 - Quantity Foods-20150330153103.doc

Description: NUTR 4070 Quantity Foods

Form

User ID: rhln **Name:** Rita Haliena
Date: 03/30/2015 **Number:** 6912

000066

Kay Coohsey — 3/31/15
Chair, Department Curriculum Committee — Date

E. Jeffrey Rhodeheamel — 3/31/15
Department Chair — Date

Robert J. Kominski — 4/9/15
Chair, College Curriculum Committee — Date

Reed Whittemore — 4/9/15
College Dean — Date

Director, Calhoun Honors College — Date

Patricia W. Marrone — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H Jones — 7/14/15
Provost — Date

President — Date

Change 4000/6000 Course

Change a Course

Subject: FDSC-Food Science
Number: 4071/6071
Effective Term: Fall 2016
Title: Quantity Food Production Lab
Honors Course:
☐ Add Honors Course:
Last Term Course was taught:999999
Brief Statement of Change Based on Assessment Results: Increasing laboratory credit hours to allow adequate time for application of quantity food production principles as recommended by accrediting agency (ACEND).

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 Subject

To NUTR-Nutrition

☑ Change of Credit

From
Fixed Credit Course
Credit Hrs Contact Hrs
0 3
Variable Credit Course
Credit Hrs Contact Hrs
Min Max Min Max

To
Fixed Credit Course
Credit Hrs Contact Hrs
0 6
Variable Credit Course
Credit Hrs Contact Hrs
Min Max Min Max

☑ Change Catalog Description

From Principles of the production of food in quantity for use in food service systems. Emphasis will be on functions of components of foods and of ingredients in foods on the quality of the final product, on safe production of food, and on proper use of equipment.

To Principles of the production of food in quantity for use in food service systems. Emphasis will be placed on safe food preparation, proper use of equipment, menu and recipe development, ingredient scaling and procurement, quality of meal produced, meal supervision, and financial and time management.

☑ Change Prerequisite(s) / Corequisite(s)

From Co-req: FDSC 4070 Pre-req: food science major or minor

To Co-req: NUTR 4070 Pre-req: Food science major or minor; FDSC ~~3060~~; NUTR 2030; FDSC 2010 or consent of instructor 3060

Learning Objectives

• Apply safety principles related to food, personnel, and consumers. • Demonstrate techniques of food preparation. • Apply principles of food science and food systems to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups.

Topical Outline

• Introduction – 3 hours • Cooking methods/equipment – 9 hours • Group assignments and project instruction/planning – 3 hours • Menu planning – 6 hours • Recipe/ingredient adjustments – 6 hours • Recipe costing/procurement – 6 hours • Production planning – 6 hours • Team meal practice – 12 hours • Team meals – 18 hours • Wrap-up – 3 hours

Add course requirements for 6000-level courses

Graduate project related to subject matter worth 20% such as complete a facility design for a mock institution identifying specifications, vendors, and pricing for 2 major pieces of equipment.

Evaluation

4000
A 90 - 100
B 80 - 89
C 70 - 79
D 60 - 69
F < 60
Assignments 10% Cycle Menus (2) 20% Meal Planning Progress Documents 20% Final Meal Planning Packet 30% ServSafe Exam 10% Final Exam 10%
6000
A 90 - 100
B 80 - 89
C 70 - 79
F < 70
Assignments 8% Cycle Menus (2) 16% Meal Planning Progress Documents 16% Final Meal Planning Packet 24% ServSafe Exam 8% Final Exam 8% Graduate project 20%

Syllabus

Upload File: NUTR 4071 - Quantity Foods - lab-20150302183944.doc

Description: NUTR 4071 Quantity Foods Lab

Form

User ID: rhln **Name:** Rita Haliena
Date: 03/02/2015 **Number:** 6193

000069

Kay Cooksey 3/31/15

Chair, Department Curriculum Committee Date

[illegible] 3/31/15

Department Chair Date

Robert J. Kosinski 4/9/15

Chair, College Curriculum Committee Date

Ted Whitwell 4/9/15

College Dean Date

Director, Calhoun Honors College Date

[illegible] 9/1/2015

Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

Robert H Jones 7/14/15

Provost Date

President Date

000070

Change Undergraduate Course

Change a Course

Subject: NUTR-Nutrition
Number: 4270
Effective Term: Fall 2016
Title: Nutrition Counseling
Honors Course:
☐ Add Honors Course:
Last Term Course was taught:201401
Brief Statement of Change Based on Assessment Results:
Graduate survey results indicate students need additional training in nutrition counseling

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.)**

Meet ACEND requirements

☑ Change of Credit

From
Fixed Credit Course

Credit Hrs	Contact Hrs
1	1

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

Learning Objectives

• Define and demonstrate effective counseling techniques in diverse populations. • Apply and assess the effectiveness of motivational interviewing techniques. • Exhibit the ability to recognize and apply evidence based counseling techniques that are client centered to promote behavioral changes. • Participate in and evaluate nutrition counseling sessions utilizing the nutrition care process.

Topical Outline

• Introduction – 1 hour • Counseling strategies – 4 hours • Motivational Interviewing – 8 hours • Behavioral change theory/cognitive therapy – 5 hours • Counseling skills for disease prevention and chronic disease – 6 hours • Management issues/reimbursement – 5 hours • Exam – 1 hour

Evaluation

Undergraduate

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

Exam: 25% Assignments/Discussion Boards/Quizzes: 35% Role play/Class Participation: 20% Project: 20%

000071

Syllabus

Upload File: NUTR 4270 Nutr Counseling-20150302192423.docx

Description: NUTR 4270 Nutr Counseling

Form

User ID: rhln **Name:** Rita Haliena
Date: 03/30/2015 **Number:** 6196

000072

Kay Coolsey — 3/31/15
Chair, Department Curriculum Committee — Date

E. Jeffrey Rhodeheamel — 3/31/15
Department Chair — Date

Robert J. Kosinski — 4/9/15
Chair, College Curriculum Committee — Date

Jed Whittemore — 4/9/15
College Dean — Date

Director, Calhoun Honors College — Date

Clarice W. Nicholson — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H. Jones — 7/14/15
Provost — Date

President — Date

CLEMSON UNIVERSITY **Curriculum and Course Change System - Print Change/Delete Course Form**

000073

X **Change a Course - Abbrev & Number: NUTR- 4510**
Corresponding Lab Course: --
Corresponding Honors course: NUTR--4510
.. **Add Honors course:** --
Corresponding Graduate course: NUTR--6510
.. **Add Graduate course:** --
Course Title: Human Nutrition

Brief Statement of Change:
With a total review of the Nutrition and Dietetics curriculum, NUTR 2030 was added to the curriculum to provide the students with an introductory nutrition course. Prior to adding NUTR 2030 in the sophomore year, NUTR 4510 was the first nutrition course and taught in the junior year. Results of a survey of recent graduates indicated that students wanted and needed more nutrition coursework and earlier inclusion of nutrition coursework in the curriculum. This change will address additional coursework in the nutrition curriculum and provide a progression of learning more suited to the current curriculum matching the forthcoming ACEND requirements. A change in course description is needed to better reflect the content covered with the addition of NUTR 2030 to the curriculum. With the addition of NUTR 2030 to the curriculum, the current catalog statement "credit toward a degree will be given for only one of NUTR 2030, 2050, 4510" needs to be deleted.

Last Term taught: 201308	.. **Change Abbrev to:**
Effective Term: 08/2016	.. **Change Number to:**

X **Change Catalog Title:**	X **Change Transcript Title:**
from: Human Nutrition	from: Human Nutrition
to: Human Nutrition & Metabolism I	to: Human Nutrition & Metabolism I

.. **Change of Credit**	From: Fixed Credit: 3 (3,0) Variable Credit: - (-), (-)	To: Fixed Credit: (,) Variable Credit: - (-),(-)

.. **Add cross-listing with the following child course(s):**

.. **Delete cross-listing with the following child course(s):**

.. **Reverse Parent/Child relationship with:**

.. **Change Method of Instruction**		.. **Change Course Modifier**		.. **Change General Education Designation**	
from:	to:	from:	to:	from:	to:
X A-Lecture Only	..	.. Pass/Fail Only	..	.. Creative Inquiry	..
.. B-Lab (w/fee)	..	X Graded	..	.. English Composition	..
.. D-Seminar	..	.. Variable Title	..	.. Oral Communication	..
.. E-Independent Study	..	.. Creative Inquiry	..	.. Mathematics	..
.. F-Tutorial (w/fee)	..	.. Repeatable	..	.. Natural Science w/Lab	..
.. G-Studio	..	maximum credits		.. Natural Science w/Lab	..
.. H-Field course	..	from:		.. Math or Science	..
.. I-Study Abroad	..	to:		.. A&H (Literature)	..
.. L-Lab (no/fee)	..			.. A&H (Non-Literature)	..
.. N/B-Lecture/Lab(w/fee)	..			.. Social Science	..
.. N/L-Lecture/Lab(no fee)	..			.. CCA	..
				.. STS	..

X **Change Catalog Description:**
from: Advanced concepts of nutrition, including physiological handling of nutrients, nutrient-nutrient interactions, and principles of nutritional deficiency and over-nutrition. Factors affecting methods of determining nutritional status, development of nutrition standards, and recent advances in human nutrition. Credit toward a degree will be given for only one of NUTR 2030, 2050 or 4510.
to: Concepts of metabolism fundamental to understanding human nutrition are examined. Bioenergetics as well as metabolism of carbohydrates, lipids, and amino acids are discussed.

X **Change Prerequisite(s):**
from: Preq: Food Science major or minor. Preq or concurrent enrollment:BCHM 3050.
to: Preq: Food Science major or minor. Preq: BCHM 3050 or 4230 or 4060, NUTR 2030 or permission of instructor.

Learning Objectives: Learning outcomes include metabolism of the macronutrients and the integration of macronutrient metabolism.

Topical Outline: Unit 1: Carbohydrate (13 hours)
Unit 2: Lipid (13 hours)
Unit 3: Protein (13 hours)
Unit 4: Integration of Metabolism (4 hours)

Evaluation: Weekly assessments - 10 @ 4% = 40%
Terminology assessments - 4 @ 5% = 20%
Exams 4 @ 10% = 40%
Graduate and honors students only
Discussions (Due the last day of classes) 75 points (20%)
Total points (graduate/honors) 375 points

Evaluation
Grades will be rounded to the nearest tenth of a percent. For example, an 86.64 will be rounded down

to an 86.6 and an 86.65 will be rounded up to an 86.7.
A ≥ 90.0%
B 80.0 – 89.9%
C 70.0 – 79.9%
D 60.0 – 69.9%
F < 60.0%

Graduate Students
A ≥ 90.0%
B 80.0 – 89.9%
C 70.0 – 79.9%
F < ~~60.0%~~ 70%

Add course requirements for honors and/or 600-level courses (if applicable): Graduate and honors students only
Discussions (Due the last day of classes) 75 points (20%)
Total points (graduate/honors) 375 points

Form Originator: MBOHANB, Bohan Brown,Michelle Marie **Date Form Created:** 10/31/2014
Form Last Updated by: KCOOKSE, Cooksey,Kay D **Date Form Last Updated:** 4/7/2015
Form Number: 7776

Approval

Kay Cooksey	4/7/15	Patricia W. Marshall	5/1/2015
Chair, Department Curriculum Committee	Date	Chair, Undergraduate Curriculum Committee	Date
[signature]	4/7/15		
Department Chair	Date	Chair, Graduate Curriculum Committee	Date
Robert J. Kaminski	4/10/15	Robert H. Jones	7/14/15
Chair, College Curriculum Committee	Date	Provost	Date
Jed Whittemore	4/10/15		
College Dean	Date	President	Date
Director, Calhoun Honors College	Date		

CLEMSON UNIVERSITY **Curriculum and Course Change System - Print Change/Delete Course Form**

X **Change a Course - Abbrev & Number: NUTR- 4550**
Corresponding Lab Course: --
Corresponding Honors course: --
X **Add Honors course:** NUTR-H-4550
Corresponding Graduate course: NUTR--6550
.. **Add Graduate course:** --
Course Title: Nutr Metabolism

Brief Statement of Change:
With a total review of the Nutrition and Dietetics curriculum, NUTR 2030 was added to the curriculum to provide students with an introductory nutrition course. Prior to adding NUTR 2030 to the sophomore year, NUTR 4510 was the first nutrition course and was taught in the junior year. Results of survey of recent graduates wanted and needed more nutrition coursework and earlier inclusion in the curriculum. This change will address additional coursework in the nutrition curriculum and provide a progression of learning more suited to the current curriculum and matching the forthcoming ACEND requirements.

Last Term taught: 201405	.. **Change Abbrev to:**
Effective Term: 08/2016	.. **Change Number to:**

X **Change Catalog Title:**	X **Change Transcript Title:**
from: Nutrition and Metabolism	from: Nutr Metabolism
to: Human Nutrition & Metabolism II	to: Human Nutrition&Metabolism II

.. **Change of Credit**	From: Fixed Credit: 3 (3,0) Variable Credit: - (-), (-)	To: Fixed Credit: (,) Variable Credit: - (-),(-)

.. **Add cross-listing with the following child course(s):**
.. **Delete cross-listing with the following child course(s):**
.. **Reverse Parent/Child relationship with:**

.. **Change Method of Instruction**		.. **Change Course Modifier**		.. **Change General Education Designation**	
from:	to:	from:	to:	from:	to:
X A-Lecture Only	..	.. Pass/Fail Only	..	.. Creative Inquiry	..
.. B-Lab (w/fee)	..	.. Graded	..	.. English Composition	..
.. D-Seminar	..	.. Variable Title	..	.. Oral Communication	..
.. E-Independent Study	..	.. Creative Inquiry	..	.. Mathematics	..
.. F-Tutorial (w/fee)	..	.. Repeatable	..	.. Natural Science w/Lab	..
.. G-Studio	..	maximum credits		.. Natural Science w/Lab	..
.. H-Field course	..	from:		.. Math or Science	..
.. I-Study Abroad	..	to:		.. A&H (Literature)	..
.. L-Lab (no/fee)	..			.. A&H (Non-Literature)	..
.. N/B-Lecture/Lab(w/fee)	..			.. Social Science	..
.. N/L-Lecture/Lab(no fee)	..			.. CCA	..
				.. STS	..

X **Change Catalog Description:**
from: Concepts of metabolism fundamental to understanding normal and therapeutic nutrition are examined. Bioenergetics as well as metabolism of carbohydrates, lipids, amino acids, vitamins, and minerals as they relate to nutrition are discussed.
to: Concepts of metabolism fundamental to understanding human nutrition are examined. Bioenergetics related to the metabolism of vitamins and minerals, as well as physical activity and hormonal responses.

X **Change Prerequisite(s):**
from: Preq: Food Science major or minor; and BCHM 3050 and BIOL 2220. Preq or concurrent enrollment: BIOL 2230.
to: Preq: NUTR 4510 and BIOL 2220. Preq or concurrent: BIOL 2230.

Learning Objectives: Learning outcomes include role of micronutrients in bioenergetics and health, and the role of physical activity and hormones in regulating bioenergetics.

Topical Outline: Unit 1 – Vitamins (10 contact hours)
Unit 2 – Minerals (10 contact hours)
Unit 3 – Regulation of Fuel Utilization (food, physical activity and hormones; 10 contact hours)
Unit 4 – Energetics (13 contact hours)

Evaluation: Regular Quizzes 10 @ 4% = 40%
Terminology assessments 4 @ 5% = 20%
Exams 4 @ 10% = 40%

Graduate and honors students only
Discussions (Due the last day of classes) 75 points (20%)
Total points (graduate/honors) 375 points

Undergraduate Evaluation 4550
Grades will be rounded to the nearest tenth of a percent. For example, an 86.64 will be rounded down to an 86.6 and an 86.65 will be rounded up to an 86.7.
A ≥ 90.0%
B 80.0 – 89.9%

C 70.0 – 79.9%
D 60.0 – 69.9%
F < 60.0%

000076

Graduate Evaluation ~~5~~ 6 50
Grades will be rounded to the nearest tenth of a percent. For example, an 86.64 will be rounded down to an 86.6 and an 86.65 will be rounded up to an 86.7.
A ≥ 90.0%
B 80.0 – 89.9%
C 70.0 – 79.9%
F < ~~60.0%~~ 70%

Add course requirements for honors and/or 600-level courses (if applicable): Writing Assignment (25 points)
Discussion (75 points)

Form Originator: EJESCH, Jesch,Elliot D **Date Form Created:** 10/31/2014
Form Last Updated by: KCOOKSE, Cooksey,Kay D **Date Form Last Updated:** 4/10/2015
Form Number: 7775

Approval

Kay Cooksey	4/10/15	[signature]	5/1/2015
Chair, Department Curriculum Committee	Date	Chair, Undergraduate Curriculum Committee	Date
E. Jeffrey Rhodeland	4/10/15		
Department Chair	Date	Chair, Graduate Curriculum Committee	Date
Robert J. Kuniski	4/10/15	Robert T. Jones	7/14/15
Chair, College Curriculum Committee	Date	Provost	Date
Jed Whitmire	4/13/15		
College Dean	Date	President	Date
Director, Calhoun Honors College	Date		

000077

Change Major

Major Name: Food Science
Degree: Bachelor of Science
Effective Catalog Year: 2016-2017

☑

Change Major Name to: Food Science and Human Nutrition

- ☐ **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:
Description: Nutrition Concentration map
Additional Information:
Description: Courses for emphases

Summary/Explanation

Change the major name to more aptly represent the two concentrations that are provided - Food Science & Technology and Nutrition as over 50% of the food science majors are completing the nutrition concentration. Including the term "nutrition" in the major name may enhance opportunities for nutrition-related positions, internships, or advanced degree programs as companies/institutions may use electronic scanners to search key words and electronic application systems. The inclusion of nutrition in the major name should result in students being included in the candidate pool whereas previously they may have been excluded as candidates. Although the Nutrition concentration is undergoing many changes, the Food Science and Technology concentration will be unchanged.

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: rhln **Name:** Rita Haliena
Date: 04/07/2015 **Number:** 7211

000078

Kay Cooksey 3/31/15

Chair, Department Curriculum Committee Date

G. Jeffery Rhodehamel 3/31/15

Department Chair Date

Robert J. Kosinski 4/9/15

Chair, College Curriculum Committee Date

Ted Whitwell 4/9/15

College Dean Date

Director, Calhoun Honors College Date

Janice W. Murdoch 5/1/2015

Chair, Undergraduate Curriculum Committee Date

Chair, Graduate Curriculum Committee Date

Robert H Jones 7/14/15

Provost Date

President Date

FOOD SCIENCE AND HUMAN NUTRITION MAJOR
FOOD SCIENCE AND TECHNOLOGY CONCENTRATION CURRICULUM
2014-2015

FRESHMAN YEAR

Fall Semester	
BIOL 1030 General Biol I ***and***	3
BIOL 1050 General Biol Lab I ***or***	1
BIOL 1100 Principles of Biol I	5
CH 1010 General Chemistry	4
COMM 1500 Intro to Hum Comm	3
or COMM 2500 Public Speaking	3
FDSC 1010 Intro to FdSc & Nutr	1
MATH 1020 Intro to Math Ana ***or***	3
MATH 1060 Calc of Var I	4
	15-17

Spring Semester	
BIOL 1040 General Biol II ***and***	3
BIOL 1060 General Biol Lab II ***or***	1
BIOL 1110 Principles of Biol II	5
CH 1020 General Chemistry	4
ENGL 1030 Acc Composition	3
FDSC 1020 Perspec Fd & Nutr Sci	1
FDSC 4500 Creative Inquiry	1
PSYC 2010 Intro to Psychology	3
	16-17

SOPHOMORE YEAR

Fall Semester	
CH 2010 Surv Organic Chem ***and***	3
CH 2020 Surv Organic Chem Lab ***or***	1
CH 2230 Organic Chem ***and***	3
CH 2270 Org Chem Lab	1
FDSC 4500 Creative Inquiry	1
PHYS 1220 Phys w/Cal I ***and***	3
PHYS 1240 Physics Lab I ***or***	1
PHYS 2000 Intro Physics ***or***	4
PHYS 2070 Gen Phys I ***and***	3
PHYS 2090 Gen Phys I Lab	1
Arts&Humanities (Lit) Requirement[1]	3
Social Science Requirement[1,2]	3
	15

Spring Semester	
BCHM 3050 Essen Elem Bioch	3
BIOL 4340 Biol Chem Techniques	2
STAT 2300 Statistical Methods I	3
FDSC 2140 Fd Resources & Society	3
FDSC 4500 Creative Inquiry	1
Arts&Humanites(Non-Lit) Requirement[1]	3
Elective	2
	17

JUNIOR YEAR

Fall Semester	
FDSC 3010 Food Reg and Policy	1
FDSC 4170 Seminar	1
FDSC 4500 Creative Inquiry	1
MICR 3050 Gen Microbiology	4
NUTR 4510 Human Nutrition	3
Departmental Requirement[3]	3
Emphasis Area Requirement[4]	2
	15

Spring Semester	
ENGL 3040 Business Writing ***or***	3
ENGL 3140 Technical Writing	3
FDSC 4030 Fd Chem & Analysis	2
FDSC 4100 Food Prod Dev	4
FDSC 4500 Creative Inquiry	1
MICR 4070 Food & Dairy Micro	4
Emphasis Area Requirement[4]	3
	17

SENIOR YEAR

Fall Semester	
FDSC 3060 Fd Serv Operations ***or***	3
FDSC 3070 Restaurant Fd Serv Mgt	3
FDSC 4010 Food Chemistry I	3
FDSC 4040 Fd Preserv & Proc	3
FDSC 4070 Quantity Food Prod	2
FDSC 4500 Creative Inquiry	1
Emphasis Area Requirement[4]	3
	15

Spring Semester	
FDSC 4020 Food Chemistry II	3
FDSC 4080 Food Process Engr	4
FDSC 4090 Total Quality Mgt	3
FDSC 4500 Creative Inquiry	1
Emphasis Area Requirement[4]	3
	14

124-127 TOTAL SEMESTER HOURS

[1]See General Education requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness requirement.
[2]For students undecided on concentration area, APEC 2020, ECON 2110 or 2120 is recommended.
[3]FDSC 4300 or AVS 4130.
[4]See advisor.

IMPORTANT NOTE: If you have not taken the required courses at the appropriate time as outlined in the above curriculum map, then you assume the risk of possibly not graduating by your intended graduation date. Note that most nutrition and food science courses are only offered <u>one time per year</u> – typically the semester listed on the curriculum map. Many courses have pre-requisites which are strictly enforced. Failure to complete the pre-requisites will prevent you from taking the course. Check *Undergraduate Announcements* for the specific pre-requisites required for individual courses.

000080

Change Major

Major Name: Nutrition and Dietetics
Degree: Bachelor of Science
Effective Catalog Year: 2016-2017

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

Curriculum Map: Nutrition - Dietetics Emphasis 2016-17-2-20150303160451.docx
Description: Nutrition Concentration map
Additional Information: Nutrition - Dietetics Emphasis 2016-17-2-20150303160451.docx
Description: Nutrition concentration emphases

Summary/Explanation

This change only affects the Nutrition concentration. The Food Science and Technology concentration will remain the same. As the nutrition and dietetics field has advanced, additional skill sets are needed to prepare graduates for employment and career advancement in a chosen nutrition related field. The current Nutrition and Dietetics concentration does not allow for different career opportunities within the nutrition field. By adding four emphases areas, graduates will be better prepared for the variety of nutrition fields available. Students currently choose the Nutrition and Dietetics Concentration to prepare them for professional and graduate coursework, preparation for a Dietetic Internship to become a Registered Dietitian (RD), as well as employment in the community health and wellness and food industry arenas. If a student plans to attend professional school and is following the current curriculum, the student may be required to take additional 10 or more credits to meet the program pre-requisites. This may require a student to take 18-20 or more credits per semester to graduate in a four year time frame resulting in less than desirable grade outcomes. The proposal of four emphases (Dietetics – RD tract, Basic and Behavioral Science, Community Health and Wellness, and Food Industry) will allow students to better meet their intended career needs with the addition of related coursework. The attached proposed curriculum allows for the first two years being the same with the differentiation beginning in the junior year. Students will claim an emphasis area before the junior year. As the difference in the emphases is 17 credit hours, students can be tracked according to emphases. The current concentration does not allow for tracking a student's career as there is only one option. Such differentiation will allow for improved advising. The current Nutrition and Dietetics concentration which is intended to meet the RD track for students is not fully in compliance with the 2012 ACEND accreditation standards for those students planning to become Registered Dietitians. The additional courses will provide enhanced coverage of the following accreditation requirements: - The curriculum must reflect principles and methods of nutrition assessment (NUTR 3020) - The curriculum must include management and business theories and principles required to deliver programs and services (MGT 2010 and ACCT 2020) - Students must be able to evaluate a budget and interpret financial data (ACCT 2020) - Course content to include techniques of food preparation and application to the development, modification, and evaluation of recipes, menus and food products acceptable to diverse groups (FDSC 2010 and NUTR 3010) With the addition of FDSC 2010 Introduction to Foods, NUTR 3010 Food and Culture, and NUTR 3020 Nutrition Assessment, to the core concentration, the content of the curriculum will be strengthen to meet the identified curriculum gaps.

Rationale for Change Major

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

Form

User ID: rhln **Name:** Rita Haliena
Date: 03/30/2015 **Number:** 6890

000081

Kay Cooksey — 3/31/15
Chair, Department Curriculum Committee — Date

E. Jeffrey Rhodeheard — 3/31/15
Department Chair — Date

Robert J. Kominski — 4/9/15
Chair, College Curriculum Committee — Date

Jed Whittemore — 4/9/15
College Dean — Date

Director, Calhoun Honors College — Date

Jessica W. Munson — 5/1/2015
Chair, Undergraduate Curriculum Committee — Date

Chair, Graduate Curriculum Committee — Date

Robert H Jones — 7/14/15
Provost — Date

President — Date

FOOD SCIENCE and HUMAN NUTRITION MAJOR
Nutrition Concentration Curriculum
2016-2017

FRESHMAN YEAR

Fall Semester		Spring Semester	
BIOL 1030 General Biol I ***and***	3	BIOL 1040 General Biol II ***and***	3
BIOL 1050 General Biol Lab I ***or***	1	BIOL 1060 General Biol Lab II ***or***	1
BIOL 1100 Principles of Biol I	5	BIOL 1110 Principles of Biol II	5
CH 1010 General Chemistry	4	CH 1020 General Chemistry	4
COMM 1500 Intro to Hum Comm ***or*** COMM 2500 Public Speaking	3	ENGL 1030 Acc Composition	3
FDSC 1010 Intro to FDSC & NUTR	1	PSYC 2010 Intro to Psychology	3
MATH 1020 Intro to Math Ana ***or*** MATH 1060 Calc of Var I	3-4	Elective	1
	15-17		15-16

SOPHOMORE YEAR

Fall Semester		Spring Semester	
ECON 2000 Econ Concepts *or* ECON 2120 Macroeconomics	3	MGT 2010 Principles of Mgt	3
CH 2230 Organic Chem ***and*** CH 2270 Org Chem Lab	4	STAT 2300 Introductory Statistics	3
BIOL 2220/2221 Anat & Phys I	4	BIOL 2230 Anat & Phys II	4
NUTR 2160 Evidence-Based Nutr	2	NUTR 2040 Lifecycle Nutrition	3
NUTR 2030 Prin. of Hum Nutr	3	BCHM 3050 Essen Elem Bioch	3
	16		16

JUNIOR YEAR

Fall Semester		Spring Semester	
ACCT 2020 Managerial Acct Princ	3	NUTR 3010 Food and Culture	3
MICR 3050 Gen Microbiology	4	FDSC 2010 Intro to Foods	3
NUTR 3020 Nutr Assessment	4	MICR 4070 Food and Dairy Micro	4
NUTR 4510 Hum Nutr & Metab I	3	NUTR 4550 Hum Nutr & Metab II	3
FDSC 4500 Creative Inquiry	1	FDSC 4500 Creative Inquiry	1
	15	Emphasis Professional Dev. [1]	1
			15

SENIOR YEAR

Fall Semester		Spring Semester	
A & H (Literature) Requirement[2]	3	A&H (Non-Lit) Requirement[2]	3
ENGL 3040 Business Writing ***or*** ENGL 3140 Technical Writing	3	NUTR 4260 Community Nutr	3
Emphasis[3]	3	Emphasis[3]	4
Emphasis[3]	4	Emphasis[3]	3
Elective	2	Emphasis[3]	2
	15	Elective	1
			16

123-126 TOTAL SEMESTER HOURS

[1]NUTR 4180 is required for Dietetics emphasis and 4190 is required for the remaining emphases.
[2]See General Education requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness requirement.
[3]See advisor; Completion of an emphasis is required for the concentration. The approved course list of the four emphasis areas is available in the department undergraduate student handbook or the department office. Emphasis areas consist of 17 credits selected from one of the following areas: Dietetics, Basic and Behavioral Science, Community Health and Wellness, and Food Industry. To be accepted into the Dietetics emphasis, students must meet a GPA of 3.2 and achieve a C or better in science coursework and B or better in Nutrition coursework and maintain a 3.0 GPA.

IMPORTANT: Make note of all pre-requisites and co-requisites associated with specific courses as indicated in the course catalog. If the curriculum is not followed as outlined, it may impair one's ability to progress through the curriculum if not taken as directed or passed with a specified grade. Most courses within the major are offered one time per year as outlined above. If you have not taken the required courses at the appropriate time as outlined in the curriculum map, you will assume the potential risk of not graduating on time.

Dietetics Emphasis: 17 credits

- **Professional development**
  - NUTR 4180 Professional Development in Dietetics – 1
- **Dietetics requirements**
  - NUTR 4240 Medical Nutrition Therapy I - 4
  - NUTR 4250 Medical Nutrition Therapy II – 4
  - NUTR 4270 Nutrition counseling - 2
  - FDSC 3060 Institutional Foodservice Management – 3
  - NUTR 4070 Quantity Food Production – 3

To be accepted into the Dietetics emphasis, students must meet a GPA of 3.2 and achieve a C or better in science coursework and B or better in Nutrition coursework and maintain a 3.0 GPA to remain in this emphasis. See the Department student handbook and advisor for details.

Basic and Behavioral Science Emphasis: 17 credits

- **Professional development**
  - NUTR 4190 Professional Development in Nutrition – 1
- **Basic and Behavioral Science requirements – choose 16 credits from below:**
  - Ch 2240/2280 Organic Chemistry and lab – 4
  - Physics 2070/2090 Physics I and Lab – 4
  - Physics 2080/2010 Physics II and Lab – 4
  - Genetics 3000 Fundamental Genetics – 3
  - Stat 3300 Statistical Methods II – 3
  - PSYC 3830 Abnormal Psychology (CBBS course fee) - 3
  - PSYC 3400 Lifespan Developmental Psychology (CBBS course fee) – 3
  - APEC 3610 Introduction to Health Care Economics – 3
  - Complete these 3 courses to obtain a Public Health Certificate (online):
    - HLTH 2020 Introduction to Public Health – 3
    - HLTH 2030 Overview of Health Care Systems – 3
    - HLTH 3800 Epidemiology (requires 2000 level health course) – 3
  - SOC 3600 Social Class and Poverty (3) (requires SOC 2010) – 3
  - GEN 3000 Fundamental Genetics – 3
  - FDSC 4500 – 1

Community Health and Wellness Emphasis: 17 credits

- **Professional Development**
  - NUTR 4190 Professional Development in Nutrition – 1
- **Community Health and Wellness requirements – choose 16 credits from below:**
  - PSYC 3450 Adulthood and Aging (CBBS course fee) -3
  - Complete these 3 courses to obtain a Public Health Certificate (online):
    - HLTH 2020 Introduction to Public Health – 3
    - HLTH 2030 Overview of Health Care Systems – 3
    - HLTH 3800 Epidemiology (requires 2000 level health course) – 3
  - HLTH 2980 Human Health and Disease – 3
  - MICR 4000 Public Health Microbiology – 3
  - MICR 4160 Introduction to Virology – 3
  - SOC 2010 Introduction to Sociology – 3
  - SOC 2020 Social Problems – 3
  - SOC 3600 Social Class and Poverty (requires SOC 2010) (CBBS course fee) – 3

- COMM 3210 Communication across media (3) (requires COMM 2010) – 3
- BIOL 2030 Human Disease and Society (requires Biol 1220 or 1230) – 3
- MKT 3010 Principles of Marketing (CBBS course fee) – 3
- PSYC 3400 Lifespan Developmental Psychology (CBBS course fee) – 3
- PSYC 4800 Health Psychology (CBBS course fee) – 3
- ELE 3010 Introduction to Entrepreneurship (CBBS course fee) – 3
- FDSC 4500 – 1

Food Industry Emphasis: 17 credits

- **Professional development**
  - NUTR 4190 Professional Development in Nutrition – 1
- **Food Industry requirements – choose 16 credits from below:**
  - FDSC 4010 Food Chemistry I – 3
  - FDSC 4020 Food Chemistry II – 3
  - FDSC 4030 Food Chemistry and Analysis Lab – 2 (change pre-req to FDSC 2140 or FDSC 2010)
  - FDSC 3070 Restaurant Food Service Management – 3
  - NUTR 4070 Quantity Food Production – 3
  - FDSC 4090 Total Quality Management for the Food and Packaging Industries – 3
  - FDSC 4100 Food Product Development – 4
  - FDSC 4500 – 1

Dietetics Program Progression Policy

Beginning fall 2016, students choosing the "Food Science and Human Nutrition major with Nutrition Concentration" will follow the same course plan for the freshman and sophomore years. By January 5th of their sophomore year students must select one of the following nutrition emphases – Dietetics, Basic and Behavioral Sciences, Community Health and Wellness, or Food Industry. Students who desire the Dietetics emphasis must complete a formal application and meet certain criteria for acceptance into that emphasis. Acceptance into the Dietetics emphases will not guarantee admittance to a dietetic internship. Students must complete the required preparation so he or she is competitive.

Criteria for Dietetics Emphasis Admission:

- Attend an information meeting concerning the route to become a registered dietitian offered fall semester; documentation of attendance is required
- Completion of 60 or more credits by the end of the semester in which you apply (approximately sophomore year for most students)
- Completion of the following courses with a C or better:
    - Chemistry 1010
    - Chemistry 1020
    - Chemistry 2230/2270
    - Biology 2220
- Completion of the following courses with a B or better:
    - Nutrition 2030
    - Nutrition 2160
- Minimum cumulative GPA of 3.2
- Completion of the Dietetics application form

Students will receive notification through email regarding the status of his/her application by mid-February prior to fall registration of junior level classes. Students who meet all criteria outlined above will be automatically accepted into the Dietetics emphasis. Students who do not meet the criteria or have a GPA greater than 3.0 but less than 3.2 will be conditionally accepted. Final acceptance will be determined by mid-May when spring semester grades have been submitted based on meeting the minimum 3.2 GPA criteria along meeting the other outlined. If a student is taking a required course during the summer, they will receive notification following summer grades submission. Upon acceptance, students must complete the "Change of Academic Program" form to formalize selection of the "Dietetics" emphasis.

Transfer or change of majors will not be allowed to apply for the Dietetics emphasis until they have met all the required criteria. Students are allowed to apply up to two times. Therefore, he or she should not apply until they are certain they have met or can meet the admission criteria.

Because of the competitive nature of dietetic internship program acceptance and professional standards of academic achievement, students must maintain a grade of "B" or better in core dietetics courses and an overall 3.0 GPA. If a student falls below a 3.0 GPA or obtains lower than a "B" in a core dietetics course, he or she will be placed on probation for a semester. The student must meet with his/her academic advisor to jointly outline the student's plan for improvement. Students must demonstrate improved academic performance by the end of the semester to remain in good academic standing with the program. In extenuating circumstances an extension may be given if adequate justification and documentation if provided to the DPD program director or other faculty member. Students who fail to raise their overall GPA to 3.0 or greater by the end of the probationary period will be required to change to one of the other emphasis areas to be able to graduate with a Food Science and Human Nutrition Bachelor of Science degree. Students would also have the option to change to a different major if none of the remaining emphases areas meet his or her career needs.

Nutrition Concentration Curriculum

Overview of proposed curriculum changes:

- Major name change from Food Science to Food Science and Human Nutrition
  - To represent both concentrations
- Two concentrations
  - Food Science and Technology – no changes made
  - Nutrition (change concentration name from Nutrition and Dietetics to NUTRITION)
    - Freshman and sophomore curriculum is the same
    - Junior and senior year have 17 credits that are different to meet the emphases
- Nutrition concentration with 4 emphases
  - Dietetics
  - Basic and Behavioral Science
  - Community Health and Wellness
  - Food Industry
- Implement progression policy for Dietetics emphasis– criteria:
  - Application process for admittance spring of sophomore year
  - C or better for sciences (CH 1010, 1020, Ch 2230/2270, Biol 2220)
  - B or better for nutrition course (Nutr 2160, Nutr 2030)
  - Minimum GPA 3.2 or greater
  - Once accepted students must maintain a 3.0 GPA and B or better in dietetics courses
  - Student can apply up to two times
- New courses for Nutrition Concentration
  - NUTR 3010 – Food and Culture (3 credits)
    - Understand the importance of cultural competence in nutrition and healthcare fields
    - Explore factors that affect types of food consumed and impact on nutrition and health
    - Discuss socioeconomic, cultural and ethnic factors determining food preferences/eating patterns
  - NUTR 3020 – Nutrition Assessment (4 credits with lab)
    - Develop assessment skills involving anthropometric, dietary, clinical and biochemical tests
      - Medical terminology, dietary recalls, BMI, energy expenditure determination, blood pressures, body composition, fitness testing, physical assessment, strength testing
- Change content of current courses for Nutrition concentration
  - FDSC 2010 – Introduction to Foods – increase from 2 to 3 credits (2 classes with lab)
    - Change in course title and content change
    - Covers food science principles required for nutrition students in one course and according to ACEND accreditation
    - Nutrition students need to understand how ingredients function in foods and how alteration of one or more ingredients can impact quality and nutrient values; i.e. how does omission of gluten impact a product – applications would be in foodservice and clinical when educating clients
    - This course does not cover the depth of information required by food technology concentration
  - NUTR 4510 and NUTR 4550 – change title and content as NUTR 2030 and 2040 have been added to curriculum
    - NUTR 4510 will be Nutrition and Metabolism I covering macronutrients
    - NUTR 4550 will be Nutrition and Metabolism II covering micronutrients
- Increased credits/other changes for current courses in Nutrition concentration:
  - FDSC 2010 – Introduction to Foods: increased from 2 to 3 credits (2 classes and 1 lab)
  - NUTR 2160 – Evidence-based Nutrition: increased from 1 to 2 credits
  - NUTR 4070 – Quantity Food Production: increased from 2 to 3 credits (1 class with 2 labs)
    - Change from FDSC to NUTR prefix
  - NUTR 4270 – Nutrition Counseling: increased from 1 to 2 credits