

**CALS Curriculum Committee Meeting**  
**January 20, 2023**  
**McCarty Hall D Rm. 1044/1045**  
**1:00 p.m.**

**Via Zoom:** <https://ufl.zoom.us/j/355458614>  
Meeting ID : 355458614

**Members:** S. Ahn, J. Brendemuhl, D. Coenen, J. Czipulis, K. Fogarty, D. Gabriel, V. Hull (Chair), P. Inglett, J. Larkin, T. Martin, G. Nunez, E. Pappo, C. Prince, J. Scheffler, B. Schutzman, M. Sharp, M. Sowcik, A. Watson, J. Weeks, A. Wysocki

**Agenda and Index for Materials**

**Approve Minutes from December 16, 2022 meeting**

**Dr. Brendemuhl: Update from UCC**

**Undergraduate New Course Proposal**

1. ANS 3XXXL – Chicken Growth and Development (req. #18102)

**Undergraduate Course Change Proposals**

2. ANS 3008 – Livestock Behavior and Welfare (req. #18076)
3. ANS 3404C – Food Animal Nutrition and Feeding (req. #18099)
4. ANS 3934 – Careers in the Livestock Industry (req. #18104)
5. ANS 4320C – Applied Ruminant Reproductive Management (req. #18056)

**Certificates**

6. Proposed Modification to the Natural Resource Policy and Administration Graduate Certificate (req. #18053)
7. Proposed Modification to the Ecological Restoration Graduate Certificate (req. #18055)

**Curriculum**

8. Proposed New 8-Semester Plan for BS in Forest Resources and Conservation (req. #18039)
9. Proposed New 8-Semester Plan for BS in Natural Resource Conservation (req. #18041)

10. Proposed Changes to the Animal Sciences – Animal Biology Specialization (req. #18103)

11. Proposed Changes to the Animal Sciences – Food Animal Specialization (req. #18105)

12. Proposed Changes to the Animal Sciences – Equine Specialization (req. #18106)

**CALS Curriculum Committee Meeting**  
**December 16, 2022**  
**Submitted by James Fant**

**Members Present:** S. Ahn, J. Brendemuhl, D. Coenen, D. Gabriel, P. Inglett, J. Larkin, T. Martin, G. Nunez, C. Prince, J. Scheffler, B. Schutzman, M. Sharp, M. Sowcik, A. Watson, J. Weeks

**Substitutes:** Dale Pracht for K. Fogarty, Mike Moulton for V. Hull

**Visitors:** Albert De Vries, Kimberly Wiley, Ying Zhang

**Call to Order:** The College of Agricultural and Life Sciences Curriculum Committee met in McCarty Hall D Rm. 1044/1045 on December 16, 2022. Dr. Coenen called the meeting to order at 1:00 p.m.

**Previous agenda items and supporting material can be found on the CALS College Committees homepage under document archives:** <https://cals.ufl.edu/faculty-staff/committees/>

**Approval of Minutes:** A motion was made by Dr. Sharp to approve the minutes from the November 18, 2022, meeting of the CALS CC. The motion was approved.

**All items approved by the committee will be forwarded to either the Graduate Curriculum Committee (GCC), Graduate Council (GC) or the University Curriculum Committee (UCC) once any changes requested are made and the submission is complete.**

**Links:** Grades – <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>  
For Graduate Grades: <https://catalog.ufl.edu/graduate/regulations/#text>  
Syllabus Statements – [https://cals.ufl.edu/content/PDF/Faculty\\_Staff/CALS-Syllabus-Policy.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf)  
Absences & Make-Ups – <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>  
Writing Learning Objectives - [https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf).

**Update from UCC:**

There were seven Undergraduate items from CALS on the 12/13/22 UCC agenda and all were **APPROVED**. There was a change to the AEC\_Communication and Leadership Development specialization; a change to the Minor in Wildlife Ecology and Conservation; two new courses; a) ORH 2XXX-Introduction to Medicinal Plants; b) PLP 2XXX-What Are Plants Talking About?; one new joint course; FAS 4XXX-Freshwater Ecology; and changes to two courses; a) FOR 3200C-Foundation of Natural Resources and Conservation; b) ENY 4210-Insects and Wildlife. There were no other updates.

## Undergraduate New Course Proposal

1. AOM 4XXX – Introduction to Instrumentation in Controlled Environment Agriculture (req. #17913)

**Please be sure to make all requested changes to both the UCC form and syllabus if necessary.** A motion was made by Dr. Inglett to recycle this item back to the department for edits and resubmission. The motion was approved. Provide outside consults from Agronomy, Horticultural Sciences, and Soil, Water, and Ecosystem Sciences to assure there is no excessive overlap with any existing courses. There needs to be an indication that the term project is a group project. There needs to be an explanation of how the groups are determined and if there will be a peer review. The term project percentage of the final grade needs to be consistent throughout the submission. This includes the scale and the explanation of the project. Remove the points from the grading scale and explanations leaving only the percentages totaling 100%. At the top of the syllabus indicate lecture and lab separately. Add lecture and lab to each week of the course schedule.

## Undergraduate Course Change Proposals

2. ANS 4245C – Beef Background and Feedlot Management (req. #17975)

**Please be sure to make all requested changes to both the UCC form and syllabus if necessary.** A motion was made by Dr. Martin to approve this item with edits required. The motion was approved. Include specific office hours on the syllabus. Some of the course objectives need to be replaced with more appropriate learning verbs. Please see the following for assistance: [https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). The multiple offerings in a single semester section of the UCC form should read No.

3. FYC 4301 – Engaging Communities for Decision-Making and Action (req. #17908)

**Please be sure to make all requested changes to both the UCC form and syllabus if necessary.** A motion was made by Dr. Sharp to approve this item with edits required. The motion was approved. Add the prefix and course number FYC 4622 to the rationale on the UCC form. The multiple offerings in a single semester section of the UCC form should read No.

4. FYC 4408 – Organizational Leadership for Nonprofits (req. #17909)

**Please be sure to make all requested changes to both the UCC form and syllabus if necessary.** A motion was made by Dr. Sharp to approve this item with edits required. The motion was approved. Change the course goals to objectives. Replace demonstrate with a more appropriate learning verb. Please see the following for assistance: [https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Include office hours and the prerequisite being removed in the current syllabus. The multiple offerings in a single semester section of the UCC form should read No. Remove all language regarding course enrollment from the rationale on the UCC form. Indicate more why the existing prerequisite is not needed.

## **Curriculum**

5. Proposed addition of an Integrative specialization to the Animal Sciences major (req. #17976)

A motion was made by Dr. Martin to approve this item as submitted. The motion was approved.

## **Additional item**

6. The Food and Resource Economics department will be submitting 19 items for review in January 2023. These items are all requests to remove existing prerequisites. Since graduate courses should not have prerequisites, it was put forth that these items would only be reviewed by Dr. Brendemuhl with the CALS CC deferring to his decision on each. A motion to approve was made by Dr. Inglett. The motion was approved.

The meeting was adjourned at **2:14** p.m.

## Cover Sheet: Request 18102

### Proposal for new undergraduate course

#### Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Tracy Scheffler tscheffler@ufl.edu
Created	1/2/2023 4:15:28 PM
Updated	1/5/2023 3:09:49 PM
Description of request	This is a proposal for a new undergraduate course in Animal Sciences (ANS): Chicken Growth and Development

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		1/3/2023
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			1/3/2023
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

## Course|New for request 18102

### Info

**Request:** Proposal for new undergraduate course

**Description of request:** This is a proposal for a new undergraduate course in Animal Sciences (ANS): Chicken Growth and Development

**Submitter:** Tracy Scheffler tscheffler@ufl.edu

**Created:** 1/2/2023 4:21:06 PM

**Form version:** 2

### Responses

**Recommended Prefix** ANS

**Course Level** 3

**Course Number** XXX

**Lab Code** L

**Category of Instruction** Intermediate

**Course Title** Chicken Growth and Development

**Transcript Title** Chicken Growth & Development

**Degree Type** Baccalaureate

**Delivery Method(s)** On-Campus

**Co-Listing** No

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Rotating Topic?** No

**Repeatable Credit?** No

**Amount of Credit** 1

**S/U Only?** No

**Contact Type** Regularly Scheduled

**Course Type** Lecture

**Weekly Contact Hours** 2

**Course Description** Practical application of the principles of animal growth and development. The chicken will be used as a model to examine how a particular factor (genetics, sex, nutrition, etc.) affects growth and development and to explore broader implications for animals, producers, and consumers.

**Prerequisites** ANS 3043 or concurrently

**Co-requisites** N/A

**Rationale and Placement in Curriculum** Core concepts in growth are discussed in ANS 3043 Growth and Development of Farm Animals, which is a required lecture course for all students majoring in Animal Sciences. However, these concepts can be abstract, and it can be challenging to conceptualize application of these principles in real life scenarios.

In the proposed lab course, students will use broiler (meat) chickens as a model species to apply growth and development concepts to practice. Different scenarios can be used each semester to evaluate how a factor, such as sex of the bird, nutrition, or genetics, affects animal growth, efficiency, and composition. Students are involved in determining which measurements should be taken, while also considering significance and implications for the animal, producer, and consumer. Students are involved in raising the chickens, collecting data, and analyzing and interpreting the results. The lab is designed to promote critical thinking and add context to why growth biology is important and how it integrates with other key areas, including sustainability, welfare, and food security. The chicken is the ideal animal for this activity because the semester provides sufficient time for the animal to grow from hatch to market weight.

The lab experience in chicken growth and development has been offered as ANS 4932 in Fall 2022 and Spring 2023. A CALS Instructional Improvement Mini-Grant (2022) supported course development and initial costs for animals, equipment, and supplies.

This lab course also helps meet the demand for lab electives within the ANS major. Students with an Animal Biology specialization (~80% of ANS undergraduates) are required to take 4 credits of lab electives. This lab provides opportunity for students to gain more experience handling livestock, and it is the only course in ANS devoted specifically to poultry.

**Course Objectives** The student will:

- Apply principles of growth and development to practice
- Evaluate growth parameters of chickens
- Identify chicken anatomy
- Practice handling and management of broiler chickens
- Develop skills to collect, analyze, and interpret scientific data
- Examine broader impacts of animal growth on animals, producers, and consumers by evaluating relationships between animal growth, tissue growth, welfare, costs, and product yield and quality

**Course Textbook(s) and/or Other Assigned Reading** Recommended texts:  
Principles of Animal Growth and Development. Gerrard and Grant (2006)  
Growth of Farm Animals. Lawrence, Fowler, and Novakofski; 3rd ed. (2012)

<b>Weekly Schedule of Topics</b>	<b>Wk</b>	<b>Topic</b>
	1	Course introduction & discuss the factor to be investigated
	2	Anatomy
	3	Chick development in the egg
	4	Health and management
	5	Chicks arrive, identification and initial measurements
	6	Chicken measurements, genetics
	7	Chicken measurements, nutrition
	8	Chicken measurements, behavior
	9	Chicken measurements, muscle and adipose
	10	Chicken measurements, bone
	11	Chicken measurements, chicken slaughter, meat quality, & food safety
	12	Chicken measurements, harvest / sample collection date 1 (tentative)
	13	Chicken measurements, harvest / sample collection date 2 (tentative)
	14	Data summary and analysis, discussion
	15	Meat processing / Chicken nuggets

**Grading Scheme** Students will be graded on:

1. Attendance and service

Attendance in weekly lab sessions is expected and required. A sign-in sheet will be used to track attendance.

Service: Students will independently check chickens and housing conditions ~1x per week. This should take ~10-15 minutes; responsibilities include checking chicken health and behavior, and that clean food and water is available (and adding/replacing if necessary). Student will record observations and any actions taken (feed added, water replaced, etc.).

2. Journal

Record your observations of chickens, includes growth, behavior, health, and anything you find interesting.

1 entry per week minimum

Format can be either handwritten/notebook or typed in MS word or similar program.

3. Short weekly assignments or quizzes

Examples: collect and summarize information about a topic related to chicken growth (e.g., nutritional needs); group assignment summarizing chicken data periodically through the semester; quizzes on canvas



#### 4. Final Project

Summarize the progression of the chicks through the semester – this should include presenting growth data, with an explanation and interpretation of the results. Address implications for the animals, producers, and consumers.

The format is up to you - creativity for the final project is encouraged!

There will also be an essay question due with the final project.

#### Grading (weight)

1. Attendance & Service: 25%
2. Journal: 20%
3. Short assignments and quizzes: 25%
4. Final project & essay: 30%

#### Grade: % score range

A: 90.0 – 100.0

B: 80.0 – 89.99

C: 70.0 – 79.99

D: 60.0 – 69.99

E: 59.99

**Instructor(s)** Tracy Scheffler

**Attendance & Make-up** Yes

**Accommodations** Yes

**UF Grading Policies for assigning Grade Points** Yes

**Course Evaluation Policy** Yes

## ANS 4932

### Special Topics in Animal Sciences – Chicken Growth and Development Spring 2023 (1 credit, lab)

#### Course Instructor

**Tracy Scheffler, Ph.D.**

Office: Animal Sci. (#459), Room 210F

Phone: (352) 392-7529

Email: [tscheffler@ufl.edu](mailto:tscheffler@ufl.edu)

Office hours: Monday & Tuesday, 9 to 10 AM

#### Time & Location

Monday | 3:00 PM – 4:55 PM (8<sup>th</sup> & 9<sup>th</sup> periods)

ANS 151 & Chicken Pens

#### Course Description & Objectives

Practical application of the principles of animal growth and development. The chicken will be used as a model to examine how a particular factor (genetics, sex, nutrition, etc.) affects growth and development and to explore broader implications for animals, producers, and consumers.

The student will:

- Apply principles of growth and development to practice
- Evaluate growth parameters of chickens
- Identify chicken anatomy
- Practice handling and management of broiler chickens
- Develop skills to collect, analyze, and interpret scientific data
- Examine broader impacts of animal growth on animals, producers, and consumers by evaluating relationships between animal growth, tissue growth, welfare, costs, and product yield and quality

#### Prerequisites

To be taken concurrently with (or have previously taken) ANS 3043 Growth and Development of Farm Animals

#### Supporting texts

There is no assigned textbook. The following textbooks may be helpful (these are also recommended texts for ANS 3043):

- ***Principles of Animal Growth and Development***. Gerrard and Grant; ISBN13:978-0-7575-2986-3; Kendall Hunt Publishing, Dubuque, Iowa 52002.
- ***Growth of Farm Animals*** Lawrence, Fowler, and Novakofski; 3<sup>rd</sup> ed. (2012); ISBN-13:

978-1-84593-558-0 (paperback); CABI Cambridge, MA

### Course website on Canvas

Information and resources will be posted in the course Canvas website (login via <https://elearning.ufl.edu/>).

### Grades and Grading Policy

You will be graded on:

#### Attendance and service

- Attendance in weekly lab sessions is expected and required. A sign-in sheet will be used to track attendance.
- Service: Students will independently check chickens and housing conditions ~1x per week. This should take ~10-15 minutes; responsibilities include checking chicken health and behavior, and that clean food and water is available (and adding/replacing if necessary). Student will record observations and any actions taken (feed added, water replaced, etc.).

#### Journal (due May 2<sup>nd</sup>)

- Record your observations of chickens, includes growth, behavior, health, and anything you find interesting.
- 1 entry per week minimum
- Format can be either handwritten/notebook or typed in MS word or similar program.

#### Short weekly assignments or quizzes

Examples: collect and summarize information about a topic related to chicken growth (e.g., nutritional needs); group assignment summarizing chicken data periodically through the semester; quizzes on canvas

#### Final Project (due May 2<sup>nd</sup>)

- Summarize the progression of the chicks through the semester – this should include presenting growth data, with an explanation and interpretation of the results. Address implications for the animals, producers, and consumers.  
The format is up to you - creativity for the final project is encouraged!
- There will also be an essay question due with the final project.

	Weight
Attendance and service	25 %
Journal	20 %
Short assignments & quizzes	25 %
Final project & essay	30 %

Grade	% score range
A	90.0 – 100.0
B	80.0 – 89.99
C	70.0 – 79.99
D	60.0 – 69.99
E	≤ 59.99

\* For information on current UF policies for assigning grade points:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

## Attendance

Requirements for class attendance, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

In general, acceptable reasons for absence from or failure to participate in class include illness; Title IX-related situations; serious accidents or emergencies affecting the student, their roommates, or their family; special curricular requirements (e.g., judging trips, field trips, and professional conferences); military obligation; severe weather conditions that prevent class participation; religious holidays; participation in official university activities (e.g., music performances, athletic competition, debate); and court-imposed legal obligations (e.g., jury duty or subpoena). Other reasons (e.g., a job interview or club activity) may be deemed acceptable if approved by the instructor.

For all planned absences, a student in a situation that allows an excused absence from a class or any required class activity, must inform the instructor as early as possible prior to the class. For all unplanned absences because of accidents or emergency situations, students should contact their instructor as soon as conditions permit.

## Course topics

Week	Date	Topic
1	1/9	Course introduction & discuss the issue
2	1/16	No class – Holiday/Martin Luther King Jr Day
3	1/23	Anatomy
4	1/30	Chick development in the egg
5	2/6	Health and management
6	2/13	Chicks arrive! Identification and initial measurements
7	2/20	Chicken measurements, genetics
8	2/26	Chicken measurements, nutrition
9	3/6	Chicken measurements, behavior
10	3/13	Chicken measurements, muscle and adipose
11	3/20	Chicken measurements, bone
12	3/27	Chicken measurements, chicken slaughter, meat quality, & food safety
13	4/3	Chicken measurements, harvest / sample collection date 1 (tentative)
14	4/10	Chicken measurements, harvest / sample collection date 2 (tentative)
15	4/17	Data summary and analysis, discussion
16	4/24	Meat processing / Chicken nuggets

Schedule is subject to change - depends on chicken growth and resource availability. Topics are tentative and may change at the instructor's discretion.

**Dress code**

Keep in mind that for most of the semester we will be working with live birds. This involves handling birds and being in their pens. The facility is covered but not temperature controlled. Appropriate clothing is a protective measure from several environmental hazards, such as manure, insects, and equipment. For your own protection, you are required to wear closed toe shoes, long pants, and a sleeved (short or long) shirt for laboratory sessions.

### **Risks associated with working with livestock and their tissues**

There is some inherent risk with handling and working with chickens and their tissues. The instructor and Tas will work to provide students with the ability to manage chickens with minimal stress, thus lowering the risk of injury to people and chickens. Chickens can carry microorganisms such as Salmonella and Campylobacter that can cause diarrhea and flu-like symptoms in humans. These microorganisms may be present in the chickens' digestive tract, and can be shed in the manure and survive in the chickens' surroundings. It is also possible they could be present in the meat. These pathogens can cause significant illness, especially to someone who is immunocompromised. Students should wash their hands after handling livestock and raw meat.

### **Other important dates**

First class: Mon. Jan. 9<sup>th</sup>      Last class: Mon. Apr. 26<sup>th</sup>  
No class: Mon. Jan. 16<sup>th</sup> (MLK Day), Mar. 13<sup>th</sup> (spring break)

### **Other important information**

#### **Technology requirements**

Computer requirements for this course are consistent with UF policy for student computing requirements, and likely similar to your other classes:

<https://it.ufl.edu/policies/studentcomputing-requirements/>

This course uses Canvas for providing course content. Please see links below for further information regarding privacy and accessibility of Canvas:

- Canvas (Infrastructure) privacy policy: <https://www.instructure.com/policies/privacy>
- Canvas (Infrastructure) accessibility statement: <https://www.instructure.com/canvas/accessibility>

#### **Canvas Technology Requirements**

*Computers, Internet, and Web browsers:* Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser. It is recommended to use a computer less than five years old with at least 1GB of RAM. It is recommended to have a minimum Internet speed of 512kbps. It is **strongly recommended** to not use a wireless connection, phone, tablet, or notepad for critical course tasks such as exams and discussions.

Canvas currently supports the following browsers: Chrome, Safari, Firefox, Edge. Canvas supports the last two versions of most browsers. It is **highly recommend** updating to the **newest version** of whatever browser you are using. Note that your computer's operating system may affect browser function. Failure to use one of these browsers will cause problems.

For more information on approved computers and browsers please visit:

<https://community.canvaslms.com/t5/Canvas-Basics-Guide/What-are-the-browser-and-computer-requirements-for-Canvas/ta-p/66> On this web page there is an area titled “Is My Browser up to Date?” Use it to check each computer and browser you may use in this course. There is another important area on “Browser Privacy Settings.” Read the section(s) for any browser intended for use. For example, **Note that:** In browsers such as Safari, insecure content will never be displayed in the browser. Return to the page to check for updates on technology issues in Canvas.

If you encounter technical difficulties in this course, **contact the UF Computing Help Desk** right away to troubleshoot. <https://helpdesk.ufl.edu/> or (352) 392-HELP. If the problem cannot be fixed immediately, **notify your instructor, and provide them with the Help Desk ticket number.**

### **Software use**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### **Services for students with disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. Students should share their accommodation letter with the instructors and discuss their access needs as early as possible in the semester.

- 0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/students/get-started/>

### **Online course evaluation process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [ufl.bluera.com/ufl/](http://ufl.bluera.com/ufl/). Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

### Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. [Visit the Student Honor Code and Student Conduct Code webpage for more information.](#)

### In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may **not** publish recorded lectures without the consent of the instructors.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructors is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

## Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center*, 3190 Radio Road, 352-392-1575  
[www.counseling.ufl.edu](http://www.counseling.ufl.edu)
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Wellness Coaching
- U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)
- *Career Connections Center*, First Floor JWRU, 392-1601, <https://career.ufl.edu/>
- Student Success Initiative, <http://studentsuccess.ufl.edu>

### Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>



# CALS Curriculum Committee

## Submission Checklist

**NOTE: This checklist must be included with all course and certificate submissions.**

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as “Proposal of a new undergraduate course” is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

**CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.**

X It is required when making a submission that you consult your department’s representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

X You MUST comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site(<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

NA Submission of a course modification requires both the current version of the course syllabus and the proposed version.

NA Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

X The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

X The course learning objectives must be consistent with Bloom’s taxonomy. Please see the following link at the CALS Curriculum site. ([https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf) ). Do not use the words demonstrate or understand when listing learning objectives.

X The course schedule should be concise and include the appropriate number of weeks in the semester.

NA All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

NA Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

X Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be “none” or left blank. Junior or senior standing is an acceptable option. A phrase such as “a course in basic biology” is not acceptable.

X Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

X The attendance and make-up policy in a syllabus cannot contradict the university’s policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

X The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

### **Certificates**

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl ([brendj@ufl.edu](mailto:brendj@ufl.edu)) for further instruction)

## Cover Sheet: Request 18076

### Name change for ANS 3008

#### Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Emily Miller Cushon emillerc@ufl.edu
Created	12/16/2022 9:53:05 AM
Updated	1/4/2023 11:54:29 AM
Description of request	Requesting ANS 3008 be renamed 'Domestic Animal Behavior and Welfare', to reflect the scope of content in this course and the variety of interests of students in the Department of Animal Sciences, and for the prerequisite be listed sophomore standing or above.

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		12/19/2022
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			12/19/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

## Course|Modify for request 18076

### Info

**Request:** Name change for ANS 3008

**Description of request:** Requesting ANS 3008 be renamed 'Domestic Animal Behavior and Welfare', to reflect the scope of content in this course and the variety of interests of students in the Department of Animal Sciences, and for the prerequisite be listed sophomore standing or above.

**Submitter:** Emily Miller Cushon emillerc@ufl.edu

**Created:** 12/16/2022 9:36:30 AM

**Form version:** 1

### Responses

**Current Prefix** ANS

**Course Level** 3

**Number** 008

**Lab Code** None

**Course Title** Livestock Behavior and Welfare

**Effective Term** Fall

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option opens additional form fields below)

**Change Course Prefix?** No

**Change Course Level?** No

**Change Course Number?** No

**Change Lab Code?** No

**Change Course Title?** Yes

**Current Course Title** Livestock Behavior and Welfare

**Proposed Course Title** Domestic Animal Behavior and Welfare

**Change Transcript Title?** Yes

**Current Transcript Title** Lvstk Behav Welfare

**Proposed Transcript Title (30 char. max)** Anim Behav Welfare

**Change Credit Hours?** No

**Change Variable Credit?** No

**Change S/U Only?** No

**Change Contact Type?** No

**Course Type** Lecture

**Change Rotating Topic Designation?** No

**Change Repeatable Credit?** No

**Multiple Offerings in a Single Semester** No

**Change Course Description?** Yes

**Current Course Description** Introduces basic principles and applications of animal behavior, including approaches to improve animal welfare through an understanding of animal behavior.

Examples are drawn from a wide range of species, but the focus is on applying concepts to understand the behavior and welfare of livestock.

**Proposed Course Description (500 characters max)** Introduces basic principles and applications of animal behavior, including approaches to improve animal welfare through an understanding of animal behavior. Examples are drawn from a wide range of species, but the focus is on applying concepts to understand the behavior and welfare of domestic animals under human care, including livestock, companion, and laboratory species.

**Change Prerequisites?** Yes

**Current Prerequisites** Prereq: sophomore or junior standing.

**Proposed Prerequisites** Prereq: minimum sophomore or junior standing.

**Change Co-requisites?** No

**Rationale** I would like to rename this course 'Domestic Animal Behavior and Welfare' (instead of 'Livestock Behavior and Welfare') to reflect the scope of this course which includes study of other domestic animals under human care, including companion animals and laboratory species, in addition to livestock. This also reflects the scope of interests in the Department of Animal Sciences, where many students have an interest in companion animals in addition to livestock, and so this name change would become more inclusive of those varied interests. Further, in this course we address topics related to animal welfare of all animals under human care, and it strengthens the content and student learning opportunities to draw from broad examples.

## Course Title

**ANS 3008 Domestic Animal Behavior & Welfare (3 credits)**

## Time and Location

- Online – lectures delivered asynchronously via Canvas (approximately 2 h/week)
- Synchronous (virtual) class sessions are held via Zoom on Wednesdays 11:45 – 12:35 (5<sup>th</sup> period), according to class schedule (Page 5 of this Syllabus).

## Course Instructors, Teaching Assistants, and Office Hours

### Instructor:

**Emily Miller-Cushon, Ph.D.**

Associate Professor, Department of Animal Sciences

Office: Rm 104E, Department of Animal Sciences

Email: [emillerc@ufl.edu](mailto:emillerc@ufl.edu)

Phone: 352-448-3748

**Office hours are held on Monday (11:45-12:35).** See Canvas for the zoom link. Office hours are times that your instructors and/or TAs specifically set aside to talk with students about any questions, so please join if you'd like to talk. You may need to briefly wait before joining if another student is already present. Additional meeting times are available with the instructors or TAs by appointment. Please reach out via Canvas with any questions or to schedule a virtual face-to-face meeting. We also encourage you to post questions relating to the lecture material in the weekly discussion thread to also benefit others.

## Course Description and Objectives

This course explores factors influencing the expression of animal behavior, and the ways understanding behavior may be used to assess and improve animal welfare. Basic principles will be illustrated with examples drawn from a wide range of species, both domestic and wild, but the focus of the course will be on applying concepts to understand the behavior and welfare of domestic animal species under human care, including livestock and companion animals. This course involves formal lectures and group discussion.

Upon completion of this course, students will be able to:

- Describe fundamental processes involved in development and control of behavior
- Discuss basic categories of behavior, drawing examples from different domestic species
- Apply understanding of animal behavior to draw conclusions about the welfare of animals managed under human care
- Consider how common management practices for livestock and other domesticated animal species influence behavior and welfare

## ANS 3008 Domestic Animal Behavior & Welfare – Syllabus Fall XXXX

- Interpret and critically evaluate scientific literature in the field of animal behavior

### CLASS STRUCTURE

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*Course Website on Canvas:* Our course website can be found through login to Canvas (<http://elearning.ufl.edu>). All course material, including the syllabus, lectures, and content described below, are on Canvas. Grades and assignment feedback are also posted through Canvas. I will also use Canvas as the primary means to contact with you any important announcements.

If you are not yet familiar with using Canvas, please look at the Canvas ‘Getting Started’ Guide: [guides.instructure.com/m/8470](https://guides.instructure.com/m/8470). To make sure you are not missing any announcements, please make sure your Canvas settings are adjusted as follows:

- Go to your general **Canvas Settings** (upper right corner within Canvas) > **Notifications** (left menu bar) > **Notification Preferences:** here set to **“ASAP”** for (at least) Announcements.

*Lectures and course content:* Lectures are pre-recorded and available to you via Canvas, organized by topic within weekly modules. In addition to these lectures, topics are covered through use of materials, such as short videos and additional reading, which are listed under the recorded lecture videos to accompany the recorded lecture. Each weekly module links to a discussion thread, where you may post any comments or questions related to the content. The instructors and TAs will be monitoring this thread and posting replies, and you are also welcome and encouraged to respond to your classmates’ comments. Participation in class discussion boards will contribute to your ‘Class Participation’ grade, as described below.

*Weekly class meetings:* Class sessions are synchronous on Wednesday and held via Zoom, with your attendance counting towards your ‘Class Participation’ grade. During these meetings, we will have a range of activities to complement lecture material, on dates as outlined in the syllabus. These will often involve some reading ahead of time, and incorporate discussion (e.g. using ‘breakout rooms’ to facilitate small group discussion). These live class sessions will also be used for review sessions during quiz weeks and involve guest speakers during some weeks. Topic and any expectations, such as assigned reading, for the weekly synchronous class sessions are outlined in the Class Schedule (Page 5 of this Syllabus) and on Canvas under Modules (readings will be posted on Canvas before the discussion date).

*The following textbook is an optional supplemental reference for this course:*

Price, E. O. 2008. Principles & applications of domestic animal behavior. CAB International.

## ANS 3008 Domestic Animal Behavior & Welfare – Syllabus Fall XXXX

### ASSIGNMENTS AND GRADING

Assignments will be graded according to rubrics posted on Canvas. The final grade in the course will be assigned based on numeric average, as described below.

#### Grading scheme:

<b>A</b>	92.50 - 100 %	<b>B+</b>	87.50 - 89.49 %	<b>C+</b>	77.50 - 79.49 %	<b>D+</b>	67.50 - 69.49 %	<b>E</b>	< 59.49 %
<b>A-</b>	89.50 - 92.49 %	<b>B</b>	83.50 - 87.49 %	<b>C</b>	73.50 - 77.49 %	<b>D</b>	63.50 - 67.49 %		
		<b>B-</b>	79.50 - 83.49 %	<b>C-</b>	69.50 - 73.49 %	<b>D-</b>	59.50 - 63.49 %		

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

<b>Activity</b>	<b>Percentage of final grade</b>
Quizzes (3 during semester; 12% each)	<b>36%</b>
Assignments (3 during semester; 12% each)	<b>36%</b>
Independent research paper (Due Dec 14)	<b>15%</b>
Oral presentation	<b>8%</b>
Class attendance and participation	<b>5%</b>

**Quizzes:** There will be three non-cumulative quizzes completed during the semester to assess your knowledge of course material. See the Class Schedule for quiz dates. All quizzes are scheduled on Fridays, and will open at 8 am and close at 11:59 pm. Each quiz will cover material introduced since the previous quiz, as specified in the schedule. Expect quizzes to consist of both multiple choice and short answer written questions. During each quiz week, the Wednesday synchronous class period will be a review session summarizing material and answering questions.

**Assignments:** There will be three written assignments due throughout the semester (see Class Schedule for due dates; cut-off time is 11:59 pm) on topics designed to complement lecture material. The complete guidelines and rubric for all assignments can be found on Canvas and these assignments will also be discussed during a synchronous class before the due date.

**Independent research paper:** This class assignment will focus on a behavioral topic of your choosing (to be discussed during a synchronous class session and subject to instructor approval). This assignment will involve independent reading and research. You will be responsible for 1) reading and summarizing 4 peer-reviewed scientific journal articles (see 'Tips for Finding Journal Articles' on the course Canvas page), 2) describing unanswered questions related to your behavior topic, and 3) planning how you would go about conducting research to address an unanswered question. The complete guidelines and rubric for this assignment can be found on Canvas. Please note that correct spelling and grammar is



## ANS 3008 Domestic Animal Behavior & Welfare – Syllabus Fall XXXX

important for college-level written assignments and will factor into your grade. This assignment is intended to build on what you have learned in-class throughout the semester. It is in place of a conventional cumulative final exam and is due during the final exam period.

*Oral presentation:* Based on the behavior topic selected for the literature review, you will develop and record a brief summary of key findings on your individual topic, to share with your classmates and instructor (< 3 min in duration). During your presentation, you will concisely summarize and individually present some key facts on what you have independently learned about your behavior topic. You may use a few slides (e.g. in PowerPoint), simply record yourself speak, or use any other format you choose. These will be pre-recorded and uploaded to Canvas to be available for viewing during the last week of class, as outlined in the Class Schedule.

*Class participation:* This will be evaluated based on attendance during in-class meetings (held during period 5 on Wednesdays, via Zoom) and participation in discussion boards. To ensure you receive full marks for participation, you should plan to attend all in-class activities (unless you have an excused absence, as defined below) and participate in required discussions.

### *Absences, Make-up Work, and Late Assignments:*

Assignments should be submitted by the assigned deadline. I will accept late assignments for up to 4 days after the posted deadline, with a penalty of 20 % for every day that the assignment is late. In the case of emergencies, please contact me as soon as possible to arrange to turn in assignments without penalty. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

**Please note:** there will be no opportunities for make-up work or extra credit assignments, and grade point cut-offs are firm. To do well, I encourage you to keep up with lectures, carefully review all assignment guidelines and rubrics, take advantage of all learning opportunities (study review sessions, review guides), and visit with me early in the semester if you have any concerns. To avoid disappointment with final grades, I aim to provide informative feedback and transparent grading throughout the semester so that you know how you are progressing.

## ANS 3008 Domestic Animal Behavior & Welfare – Syllabus Fall XXXX

### CLASS SCHEDULE

Class dates are color-coded by the quiz in which that material is assessed: Quiz 1 material is **blue**, Quiz 2 material is **green**, and Quiz 3 material is **orange**.

<b>Week</b>	<b>Modules (lectures)</b>	<b>Synchronous class topic</b>	<b>Other things to do</b>	<b>Deadlines</b>
1	<b>Introduction to animal behavior</b>	<i>Aug 24</i> - Introduction to the course	Post in Introductions discussion thread	
2	<b>Domestication and behavioral genetics</b>	<i>Aug 31</i> – Activity: Developing an ethogram Discuss Assignment 1		
3	<b>Learning and motivation</b>	<i>Sept 7</i> – Learning and motivation discussion	Assigned reading before class	<b>Assignment 1</b> <i>Sept 9</i>
4		<i>Sept 14</i> - Quiz 1 review	Quiz review, bring questions to class or post in discussion	<b>Quiz 1</b> <i>Sept 16</i>
5	<b>Feeding behavior</b>	<i>Sept 21</i> – Activity: Foraging in captivity case study Discuss Assignment 2	Assigned reading before class	
6	<b>Social behavior</b>	<i>Sept 28</i> – Research on social behavior		
7	<b>Maternal and reproductive behavior</b>	<i>Oct 5</i> – Social behavior discussion activity	Post questions in the discussion thread	<b>Assignment 2</b> <i>Oct 7</i>
8		<i>Oct 12</i> – Quiz 2 review	Quiz review, bring questions to class or post in discussion	<b>Quiz 2</b> <i>Oct 14</i>
9	<b>Abnormal behavior</b>	<i>Oct 19</i> – Discussion of behavior topics and final class project		
10	<b>Animal welfare</b>	<i>Oct 26</i> – Animal welfare discussion Discuss Assignment 3	Assigned reading before class	
11	<b>Animal welfare, cont.</b>	<i>Nov 2</i> – Equine behavior and welfare case study	Post questions in the discussion thread	<b>Assignment 3</b> <i>Nov 4</i>
12		<i>Nov 9</i> - Quiz 3 review	Quiz review, bring questions to class or post in discussion	<b>Quiz 3</b> <i>Nov 10</i>
13	<b>Careers in animal behavior and welfare</b>	<i>Nov 16</i> - Guest presentation: Welfare of animals in research	Post in the 'Careers in animal welfare' discussion thread	
14		<i>Nov 23</i> – No class	Happy Thanksgiving!	
15		<i>Nov 30</i> – Research in animal behavior and welfare		<b>Oral presentation</b> <i>Dec 2</i>
16	<b>Final presentations</b>	<i>Dec 7</i> - Discussion: Independent research topics	Watch classmates' presentations	<b>Independent Research Paper</b> <i>Dec 11</i>

## OTHER IMPORTANT INFORMATION

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### *Technology requirements and privacy*

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Computer requirements for this course are consistent with UF policy for student computing requirements, and likely similar to your other classes: <https://it.ufl.edu/policies/student-computing-requirements/>

Videos of pre-recorded lectures are shared on lecture pages using **Microsoft Stream**. The first time you access the video, you will need to login to your Microsoft Stream account using your UF username and password.

This course uses **Canvas** for providing course content. Please see the links below for important information regarding privacy and accessibility of these tools:

Canvas (Infrastructure) privacy policy: <https://www.instructure.com/policies/privacy>

Canvas (Infrastructure) accessibility statement: <https://www.instructure.com/canvas/accessibility>

### *Academic Honesty*

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

## ANS 3008 Domestic Animal Behavior & Welfare – Syllabus Fall XXXX

### *Software Use*

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### *Services for Students with Disabilities*

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

### *Campus Resources*

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu](http://www.counseling.ufl.edu)*
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Wellness Coaching
- U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)
- *Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>*
- Student Success Initiative, <http://studentsuccess.ufl.edu>

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>.
- Online Course: <https://distance.ufl.edu/state-authorization-status/#student-complaint>

### *Online Course Evaluation Process*

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this

## **ANS 3008 Domestic Animal Behavior & Welfare – Syllabus Fall XXXX**

course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

# Cover Sheet: Request 18099

Change ANS3404C from 3 to 4 credits

## Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Diwakar Vyas diwakarvyas@ufl.edu
Created	12/20/2022 4:15:58 PM
Updated	12/20/2022 4:29:48 PM
Description of request	This class has 3 lecture and 2 lab hours and it is equivalent to 4 credits. For past several years, despite similar lecture and lab hours, this course was kept at 3 credits. Now, we are requesting to change this to 4 credits so that students gets credits that matches their effort.

## Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		12/20/2022
ANS 3404C Syllabus 2023_Final.docx					12/20/2022
ANS 3404C Syllabus 2022_updated.docx					12/20/2022
CALS CC Checklist_ANS3404C.pdf					12/20/2022
College	Pending	CALS - College of Agricultural and Life Sciences			12/20/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

## Course|Modify for request 18099

### Info

**Request:** Change ANS3404C from 3 to 4 credits

**Description of request:** This class has 3 lecture and 2 lab hours and it is equivalent to 4 credits. For past several years, despite similar lecture and lab hours, this course was kept at 3 credits. Now, we are requesting to change this to 4 credits so that students gets credits that matches their effort.

**Submitter:** Diwakar Vyas diwakarvyas@ufl.edu

**Created:** 12/20/2022 4:06:25 PM

**Form version:** 1

### Responses

**Current Prefix** ANS

**Course Level** 3

**Number** 404

**Lab Code** C

**Course Title** Food Animal Nutrition and Feeding

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option opens additional form fields below)

**Change Course Prefix?** No

**Change Course Level?** No

**Change Course Number?** No

**Change Lab Code?** No

**Change Course Title?** No

**Change Transcript Title?** No

**Change Credit Hours?** Yes

**Current Credit Hours** 3

**Proposed Credit Hours** 4

**Change Variable Credit?** No

**Change S/U Only?** No

**Change Contact Type?** No

**Course Type** Lecture

**Change Rotating Topic Designation?** No

**Change Repeatable Credit?** No

**Multiple Offerings in a Single Semester** Yes

**Change Course Description?** No

**Change Prerequisites?** No

**Change Co-requisites?** No

**Rationale** This course has 3 lecture hours and 2 lab hours and it is equivalent to 4 credits. For last several years, this course was kept at 3 credits and now we are requesting to change it.



# CALS Curriculum Committee

## Submission Checklist

**NOTE: This checklist must be included with all course and certificate submissions.**

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as “Proposal of a new undergraduate course” is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

**CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.**

  x   It is required when making a submission that you consult your department’s representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

  x   You **MUST** comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site(<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

  x   Submission of a course modification requires both the current version of the course syllabus and the proposed version.

  NA   Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

  x   The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

  x   The course learning objectives must be consistent with Bloom’s taxonomy. Please see the following link at the CALS Curriculum site. ([https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf) ). Do not use the words demonstrate or understand when listing learning objectives.

X The course schedule should be concise and include the appropriate number of weeks in the semester.

NA All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

NA Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

X Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be “none” or left blank. Junior or senior standing is an acceptable option. A phrase such as “a course in basic biology” is not acceptable.

X Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

X The attendance and make-up policy in a syllabus cannot contradict the university’s policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

X The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

### **Certificates**

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl ([brendj@ufl.edu](mailto:brendj@ufl.edu)) for further instruction)

**ANS 3404C**  
**Food Animal Nutrition and Feeding**  
**Spring, 2022**

**Course Description:** 3 credits; Prerequisite = ANS 3440 Principles of Nutrition. This course is a basic nutrition course designed to familiarize students with the common feedstuffs used in cattle diets, the broad management practices used and nutrient requirements of cattle at specific stages of growth, production and reproduction, and how scientific methods and experimental results are applied to animal feeding practices.

**Course Learning Objectives:**

Upon completing this course, students should be able to do the following:

1. Identify and describe the characteristics of commonly used feed ingredients for cattle diets.
2. Discuss the impact of how feed processing affects nutrient utilization by cattle.
3. Read and interpret feed tags and laboratory analyses of diet/feed ingredients.
4. Describe the general changes in nutrient requirements that occur throughout the life-cycle of beef cattle and dairy cattle.
5. Calculate and formulate concentrations & amounts of nutrients in rations and feed mixes.
6. Formulate basic beef cattle and dairy cattle rations using mathematical formulas / computer software.

**Faculty Instructor**

Dr. Diwakar Vyas  
Room 202C  
Animal Sciences Building  
Ph: 352-294-1079  
Email: [diwakarvyas@ufl.edu](mailto:diwakarvyas@ufl.edu)

**Teaching Assistants**

Samia Farooq; E-mail: [farooq.samia@ufl.edu](mailto:farooq.samia@ufl.edu)  
Benjamin Po; Email: [benjaminpo@ufl.edu](mailto:benjaminpo@ufl.edu)

**Schedule and Critical Dates:**

- Lecture: Tuesday, Periods 1 and 2 (7:25-9:20 am), Room 151
- Lecture: Thursday, Period 1 (7:25-8:15 am), Room 151
- Lab: Thursday, Periods 2-3 (8:30 - 10:25 am), Room 151; Room 201 Red Larson building

**Required Textbook:** None. Required reading assignments may be given during the semester.

**Grading:**

For information on current UF policies for assigning grade points, see

**ALL EXAMS ARE TO BE TAKEN AT THE SCHEDULED TIMES. MAKE-UPS WILL BE GIVEN ONLY FOR PRIOR EXCUSED ABSENCES.**

%	Points	Grade	Item	Points	Dates / Time
92	736	A	Quizzes	100	Six 20-pt announced quizzes <sup>1</sup>
89	712	A-	First Exam	150	Tuesday, February 15
86	688	B+	Second Exam	150	Tuesday, March 31
83	664	B	Third Exam	150	Tuesday, April 19
			Final Exam	150	Tuesday, April 26 <sup>2</sup>
80	640	B-	Lab exercises	250	12 Weekly (25 points each) <sup>3</sup>
77	616	C+			<sup>1,2,3</sup> Drop lowest quiz, 2 lowest exercises, and lowest exam
74	592	C	Total	800	
71	568	C-	Clicker	30-35	Up to 35 bonus points will be offered by correctly answering clicker questions during lecture.
68	544	D+			
65	520	D			
< 65	< 520	E			
<b>The above grades, based on the percentage of total points (800), will be guaranteed.</b>					

**Quizzes and Exams (550 pts):**

A total of six 20-point quizzes will be announced and given throughout the semester (see lecture and lab schedule at the end of the syllabus). Since quizzes are announced and you will be allowed to drop your single lowest quiz score, **NO MAKE-UPS** will be allowed unless one is involved in an out-of-town UF sponsored trip. QUIZZES = 100 pts. (12.5% of the total points).

The 4 exams are each worth 150 points, and you will be given up to 2 hours to complete the exams. Lowest exam will be dropped from final total. Questions on the exams will come from both lecture and lab assignments. EXAMS = 450 pts. (56.25% of the total points).

You should notify Dr. Vyas of any questions regarding the grading of a quiz, exercise or exam within one week of its return to you. Later challenges will not be considered.

**Lab Assignments (250 pts):**

Problem sets (n = 12) related to feeding and diets are worth 25 points each. The two lowest scores

will not count toward the final point total of the semester. For some weeks, students are to independently watch on-line instructional videos explaining the principles and methods to use in solving the problem sets prior to the scheduled lab period on Wednesdays and Thursdays. Students are encouraged to complete the problem sets prior to the Thursday lab. Students can receive personal help during established office hours and during lab time with any particular problems that were not solved independently prior to class. Students who have completed the assigned problem set prior to will not need to stay for the whole lab period. The hands-on lab exercises are due at the end of the lab period each Thursday unless otherwise indicated. Three points will be deducted for each day that the assignment is turned in late without an excused absence. Lab exercises will not be accepted after the material has been discussed and posted for class review. LAB EXERCISES = 250 points (31.25% of the total points).

### ***Clicker responses (up to 35 points)***

Providing a correct answer to each clicker question during a lecture/lab session will result in 1 point per correct answer for extra credit. This year we will use iClicker cloud for scoring these points. This can be installed on your phone and will be used both for online classes and lab sessions.

(<https://at.ufl.edu/service-teams/classrooms/classroom-technology/iclicker-response-system/>)

### **Attendance and Make-Up Work**

Attendance will not be taken. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

### **Software Use:**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

### **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida. The following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams).

Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

### **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

### **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)*
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Wellness Coaching
- *Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)*
- *U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)*

## ANS 3404C - Lecture and Lab Schedule 2022

\*Quiz Date

Section 1THR	Lectures	Labs	Assignments
1/6 Thu	Course Syllabus Introductions <b>Lecture Topic 1.</b> Proximate Analysis & Detergent System Method of Forage Composition		
1/11 Tue	<b>Lecture Topic 1.</b> Proximate Analysis & Detergent System Method of Forage Composition (Continued)		
1/13 Thu	<b>Lecture Topic 2.</b> Feed sampling techniques	<b>Lab 1.</b> Proximate analysis of corn silage (DM and Ash estimation, preparing silage extract, measuring pH)	
1/18 Tue	<b>Lecture Topic 3.</b> Commonly Used Energy Concentrates and their Byproducts: Characteristics, Processing, and Feeding		
1/20 Thu	<b>Lecture Topic 3. Continued.</b>	<b>Lab 2.</b> Hands-on Feed Sampling Techniques: Hay Bales, Silage, and Grain Probes Assignments due today: <ul style="list-style-type: none"> <li>• In-class exercise on Feed Sampling Techniques</li> </ul>	
1/25 Tues	<b>Quiz-1</b>  <b>Lecture Topic 4.</b> Commonly Used Protein & Nitrogenous Feeds: Characteristics, Processing, and Feeding Recommendations		

1/27 Thurs		<p><b>Lab 3.</b> Fiber, and volatile fatty acid analysis</p> <ul style="list-style-type: none"> <li>• Begin learning to identify 16 energy concentrate feeds</li> </ul>	
2/1* Tues			
2/3 Thurs	<p><b>Lecture Topic 4. Continued.</b></p>	<p>Complete and turn in Lab 3.</p> <p><b>Lab 4.</b> Determining in-situ digestibility of corn silage and ground corn</p> <ul style="list-style-type: none"> <li>• Begin learning to identify protein rich concentrate feeds</li> </ul>	
2/8 Tues	<p><b>Lecture Topic 5.</b> Macro- and Micro-minerals Supplement Sources for Cattle.</p> <p><b>Quiz-2</b></p>		
2/10* Thurs	<p><b>Lecture Topic 5 Contd..</b></p>	<p>Complete and turn in Lab 4.</p> <p><b>Lab 5.</b> Hands-on Corn Wet-Milling Lab</p>	
2/15 Tues	<p><b>EXAM 1</b></p>		
2/17 Thurs	<p><b>Lecture Topic 5 Contd..</b></p>	<p>Complete and turn in corn wet-milling exercise.</p> <p><b>Lab 6.</b> Introducing DM to As-fed calculations</p>	
2/22 Tues	<p><b>Lecture Topic 6.</b> Feeding the newborn dairy calf – liquid and dry feeds</p>		



	<ul style="list-style-type: none"> <li>Download the Dairy NRC software to your PC. Sorry, but not compatible with Mac</li> </ul>		
2/24 Thurs	<b>Quiz-3</b>  <b>Given at the beginning of class</b> <b>Lecture Topic 6. Continued.</b>	Complete and turn in <b>Lab 6</b>  <b>Lab 7.</b> Feeding dairy calves NRC ration formulation	
3/01* Tues	<b>Lecture Topic 7.</b> Feeding the replacement dairy heifer		
3/03 Thu	<b>Lecture Topic 8.</b> Feeding the transition dairy cow	Complete and turn in <b>Lab 7</b> <b>Lab 8.</b> Feeding dairy heifers–NRC software	
03/08	<b>SPRING BREAK</b>		
03/10	<b>SPRING BREAK</b>		
3/15 Tue	<b>Quiz-4</b>  <b>Lecture Topic 8. Continued.</b>		
3/17 Thu	<b>Lecture Topic 9.</b> Feeding the lactating dairy cow	Complete and turn in <b>Lab 8</b>  <b>Lab 9.</b> Visit to the Dairy Research Unit	
3/22 Tue	<b>Lecture Topic 9. Continued.</b>		
3/24* Thu	<b>Lecture Topic 10.</b> Labeling and Interpretation of Commercial Feed Tags.	<b>Lab 10.</b> Feed labeling exercise	
3/29 Tue	<b>Lecture Topic 10. Continued.</b>		

3/31 Thu	<b>EXAM 2. Feeding the dairy animal</b>		
4/05* Tues	<b>Lecture Topic 11.</b> Feeding the Beef Breeding Herd – Mature Cows		
4/07 Thurs	<b>Lab 11.</b> Cow-calf operation visit		
4/12 Tues	<b>Lecture Topic 12.</b> Feeding the Beef Breeding Herd – Breeding and Replacements		
4/14 Thurs	<b>(Quiz -5)</b> <b>(Quiz -6- Available online)</b>  <b>Lecture Topic 12.</b> Feeding the Beef Replacements, stocker and feedlot cattle	<b>Lab 12</b> Body Condition Scoring at the Beef Teaching Unit.	
4/19 Tues	<b>(Quiz -6 due)</b> <b>Exam 3</b>		
4/26 Tues	<b>FINAL EXAM</b>		

**ANS 3404C**  
**Food Animal Nutrition and Feeding**  
**Spring, 2023**

**Course Description:** 3 credits; Prerequisite = ANS 3440 Principles of Nutrition. This course is a basic nutrition course designed to familiarize students with the common feedstuffs used in cattle and pig diets, the broad management practices used and nutrient requirements of cattle and pigs at specific stages of growth, production and reproduction, and how scientific methods and experimental results are applied to animal feeding practices.

**Course Objectives:**

Upon completing this course, students should be able to do the following:

1. Identify and describe the characteristics of commonly used feed ingredients for livestock diets.
2. Discuss the impact of how feed processing affects nutrient utilization by livestock.
3. Read and interpret feed tags and laboratory analyses of diet/feed ingredients.
4. Describe the general changes in nutrient requirements that occur throughout the life-cycle of beef cattle, dairy cattle, and pigs.
5. Calculate and formulate concentrations & amounts of nutrients in rations and feed mixes.
6. Formulate basic beef cattle, dairy cattle, and pig rations using mathematical formulas / computer software.

**Faculty Instructor**

Dr. Diwakar Vyas  
Room 202C  
Animal Sciences Building  
Ph: 352-294-1079  
Email: [diwakarvyas@ufl.edu](mailto:diwakarvyas@ufl.edu)

**Teaching Assistants**

Lais Oliveira; E-mail: [l.lima@ufl.edu](mailto:l.lima@ufl.edu)  
Firmansyah Saputra; Email: [saputra.f@ufl.edu](mailto:saputra.f@ufl.edu)

**Schedule and Critical Dates:**

- Lecture: Tuesday, Periods 1 and 2 (7:25-9:20 am), Room 151
- Lecture: Thursday, Period 1 (7:25-8:15 am), Room 151
- Lab: Thursday, Periods 2-3 (8:30 - 10:25 am), Room 151; Room 201 Red Larson building

**Office hours:**

Dr. Diwakar Vyas: Monday and Wednesday: 10-11 AM  
Lais Oliveira: Tuesday: 9:30-11:30 AM  
Firmansyah Saputra: Thursday: 10:30-12:30 PM

**Required Textbook:** None. Required reading assignments may be given during the semester.

**Grading:**

For information on current UF policies for assigning grade points, see

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**ALL EXAMS ARE TO BE TAKEN AT THE SCHEDULED TIMES. MAKE-UPS WILL BE GIVEN ONLY FOR PRIOR EXCUSED ABSENCES.**

%	Grade	Item	Points	Dates / Time
>92.0	A	Quizzes	100	Six 20-pt announced quizzes <sup>1</sup>
89.0-91.9	A-	First Exam	150	Tuesday, February 15
86.0-88.9	B+	Second Exam	150	Tuesday, March 31
83.0-85.9	B	Third Exam	150	Tuesday, April 19
		Final Exam	150	Tuesday, April 26 <sup>2</sup>
80.0-82.9	B-	Lab exercises	250	12 Weekly (25 points each) <sup>3</sup>
77.0-79.9	C+			<sup>1</sup> Drop lowest quiz, <sup>2</sup> Drop lowest exam, and <sup>3</sup> Drop lowest exercise
74.0-76.9	C	Total	800	
71.0-73.9	C-	Clicker	30-35	Up to 35 bonus points will be offered by correctly answering clicker questions during lecture.
68.0-70.9	D+			
65.0-67.9	D			
< 65.0	E			
<b>The above grades, based on the percentage of total points (800), will be guaranteed.</b>				

**Quizzes and Exams (550 pts):**

A total of six 20-point quizzes will be announced and given throughout the semester (see lecture and lab schedule at the end of the syllabus). Since quizzes are announced and you will be allowed to drop your single lowest quiz score, NO MAKE-UPS will be allowed unless one is involved in an out-of-town UF sponsored trip. QUIZZES = 100 pts. (12.5% of the total points).

The 4 exams are each worth 150 points, and you will be given up to 2 hours to complete the exams. Lowest exam will be dropped from final total. Questions on the exams will come from both lecture and lab assignments. EXAMS = 450 pts. (56.25% of the total points). Exam 4 will be cumulative,

and students satisfied with their score can skip the final and take it as their drop.

You should notify Dr. Vyas of any questions regarding the grading of a quiz, exercise or exam within one week of its return to you. Later challenges will not be considered.

### ***Lab Assignments (250 pts):***

Problem sets (n = 12) related to feeding and diets are worth 25 points each. The two lowest scores will not count toward the final point total of the semester. For some weeks, students are to independently watch on-line instructional videos explaining the principles and methods to use in solving the problem sets prior to the scheduled lab period on Wednesdays and Thursdays. Students are encouraged to complete the problem sets prior to the Thursday lab. Students can receive personal help during established office hours and during lab time with any particular problems that were not solved independently prior to class. Students who have completed the assigned problem set prior to will not need to stay for the whole lab period. The hands-on lab exercises are due at the end of the lab period each Thursday unless otherwise indicated. Three points will be deducted for each day that the assignment is turned in late without an excused absence. Lab exercises will not be accepted after the material has been discussed and posted for class review. LAB EXERCISES = 250 points (31.25% of the total points).

### ***Clicker responses (up to 35 points)***

Providing a correct answer to each clicker question during a lecture/lab session will result in 1 point per correct answer for extra credit. This year we will use iClicker cloud for scoring these points. This can be installed on your phone and will be used both for online classes and lab sessions.

(<https://at.ufl.edu/service-teams/classrooms/classroom-technology/iclicker-response-system/>)

### **Attendance and Make-Up Work**

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.ua.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email, they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.ua.ufl.edu/public-results/>.

### **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold

ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

### **Software Use:**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

### **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu](http://www.counseling.ufl.edu)
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Wellness Coaching
- U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)
- Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>.

- Student Success Initiative, <http://studentsuccess.ufl.edu>.

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>
- Online Course: <https://distance.ufl.edu/state-authorization-status/#student-complaint>

## ANS 3404C - Lecture and Lab Schedule 2023

Section 1THR	Lectures	Labs	Quizzes
1/10 Tue	Course Syllabus Introductions <b>Lecture Topic 1.</b> Proximate Analysis & Detergent System Method of Forage Composition		
1/12 Thurs	<b>Lecture Topic 1.</b> Proximate Analysis & Detergent System Method of Forage Composition (Continued)	<b>Lab 1.</b> Proximate analysis of corn silage (DM and Ash estimation, preparing silage extract, measuring pH)	
1/17 Tue	<b>Lecture Topic 2.</b> Feed sampling techniques		
1/19 Thu	<b>Lecture Topic 3.</b> Commonly Used Energy Concentrates and their Byproducts: Characteristics, Processing, and Feeding	<b>Lab 2.</b> Hands-on Feed Sampling Techniques: Hay Bales, Silage, and Grain Probes Assignments due today: <ul style="list-style-type: none"> <li>• In-class exercise on Feed Sampling Techniques</li> </ul>	
1/24 Tue	<b>Lecture Topic 3. Continued.</b> Commonly Used Energy Concentrates and their Byproducts: Characteristics, Processing, and Feeding		
1/26 Thurs	<b>Lecture Topic 4.</b> Commonly Used Protein & Nitrogenous Feeds: Characteristics, Processing, and Feeding Recommendations	<b>Lab 3.</b> Fiber, and volatile fatty acid analysis <ul style="list-style-type: none"> <li>• Identification of 16 energy concentrate feeds</li> </ul>	<b>Quiz-1</b>



1/31 Tue			
2/2 Thurs	<b>Lecture Topic 4 Continued</b> Commonly Used Protein & Nitrogenous Feeds: Characteristics, Processing, and Feeding Recommendations	Complete and turn in Lab 3.  <b>Lab 4.</b> Determining in-situ digestibility of corn silage and ground corn  Identification of protein rich concentrate feeds	
2/7 Tue	<b>Lecture Topic 5.</b> Macro- and Micro-minerals Supplement Sources for Cattle		
2/9 Thurs	<b>Lecture Topic 5. Continued</b> Macro- and Micro-minerals Supplement Sources for Cattle	Complete and turn in Lab 4.  <b>Lab 5.</b> Hands-on Corn Wet-Milling Lab	<b>Quiz-2</b>
2/14 Tue	<b>Lecture Topic 6</b> Feeding calves and heifers (Dairy)		
2/16 Thurs	<b>EXAM 1</b>		
2/21 Tue	<b>Lecture Topic 6 Continued</b> Feeding calves and heifers (Dairy)		
2/23 Thurs	Download the Dairy NRC software to your PC.	Complete and turn in corn wet-milling exercise. <b>Lab 6.</b> Feeding dairy calves and heifers NRC ration formulation	
2/28 Tue	<b>Lecture Topic 7</b> Feeding transition and lactating dairy cows		<b>Quiz-3</b>

3/02 Thurs	<b>Lecture Topic 7</b> Feeding transition and lactating dairy cows	Complete and turn in <b>Lab 7</b> <b>Lab 7.</b> Feeding transition and lactating dairy cows	
3/07 Tue	<b>Lecture Topic 8.</b> Productive Phases and Food Programs in Pig Farming		
03/09 Thurs	<b>Lecture Topic 8. Continued</b> Productive Phases and Food Programs in Pig Farming	Complete and turn in <b>Lab 7</b> <b>Lab 8.</b> Ration formulation Gestating and Lactating pigs	
03/14	<b>SPRING BREAK</b>		
03/16	<b>SPRING BREAK</b>		
3/21 Tue	<b>Lecture Topic 9.</b> Nutritional requirements for piglets, growing pigs, and fattening and finishing pigs		<b>Quiz-4</b>
3/23 Thu	<b>Exam 2</b>		
3/28 Tue	<b>Lecture Topic 9. Continued.</b> Nutritional requirements for piglets, growing pigs, and fattening and finishing pigs		
3/30 Thu	<b>Lab 9.</b> Pig farm visit Ration formulation of growing and finishing pigs		
04/04 Tue	<b>Lecture Topic 10.</b> Labeling and Interpretation of Commercial Feed Tags		
3/23 Thu	<b>Lab 10.</b> Visit to the Dairy Research Unit		
4/11	<b>Lecture Topic 11.</b> Feeding the Beef		

Tues	Breeding Herd – Mature Cows		
4/13 Thurs	<b>Lab 11.</b> Cow-calf operation visit		
4/18 Tues	<b>Lecture Topic 12.</b> Feeding the Beef Breeding Herd – Breeding and Replacements		
4/20 Thurs	<b>Lecture Topic 12.</b> Feeding the Beef Replacements, stocker and feedlot cattle	<b>Lab 12</b> Body Condition Scoring at the Beef Teaching Unit.	<b>(Quiz -5) Quiz-6 (Available online)</b>
4/25 Tues	<b>Exam 3 (Quiz -6 due)</b>		
<b>05/02 Tues</b>	<b>FINAL EXAM</b>		

## Cover Sheet: Request 18104

Title and level change for the careers course in ANS

### Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Albert De Vries devries@ufl.edu
Created	1/4/2023 2:20:17 PM
Updated	1/4/2023 2:23:58 PM
Description of request	Change the title of the course and lower the level from 3000 to 2000

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		1/4/2023
2022 ANS 3934 Fall Syllabus.docx					1/4/2023
ANS 2XXX Careers - new.docx					1/4/2023
CALS CC checklist.pdf					1/4/2023
College	Pending	CALS - College of Agricultural and Life Sciences			1/4/2023
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

# Course|Modify for request 18104

## Info

**Request:** Title and level change for the careers course in ANS

**Description of request:** Change the title of the course and lower the level from 3000 to 2000

**Submitter:** Albert De Vries devries@ufl.edu

**Created:** 1/4/2023 2:05:06 PM

**Form version:** 1

## Responses

**Current Prefix** ANS

**Course Level** 3

**Number** 934

**Lab Code** None

**Course Title** Careers in the Livestock Industry

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option opens additional form fields below)

**Change Course Prefix?** No

**Change Course Level?** Yes

**Current Level** 3

**Proposed Level** 2

**Change Course Number?** No

**Change Lab Code?** No

**Change Course Title?** Yes

**Current Course Title** Careers in the Livestock Industry

**Proposed Course Title** Careers in Animal Sciences

**Change Transcript Title?** Yes

**Current Transcript Title** ?

**Change Credit Hours?** No

**Change Variable Credit?** No

**Change S/U Only?** No

**Change Contact Type?** No

**Course Type** Lecture

**Change Rotating Topic Designation?** No

**Change Repeatable Credit?** No

**Multiple Offerings in a Single Semester** Yes

**Change Course Description?** Yes

**Current Course Description** Careers in the livestock industry. Interactive exposure to employment opportunities in the animal sciences.

**Proposed Course Description (500 characters max)** Interactive exposure to employment

opportunities in the animal sciences and with animal sciences degrees

**Change Prerequisites?** No

**Change Co-requisites?** No

**Rationale** Change title to: Careers in Animal Sciences

- o As the schedule shows, careers other than in the livestock industry are shown
- o Recommendation to change name from the 2020 ANS Curriculum Revision committee

Make it 2000 level. It does not and should not have prerequisites

- o Anticipating that 3000+ and 4000+ will need some prerequisites
- o Similar type course as ANS2090 - Survey of Veterinary Professions

# CALS Curriculum Committee Submission Checklist

**NOTE: This checklist must be included with all course and certificate submissions.**

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

## CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

You MUST comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site (<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

Submission of a course modification requires both the current version of the course syllabus and the proposed version.

Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. ([https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf)). Do not use the words demonstrate or understand when listing learning objectives.

The course schedule should be concise and include the appropriate number of weeks in the semester.

All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

### Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl ([brendj@ufl.edu](mailto:brendj@ufl.edu)) for further instruction)



# Careers in the Livestock Industry

## ANS 3934

**Please Note:** This course will be *taught using a face-to-face classroom-based learning environment, many times with invited speakers*, to accomplish student learning objectives. No class sessions will be recorded. As such, attendance and active participation are mandatory and necessary for educational success, especially on days of invited speakers. If you fall ill during the semester, you must notify your instructors in a timely fashion so we can provide you with an alternative instructional option.

### INSTRUCTORS

**Mr. Joel McQuagge**

210B Bldg 459

352- 392-6363

[mcquagge@ufl.edu](mailto:mcquagge@ufl.edu)**Ms. Amie Imler**

231E Bldg 459

352-392-0133

[amie.taylor@ufl.edu](mailto:amie.taylor@ufl.edu)

Zoom ID: 481-418-9771 passcode Amie

**Undergraduate Teaching Assistant**

Taylor Riel

[Taylor.riel@ufl.edu](mailto:Taylor.riel@ufl.edu)

### OFFICE HOURS

**Fall student consultations will be handled in-person as well as via phone, email or Zoom.** We are willing to work with you to accommodate your schedule. Face to face meetings will be welcomed with an appointment. Our schedules are variable so please follow the directions below to make an office appointment.

- *Amie: by appointment using the following link*  
[https://outlook.office365.com/owa/calendar/aimler\\_bookings@uflorida.onmicrosoft.com/bookings/](https://outlook.office365.com/owa/calendar/aimler_bookings@uflorida.onmicrosoft.com/bookings/)
- *Joel: email is preferred to make an appointment*
- *Taylor: email is preferred to make an appointment*

### COURSE DESCRIPTION

ANS 3934 offers an introduction to careers in the livestock industry and a discussion of career exploration, career preparation, and the procedure of job placement

### SCHEDULE

Tuesday and Thursday

Period 4 (10:40 AM to 11:30 AM)

Location: ANS 156

## **COURSE OBJECTIVES**

1. Evaluate the broad scope of disciplines and opportunities that exist in the beef, equine, dairy and pork industries.
2. Become marketable candidates for positions of their choice in the production, marketing and processing of beef cattle, dairy cattle, swine, poultry, horses, as well as meats and food products.
3. Become marketable candidates for positions within the livestock support and allied industries (feed, health, sales, promotion, etc.).
4. Design a plan for career development and evaluate their current readiness for positions in the industry.

## **COURSE FORMAT**

Support materials will be presented by instructors and discussed with students during the first few weeks. Guest speakers from various Animal Sciences careers will participate in course discussions. Many speakers will be part of the UF Animal Sciences community.

- You are expected to arrive to the classroom on time and dressed professionally.
- ***Cell phones, laptops and other digital devices should remain silenced and away as a sign of respect for invited speakers.***

## **CLASS ATTENDANCE, EXPECTATIONS & MAKE-UP WORK**

Attendance and active participation are mandatory and necessary for educational success, especially on days of invited speakers. ***You are expected and required to attend class face-to-face and not via zoom.***

An unexcused absence will have a negative impact on your grade. Requests for an excused absence must be received in advance of missing class by contacting Mr. McQuagge and Mrs. Imler.

If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.](#)

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

### **\*Dress Code\***

- On days of invited speakers, dress code is business casual. ***No sleeveless shirts, t-shirts, caps, or hats.***

### **\*Cell phones & Laptops\***

- Please have your cellphones, laptops, and other digital devices ***SILENCED*** & away.

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

### **\*\*\*MARK YOUR CALENDARS – 2022 IMPORTANT DATES\*\*\***

***Animal Sciences Internship Seminar: Thursday, October 20, 2022 MANDATORY ATTENDANCE***

#### **No Class**

Thursday, November 24, 2022: Thanksgiving

#### **Last Day of Classes**

December 6, 2022

### **GRADING SYSTEM**

Introductory discussion	20
Participation in Class	520
<i>*26 Invited Speakers worth 20 points each</i>	
Internship Seminar Attendance	40
Industry Event/Career Shadowing Summary	100
Internship Plan/Professional School Experience Plan	100
Resume Review	60
Final Resume	40
	<b>880</b>

#### **Final grade averages will be computed as follows:**

≥ 90%	A
≥ 80% - < 90%	B
≥ 70% - < 80%	C
≥ 60% - < 70%	D
< 60%	E

***\*Please Note: If you miss 5 or more invited speakers for unexcused reasons, but still attend the Internship Seminar, complete all other assignments and earn full credit for all other assignments, you will earn a "B" or lower letter grade for the course. Attendance and participation in class is essential to success in this course.***

***Late assignments will be accepted up to one week after the posted due date in Canvas with a 10% per day late penalty.***

### **GRADES AND GRADE POINTS**

For information on current UF policies for assigning grade points, see

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

## **OUT-OF-CLASS ASSIGNMENTS**

*\*Please Note: Complete assignment directions with due dates and resources are in the course Canvas shell. Completed assignments are to be submitted through Canvas for grading by the due dates published in Canvas. You may submit assignments up to one week late with a 10% per day penalty.*

### **1. Industry Event **OR** Career Shadowing/Professional Interview Activity – 100 Points**

You have the option to complete either one industry event activity OR one career shadowing/professional interview activity by the end of the semester. **You must complete at least ONE of these activities this semester.**

#### **a. OPTION 1: Industry Event Activity**

Attend an activity associated with the livestock industry (extension meeting, breed association function, sale, livestock show, cattlemen's meeting, webinar, etc.) where professionals are participating in their career role. Many of these events are being held virtually. **This should be a new experience! Events should be approved by instructors.**

**A one-page reflection** will include a discussion of the event, its purpose, list of professionals involved and their duties connecting the activity to the industry. Use the Industry Event worksheet in Canvas as a guide.

#### **b. OPTION 2: Career Shadowing or Industry Professional Interview Activity**

You will spend an entire 8-hour workday with an animal industry professional **(who is NOT a veterinarian)** that represents a career goal you have interest in. Selection of the person should be done with the course instructors and your academic advisor prior to completing the activity. **Alternatively, if you are not allowed to spend an eight-hour workday face-to-face with the professional, then you should schedule a time to interview them via phone or zoom.**

After completing the shadowing or interview experience, you should have a good understanding of the career area and position. You should also know the responsibilities and requirements for placement, and characteristics of a successful employee in this position.

**A one-page reflection** documenting the experience, your conversations, and what insight you have gained into the profession should be submitted by the due date published in Canvas. Use the Career Shadowing Reflection or Industry Professional Interview and Reflection worksheet in Canvas to complete the assignment.

**\*Please Note:** It is in your best interest to complete either option of this assignment during the first couple of months of the semester. **Do not wait until the last week of class to complete these assignments.**

**2. Internship Plan/Professional Experience Plan – 100 Points**

- a. Food Animal & Equine Specialization students must create an Internship Plan as assigned in Canvas**
  - i. Once you have completed the Internship Plan and submitted the assignment documents as outlined in Canvas, make an appointment with Amie here: <https://amieufansci.youcanbook.me/> to discuss the plan.
  - ii. You are encouraged to turn in your Internship Plan to Amie via Canvas **one week prior** to your scheduled meeting.
- b. Animal Biology Specialization students must create a Professional Experience Plan as assigned in Canvas**
- c. Non-Animal Sciences Majors must consult with Amie to determine the plan most appropriate for them.**

**3. Mandatory Attendance at the Animal Sciences Internship Seminar – 40 Points**

**Thursday, October 20, 2020 @ 5:00 PM**

UF/IFAS Straughn Center

You must be present for the **entire** seminar program.

***A networking hour with industry professionals will begin at 5:00 PM. Internship poster presentations will begin at 6:00 PM and students should plan on the program lasting until at least 7:30 PM that evening. A meal will be served.***

**4. Resume – 100 Points**

- Use materials presented in class on resume development as well as other career resources to create a tailored resume appropriate for an internship, part-time job, or a post-graduate position in the industry you have an interest in.
- Have your resume reviewed by at least one professional who is not an instructor of this course. Recommendations for professional reviewers can be found in Canvas.
- Submit a copy of your original resume with reviewer comments, the position description utilized to tailor the resume, as well as your final resume to Canvas by the published due date.

## **Academic Honesty, Software Use, Campus Helping Resources, Services for Students with Disabilities**

### **Student Honor Code**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

### **Software Use:**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

### **Services for Students with Disabilities:**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

### Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

### Health and Wellness:

- *U Matter, We Care*: If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- *Counseling and Wellness Center*: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- *Student Health Care Center*: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).
- *University Police Department*: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- *UF Health Shands Emergency Room / Trauma Center*: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

### Academic Resources:

- *E-learning technical support*: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).
- *Career Connections Center*: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- *Library Support*: Various ways to receive assistance with respect to using the libraries or finding resources.
- *Teaching Center*: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
- *Writing Studio*: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- *Student Complaints On-Campus*: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).
- *On-Line Students Complaints*: [View the Distance Learning Student Complaint Process](#).

### Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

## **DIVERSITY, INCLUSION AND EQUITY**

The University of Florida's College of Agricultural and Life Sciences supports the University of Florida's commitment to diversity, inclusion, and equity. By fostering a sense of belonging for students, staff and faculty while leveraging the uniqueness of the people who study and work at the university, we believe our campus community is enriched and enhanced by diversity, including but not limited to race, ethnicity, national origin, gender, gender identity, sexuality, class, and religion. Our course will help foster an understanding of the diversity of our campus community as well as our animal sciences, agricultural and natural resource communities, locally and globally.

We will strive to create a learning environment for our students that support a diversity of thoughts, perspectives, and experiences while honoring your identities. To accomplish this, please let us know:

- If you have a name and/or set of pronouns that differ from those that appear in your official university records
- If you believe your performance in the class is being impacted by your experiences outside of class. Do not hesitate to reach out and talk with us. We want to be a resource for you. Anonymous feedback may be submitted, which may lead us to make a general announcement to the class, if necessary, to address your concerns.
- We, like many people, are still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that makes you feel uncomfortable, please talk to us about it.

Contact us with any concerns regarding inclusion and equity, including accessibility of learning materials, equipment, and software.

### **In-class Recording**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or



uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

**TENTATIVE COURSE SCHEDULE**

DATE	SUBJECT
August 25	Introduction to Course – What is the role of this course in your professional development? Preparation for Guest Speakers - <b>Daily Speaker Notes</b> <i>McQuagge, Imler</i>
August 30	Beef Cattle Industry Structure and Career Opportunities Overview <i>Dr. Todd Thrift</i>
September 1	Designing and Using a Resume' & Cover Letter; Utilizing Linked-In <i>Cathy Carr, Director of Alumni &amp; Career Services, College of Ag and Life Sciences (392-1963)</i> <a href="http://cals.ufl.edu/">http://cals.ufl.edu/</a>
September 6	Meat Production and Utilization, Food Safety, and Quality Assurance Industry Structure and Career Opportunities Overview <i>Dr. Chad Carr</i>
September 8	Structure of the Livestock Industry and an Overview of the Career Opportunities: Horse Industry <i>McQuagge</i>
September 13	Interviewing: Phone, Skype, and In-Person <i>Brad Fletcher, Area Sales Manager, Land O' Lakes Purina Animal Nutrition</i> <a href="https://www.purinamills.com/">https://www.purinamills.com/</a>
September 15	Careers in the Equine Industry: Horse Farm Owner, Professional Trainer <i>Tim Zuidema, Owner/Horse Trainer, Zuidema Pleasure Horses</i> <a href="https://www.facebook.com/timandkatyjozuidema">https://www.facebook.com/timandkatyjozuidema</a>
September 20	Careers in Teaching Agriculture and Biological Sciences <i>Jordan Hernandez, Agriscience Educator, Hillsborough County Public Schools</i>
September 22	Careers in Law <i>Chris McMasters</i>
September 27	Careers in the Meats and Food Industries <i>Holly Pliska, Talent Development Manager, JBS USA</i> <i>Jacob Lehman, Industrial Engineer, JBS USA</i> <a href="https://jbsfoodsgroup.com/">https://jbsfoodsgroup.com/</a>
September 29	Hurricane Day – No Class

DATE	SUBJECT
October 4	Careers in Extension <i>James "JK" Yarborough, Extension Agent I, Livestock &amp; Natural Resources, UF/IFAS Extension Orange County</i> <a href="https://sfyl.ifas.ufl.edu/orange/">https://sfyl.ifas.ufl.edu/orange/</a>
October 6	Careers in Animal Welfare <i>Shelby Wright, Corporate Animal Welfare Manager, Boar's Head</i> <a href="https://boarshead.com/">https://boarshead.com/</a>
October 11	Career Opportunities with Advanced Degrees <i>Graduate School Panel: Dr. Chad Carr, Dr. Antonio Faciola, Dr. Carissa Wickens, Dr. Tracy Scheffler, Dr. Albert De Vries, and Mr. Michael Fioretto</i>
October 13	Careers in Livestock and Animal Nutrition <i>Cody Welchons, Nutritionist, Livestock Nutrition Center</i> <a href="https://www.lnc-online.com/">https://www.lnc-online.com/</a>
October 18	Careers in Event Management <i>Colleen Martin, Owner/Manager, Sumter Equestrian Center</i> <a href="http://sumterequestriancenter.com/">http://sumterequestriancenter.com/</a>
October 20	Careers in Poultry Production <i>Ashley Caudill, Regional Recruiter for South Region Fresh Operations, Wayne Farms</i> <i>Adrian McLain, Head of University Relations, Wayne Farms</i> <a href="https://waynefarms.com/">https://waynefarms.com/</a> <b>MANDATORY ATTENDANCE: INTERNSHIP SEMINAR @ 5:00 PM</b>
October 25	Careers in Real Estate and Entrepreneurship <i>Valerie Dailey, Owner/Broker, Showcase Properties of Central Florida</i> <a href="https://www.showcaseocala.com/">https://www.showcaseocala.com/</a> <i>President, Florida Thoroughbred Breeders Association</i> <a href="https://www.ftboa.com/">https://www.ftboa.com/</a>
October 27	Career Opportunities in Wild Game Management and Communication <i>Bre Lewis, Wild Game Hunting Guide and Outdoor Writer</i> <a href="https://express.adobe.com/page/SDgu570S4fv4E/">https://express.adobe.com/page/SDgu570S4fv4E/</a>
November 1	Careers in Food Service and Sales <i>Shelby Smith, District Manager, ALDI USA</i> <a href="https://www.aldi.us/">https://www.aldi.us/</a>
November 3	Careers in Agricultural Sales and Management <i>Pam Mayo, Proprietary Product Manager, Florida Division, Helena Agri-Enterprises</i> <a href="https://www.helenaagri.com/">https://www.helenaagri.com/</a>
November 8	Careers in Industry Promotion, Government, and Policy <i>Dusty Holley, Director of Field Services (#2), Florida Cattlemen's Association</i> <a href="https://floridacattlemen.org/">https://floridacattlemen.org/</a>
November 10	Careers in Reproduction and Genetics <i>Cash Rice, Alta Genetics, Dairy Business Manager</i> <a href="https://us.altagenetics.com/">https://us.altagenetics.com/</a>

November 15	Careers in Agricultural Communication and Promotion <i>Zoe Bowden, Marketing Manager, Black Prong Equestrian Village and Big Lick LLC</i> <a href="https://blackprong.com/">https://blackprong.com/</a>
November 17	Careers in Zoo Animal Management <i>Kathleen Sullivan &amp; Shannon Livingston, Nutritionists, Disney's Animal Kingdom</i> <a href="https://www.disney.com/">https://www.disney.com/</a>
November 22	Careers in Ranch Management and Livestock Pharmaceutical Sales <i>Justin Feagle and Caroline Handley Feagle</i>
November 25	<b>NO CLASS: THANKSGIVING</b>
November 29	Careers in Food Industry Processing and Packaging <i>Nick Myers, Field Sales Representative, Reiser</i> <a href="https://www.reiser.com/">https://www.reiser.com/</a>
December 1	Careers in Mixed Animal Veterinary Medicine <i>Alec Wynn, Associate Veterinarian, Okeechobee Veterinary Hospital</i> <a href="https://www.okeevet.com/">https://www.okeevet.com/</a>
December 6	<b>***Class Wrap-Up***</b>

# Careers in **Animal Sciences**

## **ANS2XXX**

**Please Note:** This course will be *taught using a face-to-face classroom-based learning environment, many times with invited speakers*, to accomplish student learning objectives. No class sessions will be recorded. As such, attendance and active participation are mandatory and necessary for educational success, especially on days of invited speakers. If you fall ill during the semester, you must notify your instructors in a timely fashion so we can provide you with an alternative instructional option.

### **INSTRUCTORS**

**Mr. Joel McQuagge**

210B Bldg 459

352- 392-6363

[mcquagge@ufl.edu](mailto:mcquagge@ufl.edu)

**Ms. Amie Imler**

231E Bldg 459

352-392-0133

[amie.taylor@ufl.edu](mailto:amie.taylor@ufl.edu)

Zoom ID: 481-418-9771 passcode Amie

**Undergraduate Teaching Assistant**

Taylor Riel

[Taylor.riel@ufl.edu](mailto:Taylor.riel@ufl.edu)

### **OFFICE HOURS**

We are willing to work with you to accommodate your schedule. Our schedules are variable so please follow the directions below to make an office appointment.

- *Amie: Tuesdays 10:00 – 11:30 AM or by appointment using the following link*  
[https://outlook.office365.com/owa/calendar/aimler\\_bookings@uflorida.onmicrosoft.com/bookings/](https://outlook.office365.com/owa/calendar/aimler_bookings@uflorida.onmicrosoft.com/bookings/)
- *Joel: Wednesdays from 9:00 – 10:30 AM or by appointment. Please note: email is preferred to make an appointment*

### **COURSE DESCRIPTION**

ANS **2XXX** offers an introduction to career fields students with an Animal Sciences degree can pursue after graduation. Additionally, the course discusses career exploration, career preparation, and the procedure of job placement. The course is 2 credits.

### **PREREQUISITES**

None

## **TEXTBOOKS**

No textbook is required

## **SCHEDULE**

Tuesday and Thursday

Period 4 (10:40 AM to 11:30 AM)

Location: ANS 156

## **COURSE OBJECTIVES**

1. Evaluate the broad scope of disciplines and opportunities that exist in the beef, equine, dairy and pork industries.
2. Become marketable candidates for positions in the production, marketing and processing of livestock and their related products, and/or positions within STEM and Animal Sciences allied industries (nutrition, genetics, reproduction, health, medicine, behavior, welfare, sales, industry promotion, communication, policy, etc.).
3. Design a plan for career development and evaluate their current readiness for positions in the industry.

## **COURSE FORMAT**

Support materials will be presented by instructors in-class and through [eLearning](#). These materials will be discussed with students during the first few weeks of class. Guest speakers from various Animal Sciences careers will participate in course discussions. Many speakers will be part of the UF Animal Sciences community.

## **CLASS ATTENDANCE, EXPECTATIONS & MAKE-UP WORK**

Attendance and active participation are mandatory and necessary for educational success, especially on days of invited speakers.

Course materials will be provided to you with a university approved absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

### **\*Dress Code\***

- You are expected to arrive to the classroom on time and dressed professionally.
- On days of invited speakers, dress code is business casual. **No sleeveless shirts, t-shirts, caps, or hats.**

### **\*Cell phones & Laptops\***

- Cell phones, laptops and other digital devices should remain *silenced and away as a sign of respect for invited speakers*.

### **\*\*\*MARK YOUR CALENDARS – 2022 IMPORTANT DATES\*\*\***

***Animal Sciences Internship Seminar: Thursday, October 20, 2022 MANDATORY ATTENDANCE***

#### **No Class**

Thursday, November 24, 2022: Thanksgiving

#### **Last Day of Classes**

December 6, 2022

### **GRADING SYSTEM**

Introductory discussion	20	
Participation in Class	520	
<i>*26 Invited Speakers worth 20 points each</i>		
Internship Seminar Attendance	40	
Industry Event/Career Shadowing Summary	100	
Internship Plan/Professional School Experience Plan	100	
Resume Review		60
Final Resume	40	
	880	

#### **Final grade averages will be computed as follows:**

≥ 90.0%	A
≥ 80.0% - < 90.0%	B
≥ 70.0% - < 80.0%	C
≥ 60.0% - < 70.0%	D
< 60.0%	E

***\*Please Note: If you miss 5 or more invited speakers for unexcused reasons, but still attend the Internship Seminar, complete all other assignments, and earn full credit for all other assignments, you will earn a "B" or lower letter grade for the course. Attendance and participation in class is essential to success in this course.***

***Late assignments will be accepted up to one week after the posted due date in Canvas with a 10% per day late penalty.***

### **GRADES AND GRADE POINTS**

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

## **OUT-OF-CLASS ASSIGNMENTS**

*\*Please Note: Complete assignment directions with due dates and resources are in the course Canvas shell. Completed assignments are to be submitted through Canvas for grading by the due dates published in Canvas. You may submit assignments up to one week late with a 10% per day penalty.*

### **1. Industry Event **OR** Career Shadowing/Professional Interview Activity – 100 Points**

You have the option to complete either one industry event activity OR one career shadowing/professional interview activity by the end of the semester. **You must complete at least ONE of these activities this semester.**

#### **a. OPTION 1: Industry Event Activity**

Attend an activity associated with the livestock industry (extension meeting, breed association function, sale, livestock show, cattlemen's meeting, webinar, etc.) where professionals are participating in their career role. Many of these events are being held virtually. **This should be a new experience! Events should be approved by instructors.**

**A one-page reflection** will include a discussion of the event, its purpose, list of professionals involved and their duties connecting the activity to the industry. Use the Industry Event worksheet in Canvas as a guide.

#### **b. OPTION 2: Career Shadowing or Industry Professional Interview Activity**

You will spend an entire 8-hour workday with an animal industry professional **(who is NOT a veterinarian)** that represents a career goal you have interest in. Selection of the person should be done with the course instructors and your academic advisor prior to completing the activity. **Alternatively, if you are not allowed to spend an eight-hour workday face-to-face with the professional, then you should schedule a time to interview them via phone or zoom.**

After completing the shadowing or interview experience, you should have a good understanding of the career area and position. You should also know the responsibilities and requirements for placement, and characteristics of a successful employee in this position.

**A one-page reflection** documenting the experience, your conversations, and what insight you have gained into the profession should be submitted by the due date published in Canvas. Use the Career Shadowing Reflection or Industry Professional Interview and Reflection worksheet in Canvas to complete the assignment.

**\*Please Note:** It is in your best interest to complete either option of this assignment during the first couple of months of the semester. **Do not wait until the last week of class to complete these assignments.**



**2. Internship Plan/Professional Experience Plan – 100 Points**

- a. Food Animal & Equine Specialization students must create an Internship Plan as assigned in Canvas**
  - i. Once you have completed the Internship Plan and submitted the assignment documents as outlined in Canvas, make an appointment with Amie here: <https://amieufansci.youcanbook.me/> to discuss the plan.
  - ii. You are encouraged to turn in your Internship Plan to Amie via Canvas **one week prior** to your scheduled meeting.
- b. Animal Biology Specialization students must create a Professional Experience Plan as assigned in Canvas**
- c. Non-Animal Sciences Majors must consult with Amie to determine the plan most appropriate for them.**

**3. Mandatory Attendance at the Animal Sciences Internship Seminar – 40 Points**

**Thursday, October 20, 2020 @ 5:00 PM**

UF/IFAS Straughn Center

You must be present for the **entire** seminar program.

***A networking hour with industry professionals will begin at 5:00 PM. Internship poster presentations will begin at 6:00 PM and students should plan on the program lasting until at least 7:30 PM that evening. A meal will be served.***

**4. Resume – 100 Points**

- Use materials presented in class on resume development as well as other career resources to create a tailored resume appropriate for an internship, part-time job, or a post-graduate position in the industry you have an interest in.
- Have your resume reviewed by at least one professional who is not an instructor of this course. Recommendations for professional reviewers can be found in Canvas.
- Submit a copy of your original resume with reviewer comments, the position description utilized to tailor the resume, as well as your final resume to Canvas by the published due date.

**Grades and Grade Points**

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/> .

**Attendance and Make-Up Work**

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/> .

**Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/> . Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/> . Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/> .

**Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code> .

**Software Use**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

**Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

**Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu](http://www.counseling.ufl.edu)
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Wellness Coaching
- U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)
- Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>
- Student Success Initiative, <http://studentsuccess.ufl.edu>

**Student Complaints:**

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>
- Online Course: <https://distance.ufl.edu/state-authorization-status/#student-complaint>

**TENTATIVE COURSE SCHEDULE**

DATE	SUBJECT
August 25	Introduction to Course – What is the role of this course in your professional development? Preparation for Guest Speakers - <b>Daily Speaker Notes</b> <i>McQuagge, Imler</i>
August 30	Beef Cattle Industry Structure and Career Opportunities Overview <i>Dr. Todd Thrift</i>
September 1	Designing and Using a Resume' & Cover Letter; Utilizing Linked-In <i>Cathy Carr, Director of Alumni &amp; Career Services, College of Ag and Life Sciences (392-1963)</i> <a href="http://cals.ufl.edu/">http://cals.ufl.edu/</a>
September 6	Meat Production and Utilization, Food Safety, and Quality Assurance Industry Structure and Career Opportunities Overview <i>Dr. Chad Carr</i>
September 8	Structure of the Livestock Industry and an Overview of the Career Opportunities: Horse Industry <i>McQuagge</i>
September 13	Interviewing: Phone, Skype, and In-Person <i>Brad Fletcher, Area Sales Manager, Land O' Lakes Purina Animal Nutrition</i> <a href="https://www.purinamills.com/">https://www.purinamills.com/</a>
September 15	Careers in the Equine Industry: Horse Farm Owner, Professional Trainer <i>Tim Zuidema, Owner/Horse Trainer, Zuidema Pleasure Horses</i> <a href="https://www.facebook.com/timandkatyjozuidema">https://www.facebook.com/timandkatyjozuidema</a>
September 20	Careers in Teaching Agriculture and Biological Sciences <i>Jordan Hernandez, Agriscience Educator, Hillsborough County Public Schools</i>
September 22	Careers in Law <i>Chris McMasters</i>
September 27	Careers in the Meats and Food Industries <i>Holly Pliska, Talent Development Manager, JBS USA</i> <i>Jacob Lehman, Industrial Engineer, JBS USA</i> <a href="https://jbsfoodsgroup.com/">https://jbsfoodsgroup.com/</a>
September 29	Careers in Human Health <i>Danielle Holstein, Pediatric Cardiology Nurse, Shands Hospital</i>
October 4	Careers in Extension <i>James "JK" Yarborough, Extension Agent I, Livestock &amp; Natural Resources, UF/IFAS Extension Orange County</i> <a href="https://sfyl.ifas.ufl.edu/orange/">https://sfyl.ifas.ufl.edu/orange/</a>
October 6	Careers in Animal Welfare <i>Shelby Wright, Corporate Animal Welfare Manager, Boar's Head</i> <a href="https://boarshead.com/">https://boarshead.com/</a>
October 11	Career Opportunities with Advanced Degrees <i>Graduate School Panel: Dr. Chad Carr, Dr. Antonio Faciola, Dr. Carissa Wickens, Dr. Tracy Scheffler, Dr. Albert De Vries, and Mr. Michael Fioretto</i>

DATE	SUBJECT
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DATE	SUBJECT
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December 1	Careers in Mixed Animal Veterinary Medicine <i>Alec Wynn, Associate Veterinarian, Okeechobee Veterinary Hospital</i> <a href="https://www.okeevet.com/">https://www.okeevet.com/</a>
December 6	<b>***Class Wrap-Up***</b>

## Cover Sheet: Request 18056

### Course Modification for 4320C/6312C

#### Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Bradford Daigneault b.daigneault@ufl.edu
Created	12/7/2022 11:32:00 AM
Updated	12/7/2022 12:15:42 PM
Description of request	Course title change and credit hour modifications for an existing course.

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		12/7/2022
ANS 4320 Syllabus BDaigneault.pdf					12/7/2022
ANS6312C Syllabus BDaigneault.pdf					12/7/2022
CALS Checklist BD.pdf					12/7/2022
Documented differences in 4320C 6312C BD.pdf					12/7/2022
Old ANS4320CAppReproSyllabusFall_Undergraduate_Students.docx					12/7/2022
Old ANS6312CAppReproSyllabusFallGraduate_Students.docx					12/7/2022
College	Pending	CALS - College of Agricultural and Life Sciences			12/7/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

# Course|Modify for request 18056

## Info

**Request:** Course Modification for 4320C/6312C

**Description of request:** Course title change and credit hour modifications for an existing course.

**Submitter:** Bradford Daigneault b.daigneault@ufl.edu

**Created:** 12/7/2022 11:22:44 AM

**Form version:** 1

## Responses

**Current Prefix** ANS

**Course Level** 4

**Number** 320

**Lab Code** C

**Course Title** Applied Ruminant Reproductive Management

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option opens additional form fields below)

**Change Course Prefix?** No

**Change Course Level?** No

**Change Course Number?** No

**Change Lab Code?** No

**Change Course Title?** Yes

**Current Course Title** Applied Ruminant Reproductive Management

**Proposed Course Title** Applied Animal Reproduction

**Change Transcript Title?** Yes

**Proposed Transcript Title (30 char. max)** Applied Animal Reproduction

**Change Credit Hours?** Yes

**Current Credit Hours** 4

**Proposed Credit Hours** 3

**Change Variable Credit?** No

**Change S/U Only?** No

**Change Contact Type?** No

**Course Type** Lecture

**Change Rotating Topic Designation?** No

**Change Repeatable Credit?** No

**Multiple Offerings in a Single Semester** No

**Change Course Description?** Yes

**Current Course Description** In-depth assessment and application of bovine reproductive management practices that affect the efficiency of reproduction including managerial, physiological, biological, and economical.



**Proposed Course Description (500 characters max)** Applied Animal Reproduction is an experiential course that provides unique experiences in applied reproductive techniques and management of livestock. Rotation through numerous animal teaching units reinforces classroom curriculum in beef, dairy, equine and porcine reproductive practices. Topics include estrus detection, synchronization, management, artificial insemination, ultrasonography, assisted reproductive technologies, semen collection and evaluation, sperm freezing and embryo handling.

**Change Prerequisites?** No

**Change Co-requisites?** No

**Rationale** This course is designed as a multi-species approach to fill a gap in education of reproductive technologies and management of agricultural livestock practices. The Department of Animal Sciences at the University of Florida remains one of the few Land Grant Institutions with the resources to educate students in areas of assisted reproductive technologies that utilizes multiple animal teaching units and faculty with expertise to provide students with knowledge and practical experiences for competitive post-graduation employment. Building from the original emphasis on "Applied Ruminant Reproduction", the requested changes are also designed to reflect upon knowledge gained in 3319C (Reproductive Physiology and Endocrinology) by implementing applied approaches to assisted reproductive technologies in multiple species. The "applied" aspects of this course are traditional in terms of experiential hands on management and techniques while also striving to expand in the direction of new-age technologies that are inherently "applied", such as embryo technologies and -omics.

Vision for this course includes merging traditional reproductive techniques and technologies with current skills required for successful industry application. Techniques such as palpation, AI and ultrasonography of cattle will remain in place as per the previous course with the addition of current technologies such as sexed semen, embryo vitrification and genomics that will allow students to gain competitive experience for industry positions such as Genus, Select Sires and Sexing Technologies while also providing an introduction to techniques applicable for those considering careers in veterinary medicine.

I am not requesting a new course, but instead a change to the title and credits offered. A graduate course (ANS 6312C) will remain attached to this course as it provides valuable experience for graduate students. This course was successfully offered as a Special Topics course in Spring 2022 and has received very positive feedback.

## ANS4320C – Applied Animal Reproduction

### Course coordinators:

Dr. Brad Daigneault  
Office Hours: T, TR 10:00AM -12:00PM and by Appt.  
Room 204C “Red” Larson Animal Sciences Building  
[b.daigneault@ufl.edu](mailto:b.daigneault@ufl.edu) Ph: 352-273-2021

Mr. Justin Callaham  
Room 210E Animal Sciences  
[callaham@ufl.edu](mailto:callaham@ufl.edu)  
Ph: 352-294-6754

**Prerequisites:** ANSC 3319C

**Course Offered:** Spring

**Total Credits (3)**

**Lectures:** Tuesday 12:50 – 2: 45 PM (Periods 6-7)

**Location:** T-ANS 155, TR-TBD

**Lab:** Thursday 12:50 – 2:45 PM (Periods 6-7)

### Description:

Applied Animal Reproduction at the University of Florida is an experiential course designed to provide industry and professional students with unique experiences in applied reproductive management and practices. Enrolled students rotate through numerous animal teaching units to reinforce classroom curriculum in beef, dairy, equine and porcine reproductive practices. Topics include estrus detection, synchronization, management, artificial insemination, ultrasonography, assisted reproductive technologies, semen collection and evaluation, sperm freezing, embryo manipulation and laboratory techniques. Applied concepts will integrate assisted reproductive technologies with basic and translational emphasis on improving livestock reproductive efficiency.

### Objectives:

1. Relate different components of ruminant reproductive management programs and compare the underlying physiological mechanisms regulating these components with emphasis on species differences.
2. Differentiate emerging reproductive technologies and discuss how these technologies can be incorporated into reproductive management programs in dairy, beef, porcine and equine industries.
3. Perform reproductive management techniques including emphasis on rectal palpation, pregnancy diagnosis, artificial insemination, and semen management.
4. Integrate principles of reproductive management with assisted reproductive technologies and genomics.

Graduate credit for the above course will be expanded to provide additional educational opportunities as an interdisciplinary approach to diversification of course curriculum for non-majors. Graduate students enrolled in this course will develop a single lecture in coordination with the course instructor that complements an existing course topic by the inclusion of fundamental learning material at the cellular or molecular level. Graduate students will be required to present formal teaching as written and electronic material for a 30 min section to the class complete with learning objectives and expected outcomes. In addition, the topic must include 1) relevance to industry application and 2) identification of research areas to improve the focus topic. Graduate students will gain valuable skills germane to industry and academia including organization, lecture preparation and delivery, dissemination of materials, oral speaking, presentation, accuracy, and accountability. Graduate students will receive peer feedback by written evaluation along with course instructor evaluation to further improve in the above skill areas. Lectures provided by graduate students will also be recorded and provided for self-evaluation.

**Textbook:** No textbook required. As a reference source and in supplement to classroom materials, consult "Pathways to Pregnancy and Parturition" (3rd Edition 2012, P. L. Senger). A copy of this textbook will be requested for library reserve. Students are responsible for reading and comprehending materials disseminated.

**Grading & Exams:**

Final grade will consist of two lecture exams, teaching unit participation, and a comprehensive final exam. This course is taught concomitant with ANS 6312C, the graduate version of this course. Graduate students have different grading requirements than the undergraduate version of this course. Graduate students are expected to develop and deliver one additional lecture to include 1) written and 2) oral presentation.

**All exams and quizzes are closed book and do not permit any additional resources unless stated.**

Actual grades on all exercises will be the sum of the points received for correct responses as a percentage of total points possible. Final course grades will be based on the following percentage grade scale:

	<b>B+</b>	86.7-89.9	<b>C+</b>	76.7-79.9	<b>D+</b>	66.7-69.9	<b>F</b>	< 60
<b>A</b>	≥94.0	<b>B</b>	83.3-86.6	<b>C</b>	73.3-76.6	<b>D</b>	63.3-66.6	
<b>A-</b>	≥90.0 to <93.9	<b>B-</b>	80.0-83.2	<b>C-</b>	70.0-73.2	<b>D-</b>	60.0-63.2	

<i>Final Grade Components</i>	<b>Points</b>	<b>% Final Grade</b>
Two lecture exams (105 pts each)	210	47
Lab Participation (14 labs * 10 pts each)	140	31
Final exam (100 pts)	100	22
<i>Total possible</i>	450	100

Information regarding University Policy on grade point equivalencies and calculation of grade points is located at (<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>).

**Lecture exam dates:**

**Exam 1:** Feb 21<sup>st</sup> (in class)      **Exam 2:** April 11<sup>th</sup> (in class). Lecture exam dates are tentative and can change at the discretion of the instructor.

Final Exam: April 27th (Wednesday @ 5:30-7:30 PM).

Exams will be conducted outside of classroom activities and will consist of a series of written questions or scenarios that will require a written response in paragraph form. For short answer and essay questions, a legible, organized, concise, accurate, and grammatically correct answer will be expected to receive full credit. Outlining answers into pertinent points is acceptable and the suggested method of answering questions provided that the interrelationships between points are indicated. Lecture exams/quizzes will cover all material presented during lecture, supplemental material and laboratory activities.

## **Important Dates:**

### No class

Jan 17<sup>th</sup> (Martin Luther King Jr. Day)

Mar 5<sup>th</sup> – 12<sup>th</sup> (Spring Break).

### Other significant dates:

Jan 5<sup>th</sup>: Class begins.

Jan 5-11<sup>th</sup>: Drop/add.

Jan 28<sup>th</sup>: Deadline to withdraw and receive a 25% fee refund (W assigned).

April 8<sup>th</sup>: Deadline to withdraw

April 20<sup>th</sup>: Last day of class

April 21 -22<sup>nd</sup> : Reading days

April 27<sup>th</sup> (Wed) 5:30 -7:30 PM

## **Location for Instruction**

ANS – Animal Sciences Building, Room 155

DTU – Dairy Teaching Unit

<https://animal.ifas.ufl.edu/facilities/dairy-unit/>

BTU – Beef Teaching Unit (north)

<https://animal.ifas.ufl.edu/facilities/beef-teaching-unit/>

HTU – Horse Teaching Unit

<https://animal.ifas.ufl.edu/facilities/horse-teaching-unit/>

VTH – Veterinary Teaching Hospital

- Specific meeting locations for the teaching units and VTH will be announced prior to class.

## Lecture Schedule

The schedule below is tentative regarding the dates and topics to be covered; this schedule can change at the instructor's discretion and upon resources available.

Week	Date	Topic	Location		Instructor
1	01/05 – 1/07	Organization and Introduction	T – N/A	TR - ANS	Daigneault
2	01/10 – 01/14	Estrus synchronization & detection	T - ANS	TR - DTU	Callaham/Bisinotto
3	01/17 – 01/21	Estrus synchronization & detection	T – ANS	TR - ANS	Bisinotto/Callaham
4	01/24 – 01/28	Small ruminant & Palpation	T – ANS	TR - BTU	Cabrera/Daigneault
5	01-31 – 02/04	Palpation & Artificial Insemination	T – ANS	TR - BRU	Daigneault/Callaham
6	02-07 – 02/11	AI Perspectives and AI Practice	T – ANS	TR- BTU	Daigneault/D/C
7	02/14 – 02/18	Equine ART and Equine Demo	T – ANS	TR - DTU	Daigneault/Calla
8	<b>02/21</b> – 02/25	Sperm Sorting - Sexing	T – ANS	TR - BTU	A.Daley/A.Daley
9	02/28 – 03/04	<b>Exam 1</b> – Small Ruminant Lab	T – HTU	TR - PTU	Cabrera
10	03/07 – 03/11	<i>Spring Break</i>			
11	03/14 – 03/18	BSE or Ultrasound	T – ANS	TR - VTH	TBD
12	03/21 – 03/25	Swine lecture Semen Technologies	T – ANS	TR – ANS	Cabrera/TBD
13	03/28 – 04/01	Oocyte Activation and Manipulation	T – ANS	TR – ANS	Daigneault
14	04/04 – 04/08	Cryopreservation & Vitrification	T – ANS	TR – ANS	Hansen/Daigneault
15	<b>04/11</b> – 04/15	Embryo Transfer OPU <b>Exam 2</b>	T – ANS	TR – HTU	Spell/Santos/Hansen
16	04/18 –	<b>Graduate Student Lectures</b>	T – ANS	TR – ANS	Daigneault
17	04/27 (Wed)	<b>Final Exam</b> (5:30-7:30PM)	W– ANS		

## Activities

The primary objectives of teaching activities are to provide hands-on activities with live animals. Throughout the semester, you will work with live cattle, pigs, horses, and other domesticated livestock species. All farm animals can be dangerous and cause injury to either themselves and (or) people if handled incorrectly. Proper clothing including close-toed shoes or boots is required.

## **Lab Policies**

There will be no opportunities to make-up missed teaching activities at the animal units. Any missed activity without prior approval from the instructor or for reasons other than those listed below will not be excused and a grade of "0" will be recorded for that activity. All requests to be excused from a lab must be submitted to Dr. Daigneault or Mr. Callahan in writing by email. This policy will be strictly enforced.

In general, acceptable reasons for absence from or failure to participate in class include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligation, severe weather conditions, religious holidays, and participation in official university activities such as music performances, athletic competition or debate. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused. Other reasons also may be approved.

If a student is absent from classes or examinations because of illness, they should contact their instructors. Students should contact their college by the deadline to drop a course for medical reasons. Students can petition the Dean of Students Office to drop a course for medical reasons. The university's policy regarding medical excuse from classes is maintained by the Student Health Care Center.

## **Biosafety and Biosecurity**

The biosafety and biosecurity of animals and students is a top priority for laboratory activities. Disease transmission can have negative consequences on animal and human health that can also be fiscally taxing. To prevent disease transmission, you may not participate in a lab conducted at one of the UF animal facilities if you have been on a different commercial farm with the previous 48 hrs. Please contact Dr. Daigneault if you have specific concerns. Some laboratory activities may require you to bring clean rubber boots that must be washed and disinfected prior to laboratory activities. You must also complete the biosecurity exercise prior to participation in labs conducted at animal units. The use of cell phones or cameras at animal facilities is not permitted without receiving written permission. Instructors and TA's may dismiss students from a lab for violation of biosecurity procedures.

## **Locations**

Laboratories will be held at several locations including room 155 Animal Sciences, Dairy Unit, Swine Teaching Unit, and Horse Teaching Unit. Please refer to the lab schedule to determine where lab will be each week. A map and directions can be found at the end of this syllabus and the course web page. Transport is NOT provided.

## **ADDITIONAL COURSE INFORMATION**

### **Class Demeanor**

Students and attendees in the classroom are expected to act in a professional, polite, and respectful manner. Any person engaging in disruptive behavior will be asked to leave the room. Cell phones should remain in silent mode throughout the class. The use of cell phones is disruptive to others sitting within viewing vicinity, considered disruptive and therefore is not permitted. Personal devices may be used to engage in lecture, but viewing of any other content is considered disruptive to the learning environment. If content that does not strictly pertain to lecture material is displayed on a device, the person in possession of the device will be asked to remove the content or turn off the device.

## **Academic Honesty**

Academic Honesty As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

## **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu/>

## **Software Use and Privacy Policies**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

## **Campus Helping Resources:**

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students experiencing difficulties or lacking clear career or academic goals, which interfere with their academic performance:

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu](http://www.counseling.ufl.edu)

- Counseling Services
- Groups and Workshops
- Outreach and Consultation
- Self-Help Library
- Wellness Coaching

*U Matter, We Care:* If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

*Career Connections Center*, First Floor JWRU, 392-1601, <https://career.ufl.edu/>. • Student Success Initiative, <http://studentsuccess.ufl.edu>. Student Complaints: • Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>. • Online Course: <http://www.distance.ufl.edu/student-complaint-process>

*Counseling and Wellness Center:* [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

*Student Health Care Center:* Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

*University Police Department:* [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

*UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road,

Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

### Academic Resources

*E-learning technical support:* Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

*Career Connections Center:* Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

*Library Support:* Various ways to receive assistance with respect to using the libraries or finding resources.

*Teaching Center:* Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

*Writing Studio:* 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

*Student Complaints On-Campus:* [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

*On-Line Students Complaints:* [View the Distance Learning Student Complaint Process](#).

### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.



## Attendance

Requirements for class attendance and make-up exams, assignments and other work are consistent with University policies located at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

## Make-up work:

A student missing an exam will be allowed to make up the exam provided that a documented, valid reason for missing it exists (Please see valid excuses in lab section). Whenever possible, these problems should be discussed with the instructor in advance, preferably by email, excuse note, or handwritten note. A missed exam with no valid excuse will be considered as a "0".

## Course Expectations

Lecture and lab attendance are highly correlated with your final grade, so it is expected that you attend both on a regular basis. Class and lab are "No Cell Phone Areas". Class and lab decorum require that you act socially, professional, treat fellow students with respect, and appreciate their viewpoints and beliefs.

## COVID

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.

Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.

Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.

If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.](#)

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

## ANS6312C – Applied Animal Reproduction

### Course coordinators:

Dr. Brad Daigneault  
Office Hours: T, TR 10:00AM -12:00PM and by Appt.  
Room 204C “Red” Larson Animal Sciences Building  
[b.daigneault@ufl.edu](mailto:b.daigneault@ufl.edu) Ph: 352-273-2021

Mr. Justin Callaham  
Room 210E Animal Sciences  
[callaham@ufl.edu](mailto:callaham@ufl.edu)  
Ph: 352-294-6754

**Prerequisites: ANSC 3319C**

**Course Offered: Spring**

**Total Credits (3)**

**Lectures:** Tuesday 12:50 – 2:30 AM (Period 4)  
**Lab:** Thursday 12:50 – 2:45 PM (Periods 6-7)

**Location:** T-ANS 155, TR-TBD

### Description:

Applied Animal Reproduction at the University of Florida is an experiential course designed to provide industry and professional students with unique experiences in applied reproductive management and practices. Enrolled students rotate through numerous animal teaching units to reinforce classroom curriculum in beef, dairy, equine and porcine reproductive practices. Topics include estrus detection, synchronization, management, artificial insemination, ultrasonography, assisted reproductive technologies, semen collection and evaluation, sperm freezing, embryo manipulation and laboratory techniques. Applied concepts will integrate assisted reproductive technologies with basic and translational emphasis on improving livestock reproductive efficiency.

### Objectives:

1. Relate different components of ruminant reproductive management programs and compare the underlying physiological mechanisms regulating these components with emphasis on species differences.
2. Differentiate emerging reproductive technologies and discuss how these technologies can be incorporated into reproductive management programs in dairy, beef, porcine and equine industries.
3. Perform reproductive management techniques including emphasis on rectal palpation, pregnancy diagnosis, artificial insemination, and semen management.
4. Integrate principles of reproductive management with assisted reproductive technologies and genomics.
5. Design and deliver a new class lecture that integrates Objectives 1-4 with a concept that could be applied to this course for future instruction.

Graduate credit for the above course will be expanded to provide additional educational opportunities as an interdisciplinary approach to diversification of course curriculum for non-majors. Graduate students enrolled in this course will develop a single lecture in coordination with the course instructor that complements an existing course topic by the inclusion of fundamental learning material at the cellular or molecular level. Graduate students will be required to present formal teaching as written and electronic material for a 30 min section to the class complete with learning objectives and expected outcomes. In addition, the topic must include 1) relevance to industry application and 2) identification of research areas to improve the focus topic. Graduate students will gain valuable skills germane to industry and academia including organization, lecture preparation and delivery, dissemination of materials, oral speaking, presentation, accuracy, and accountability. Graduate students will

receive peer feedback by written evaluation along with course instructor evaluation to further improve in the above skill areas. Lectures provided by graduate students will also be recorded and provided for self-evaluation.

**Textbook:** No textbook required. As a reference source and in supplement to classroom materials, consult "Pathways to Pregnancy and Parturition" (3rd Edition 2012, P. L. Senger). A copy of this textbook will be requested for library reserve. Students are responsible for reading and comprehending materials disseminated.

**Grading & Exams:**

Final grade will consist of two lecture exams, teaching unit participation, and a comprehensive final exam. This course is taught concomitant with ANS 6312C, the graduate version of this course. Graduate students have different grading requirements than the undergraduate version of this course. Graduate students are expected to develop and deliver one additional lecture to include 1) written and 2) oral presentation.

**All exams and quizzes are closed book and do not permit any additional resources unless stated.**

Actual grades on all exercises will be the sum of the points received for correct responses as a percentage of total points possible. Final course grades will be based on the following percentage grade scale:

	<b>B+</b>	86.7-89.9	<b>C+</b>	76.7-79.9	<b>D+</b>	66.7-69.9	<b>F</b>	< 60
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<b>A-</b>	≥90.0 to <93.9	<b>B-</b>	80.0-83.2	<b>C-</b>	70.0-73.2	<b>D-</b>	60.0-63.2	

<i>Final Grade Components</i>	<b>Points</b>	<b>~ % Final Grade</b>
Two lecture exams (105 pts each)	210	35
Lab Participation (14 labs * 10 pts each)	140	23
Final exam (100 pts)	100	17
Independent Lecture (100 pts)	100	17
Mini review – Future of Reproductive Management	50	8
<i>Total possible</i>	600	100

Information regarding University Policy on grade point equivalencies and calculation of grade points is located at (<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>).

**Lecture exam dates:**

**Exam 1:** Feb 21<sup>st</sup> (in class)      **Exam 2:** April 11<sup>th</sup> (in class). Lecture exam dates are tentative and can change at the discretion of the instructor.

Final Exam: April 27th (Wednesday @ 5:30-7:30 PM).

Exams will be conducted outside of classroom activities and will consist of a series of written questions or scenarios that will require a written response in paragraph form. For short answer and essay questions, a legible, organized, concise, accurate, and grammatically correct answer will be expected to receive full credit. Outlining answers into pertinent points is acceptable and the suggested method of answering questions provided that the interrelationships between points are indicated. Lecture exams/quizzes will cover all material presented during lecture, supplemental material and laboratory activities.

## **Important Dates:**

### No class

Jan 17<sup>th</sup> (Martin Luther King Jr. Day)

Mar 5<sup>th</sup> – 12<sup>th</sup> (Spring Break).

### Other significant dates:

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## **Location for Instruction**

ANS – Animal Sciences Building, Room 155

DTU – Dairy Teaching Unit

<https://animal.ifas.ufl.edu/facilities/dairy-unit/>

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HTU – Horse Teaching Unit

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VTH – Veterinary Teaching Hospital

- Specific meeting locations for the teaching units and VTH will be announced prior to class.

## Lecture Schedule

The schedule below is tentative regarding the dates and topics to be covered; this schedule can change at the instructor's discretion and upon resources available.

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4	01/24 – 01/28	Small ruminant & Palpation	T – ANS	TR - BTU	Cabrera/Daigneault
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10	03/07 – 03/11	<i>Spring Break</i>			
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16	04/18 –	<b>Graduate Student Lectures</b>	T – ANS	TR – ANS	Daigneault
17	04/27 (Wed)	<b>Final Exam</b> (5:30-7:30PM)	W– ANS		

## Activities

The primary objectives of teaching activities are to provide hands-on activities with live animals. Throughout the semester, you will work with live cattle, pigs, horses, and other domesticated livestock species. All farm animals can be dangerous and cause injury to either themselves and (or) people if handled incorrectly. Proper clothing including close-toed shoes or boots is required.

## **Lab Policies**

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## **Biosafety and Biosecurity**

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## **Academic Honesty**

Academic Honesty As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

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## **Software Use and Privacy Policies**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

## **Campus Helping Resources:**

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students experiencing difficulties or lacking clear career or academic goals, which interfere with their academic performance:

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu](http://www.counseling.ufl.edu)

- Counseling Services
- Groups and Workshops
- Outreach and Consultation
- Self-Help Library
- Wellness Coaching

*U Matter, We Care:* If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

*Career Connections Center*, First Floor JWRU, 392-1601, <https://career.ufl.edu/>. • Student Success Initiative, <http://studentsuccess.ufl.edu>. Student Complaints: • Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>. • Online Course: <http://www.distance.ufl.edu/student-complaint-process>

*Counseling and Wellness Center:* [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

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*Student Health Care Center:* Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

*University Police Department:* [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

*UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road,

Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

### Academic Resources

*E-learning technical support:* Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

*Career Connections Center:* Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

*Library Support:* Various ways to receive assistance with respect to using the libraries or finding resources.

*Teaching Center:* Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

*Writing Studio:* 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

*Student Complaints On-Campus:* [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

*On-Line Students Complaints:* [View the Distance Learning Student Complaint Process](#).

### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.ua.ufl.edu/students/>. Students will be notified when the evaluation period opens and can



complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

## **Attendance**

Requirements for class attendance and make-up exams, assignments and other work are consistent with University policies located at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

## **Make-up work:**

A student missing an exam will be allowed to make up the exam provided that a documented, valid reason for missing it exists (Please see valid excuses in lab section). Whenever possible, these problems should be discussed with the instructor in advance, preferably by email, excuse note, or handwritten note. A missed exam with no valid excuse will be considered as a “0”.

## **Course Expectations**

Lecture and lab attendance are highly correlated with your final grade, so it is expected that you attend both on a regular basis. Class and lab are “No Cell Phone Areas”. Class and lab decorum require that you act socially, professional, treat fellow students with respect, and appreciate their viewpoints and beliefs.

## **COVID**

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.

Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.

Follow your instructor’s guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.

If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.](#)

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

## Reading Material

Improvements in Gene Editing Technology Boost Its Applications in Livestock. Iuri Viotti Perisse<sup>1</sup>, Zhiqiang Fan<sup>1</sup>, Galina N. Singina<sup>2</sup>, Kenneth L. White<sup>1</sup> and Irina A. Polejaeva<sup>1</sup>. *Frontiers in Genetics*, 2019.

Review on Sperm Sorting Technologies and Sperm Properties toward New Separation Methods via the Interface of Biochemistry and Material Science. Katigbak, Robert D, Turchini Giovanni M, de Graaf Simon P, Kong L, Dumeé Ludovic. *Advanced Biosystems*. 2019

Reproductive biology in the “omics” era: what can be done? F.L. D’Alexandri, S. Scolari, C.R. Ferreira. *Anim Reprod*, vol.7, n3, p.177-177, 2010

Factors affecting calf Birth weight: A review. M.D. Holland and K.G. Odde. *Theriogenology* 38:769-798,1992

Genetic effects on beef heifer puberty and subsequent reproduction L. C. Martin, J. S. Brinks, R. M. Bourdon and L. V. Cundiff. *J Anim Sci* 1992. 70:4006-4017.

Management considerations in heifer development and puberty. D. J. Patterson, R. C. Perry, G. H. Kiracofe, R. A. Bellows, R. B. Staigmiller and L. R. Corah. *J Anim Sci* 1992. 70:4018-4035.

Effect of Body Condition on Rebreeding. William E. Kunkle and Robert S. Sand. EDIS AS 51. University of Florida IFAS Extension.

Effects of Body Condition on Productivity in Beef Cattle. William E. Kunkle, Robert S. Sand, and D. Owen Rae. EDIS SP-144. University of Florida IFAS Extension.

Sexing mammalian sperm for production of offspring: the state-of-the-art. L.A. Johnson. *Animal Reproduction Science* 60–61 \_2000. 93–107.

Economics of selecting for sex: the most important genetic trait. G. E. Seidel, *Theriogenology* 59 (2003) 585-598.

Estimation of genetic parameters for scrotal circumference, age at puberty in heifers and hip height in Brahman cattle. C. A. Vargas, M. A. Elzo, C. C. Chase, Jr, P. J. Chenoweth and T. A. Olson. *J Anim Sci* 1998. 76:2536-2541.

Genetic relationships between scrotal circumference and female reproductive traits. G. Martínez-Velázquez, K. E. Gregory, G. L. Bennett and L. D. Van Vleck. *J Anim Sci* 2003. 81:395-401.

The value of reproductive tract scoring as a predictor of fertility and production outcomes in beef heifers. D. E. Holm, P. N. Thompson and P. C. Irons. *J ANIM SCI* 2009, 87:1934-1940.

Breeding heifers at one year of age. Biological and economic considerations. Short, R. E., R. B. Staigmiller, R. A. Bellows, and R. C. Greer. 1990.. In:Proc. 39th Annu. Beef Cattle Short Course. pp. 93-106. Univ. of Florida, Gainesville

Carcass composition in mature hereford cows: estimation and effect on daily metabolizable energy requirement during winter . Wagner, J. J., K.S. Lusby, J. W. Oltjen, J. Rakestraw, R. P. Wettemann, and L. E. Walters. 1988.. *J Anim Sci*. 66:603-612.

# CALS Curriculum Committee Submission Checklist

**NOTE: This checklist must be included with all course and certificate submissions.**

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

**CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.**

*BD* It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>. = Jason Scheffler

*BL* You **MUST** comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site (<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

\_\_\_ Submission of a course modification requires both the current version of the course syllabus and the proposed version.

\_\_\_ Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

\_\_\_ The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

*BL* The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. ([https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf)). Do not use the words demonstrate or understand when listing learning objectives.

BU The course schedule should be concise and include the appropriate number of weeks in the semester.

BU All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

BU - N/A - course already exists - requesting title & credit change  
Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

BU Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

BU Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

BU The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

BU The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

### **Certificates**

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl ([brendj@ufl.edu](mailto:brendj@ufl.edu)) for further instruction)

**Course coordinators:**

Dr. Brad Daigneault,  
Office Hours: T, TR 10:00AM -12:00PM and by Appt.  
Room 204C “Red” Larson Animal Sciences Building  
[b.daigneault@ufl.edu](mailto:b.daigneault@ufl.edu) Ph: 352-273-2021

Mr. Justin Callaham  
Room 210E Animal Sciences  
[callaham@ufl.edu](mailto:callaham@ufl.edu)  
Ph: 352-294-6754

**Prerequisites: ANSC 3319C****Course Offered: Spring****Total Credits (3)**

**Lectures:** Tuesday 12:50 – 2:30 AM (Period 4)  
**Lab:** Thursday 12:50 – 2:45 PM (Periods 6-7)

**Location:** T-ANS 155, TR-TBD

**Description:**

Applied Animal Reproduction at the University of Florida is an experiential course designed to provide industry and professional students with unique experiences in applied reproductive management and practices. Enrolled students rotate through numerous animal teaching units to reinforce classroom curriculum in beef, dairy, equine and porcine reproductive practices. Topics include estrus detection, synchronization, management, artificial insemination, ultrasonography, assisted reproductive technologies, semen collection and evaluation, sperm freezing, embryo manipulation and laboratory techniques. Applied concepts will integrate assisted reproductive technologies with basic and translational emphasis on improving livestock reproductive efficiency.

**Objectives:**

1. Relate different components of ruminant reproductive management programs and compare the underlying physiological mechanisms regulating these components with emphasis on species differences.
2. Differentiate emerging reproductive technologies and discuss how these technologies can be incorporated into reproductive management programs in dairy, beef, porcine and equine industries.
3. Perform reproductive management techniques including emphasis on rectal palpation, pregnancy diagnosis, artificial insemination, and semen management.
4. Integrate principles of reproductive management with assisted reproductive technologies and genomics.
5. Design and deliver a new class lecture that integrates Objectives 1-4 with a concept that could be applied to this course for future instruction.

Graduate credit for the above course will be expanded to provide additional educational opportunities as an interdisciplinary approach to diversification of course curriculum for non-majors. Graduate students enrolled in this course will develop a single lecture in coordination with the course instructor that complements an existing course topic by the inclusion of fundamental learning material at the cellular or molecular level. Graduate students will be required to present formal teaching as written and electronic material for a 30 min section to the class complete with learning objectives and expected outcomes. In addition, the topic must include 1) relevance to industry application and 2) identification of research areas to improve the focus topic. Graduate students will gain valuable skills germane to industry and academia including organization, lecture preparation and delivery, dissemination of materials, oral speaking, presentation, accuracy, and accountability. Graduate students will

receive peer feedback by written evaluation along with course instructor evaluation to further improve in the above skill areas. Lectures provided by graduate students will also be recorded and provided for self-evaluation.

**Textbook:** No textbook required. As a reference source and in supplement to classroom materials, consult "Pathways to Pregnancy and Parturition" (3rd Edition 2012, P. L. Senger). A copy of this textbook will be requested for library reserve. Students are responsible for reading and comprehending materials disseminated.

**Grading & Exams:**

Final grade will consist of two lecture exams, teaching unit participation, and a comprehensive final exam. This course is taught concomitant with ANS 6312C, the graduate version of this course. Graduate students have different grading requirements than the undergraduate version of this course. Graduate students are expected to develop and deliver one additional lecture to include 1) written and 2) oral presentation.

**All exams and quizzes are closed book and do not permit any additional resources unless stated.**

Actual grades on all exercises will be the sum of the points received for correct responses as a percentage of total points possible. Final course grades will be based on the following percentage grade scale:

	<b>B+</b>	86.7-89.9	<b>C+</b>	76.7-79.9	<b>D+</b>	66.7-69.9	<b>F</b>	< 60
<b>A</b>	≥94.0	<b>B</b>	83.3-86.6	<b>C</b>	73.3-76.6	<b>D</b>	63.3-66.6	
<b>A-</b>	≥90.0 to <93.9	<b>B-</b>	80.0-83.2	<b>C-</b>	70.0-73.2	<b>D-</b>	60.0-63.2	

<i>Final Grade Components</i>	<b>Points</b>	<b>~ % Final Grade</b>
Two lecture exams (105 pts each)	210	35
Lab Participation (14 labs * 10 pts each)	140	23
Final exam (100 pts)	100	17
Independent Lecture (100 pts)	100	17
Mini review – Future of Reproductive Management	50	8
<b>Total possible</b>	<b>600</b>	<b>100</b>

Information regarding University Policy on grade point equivalencies and calculation of grade points is located at (<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>).

**Lecture exam dates:**

**Exam 1:** Feb 21<sup>st</sup> (in class)      **Exam 2:** April 11<sup>th</sup> (in class). Lecture exam dates are tentative and can change at the discretion of the instructor.

Final Exam: April 27th (Wednesday @ 5:30-7:30 PM).

Exams will be conducted outside of classroom activities and will consist of a series of written questions or scenarios that will require a written response in paragraph form. For short answer and essay questions, a legible, organized, concise, accurate, and grammatically correct answer will be expected to receive full credit. Outlining answers into pertinent points is acceptable and the suggested method of answering questions provided that the interrelationships between points are indicated. Lecture exams/quizzes will cover all material presented during lecture, supplemental material and laboratory activities.

## **Important Dates:**

### No class

Jan 17<sup>th</sup> (Martin Luther King Jr. Day)

Mar 5<sup>th</sup> – 12<sup>th</sup> (Spring Break).

### Other significant dates:

Jan 5<sup>th</sup>: Class begins.

Jan 5-11<sup>th</sup>: Drop/add.

Jan 28<sup>th</sup>: Deadline to withdraw and receive a 25% fee refund (W assigned).

April 8<sup>th</sup>: Deadline to withdraw

April 20<sup>th</sup>: Last day of class

April 21 -22<sup>nd</sup> : Reading days

April 27<sup>th</sup> (Wed) 5:30 -7:30 PM

## **Location for Instruction**

ANS – Animal Sciences Building, Room 155

DTU – Dairy Teaching Unit

<https://animal.ifas.ufl.edu/facilities/dairy-unit/>

BTU – Beef Teaching Unit (north)

<https://animal.ifas.ufl.edu/facilities/beef-teaching-unit/>

HTU – Horse Teaching Unit

<https://animal.ifas.ufl.edu/facilities/horse-teaching-unit/>

VTH – Veterinary Teaching Hospital

- Specific meeting locations for the teaching units and VTH will be announced prior to class.

## Lecture Schedule

The schedule below is tentative regarding the dates and topics to be covered; this schedule can change at the instructor's discretion and upon resources available.

Week	Date	Topic	Location		Instructor
1	01/05 – 1/07	Organization and Introduction	T – N/A	TR - ANS	Daigneault
2	01/10 – 01/14	Estrus synchronization & detection	T - ANS	TR - DTU	Callaham/Bisinotto
3	01/17 – 01/21	Estrus synchronization & detection	T – ANS	TR - ANS	Bisinotto/Callaham
4	01/24 – 01/28	Small ruminant & Palpation	T – ANS	TR - BTU	Cabrera/Daigneault
5	01-31 – 02/04	Palpation & Artificial Insemination	T – ANS	TR - BRU	Daigneault/Callaham
6	02-07 – 02/11	AI Perspectives and AI Practice	T – ANS	TR- BTU	Daigneault/D/C
7	02/14 – 02/18	Equine ART and Equine Demo	T – ANS	TR - DTU	Daigneault/Calla
8	02/21 – 02/25	Sperm Sorting - Sexing	T – ANS	TR - BTU	A.Daley/A.Daley
9	<b>02/28</b> – 03/04	<b>Exam 1</b> – Small Ruminant Lab	T – HTU	TR - PTU	Cabrera
10	03/07 – 03/11	<i>Spring Break</i>			
11	03/14 – 03/18	BSE or Ultrasound	T – ANS	TR - VTH	TBD
12	03/21 – 03/25	Swine lecture Semen Technologies	T – ANS	TR – ANS	Cabrera/TBD
13	03/28 – 04/01	Oocyte Activation and Manipulation	T – ANS	TR – ANS	Daigneault
14	04/04 – 04/08	Cryopreservation & Vitrification	T – ANS	TR – ANS	Hansen/Daigneault
15	<b>04/11</b> – 04/15	Embryo Transfer OPU <b>Exam 2</b>	T – ANS	TR – HTU	Spell/Santos/Hansen
16	04/18 –	<b>Graduate Student Lectures</b>	T – ANS	TR – ANS	Daigneault
17	04/27 (Wed)	<b>Final Exam</b> (5:30-7:30PM)	W– ANS		

## Activities

The primary objectives of teaching activities are to provide hands-on activities with live animals. Throughout the semester, you will work with live cattle, pigs, horses, and other domesticated livestock species. All farm animals can be dangerous and cause injury to either themselves and (or) people if handled incorrectly. Proper clothing including close-toed shoes or boots is required.



## **Lab Policies**

There will be no opportunities to make-up missed teaching activities at the animal units. Any missed activity without prior approval from the instructor or for reasons other than those listed below will not be excused and a grade of "0" will be recorded for that activity. All requests to be excused from a lab must be submitted to Dr. Daigneault or Mr. Callahan in writing by email. This policy will be strictly enforced.

In general, acceptable reasons for absence from or failure to participate in class include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligation, severe weather conditions, religious holidays, and participation in official university activities such as music performances, athletic competition or debate. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused. Other reasons also may be approved.

If a student is absent from classes or examinations because of illness, they should contact their instructors. Students should contact their college by the deadline to drop a course for medical reasons. Students can petition the Dean of Students Office to drop a course for medical reasons. The university's policy regarding medical excuse from classes is maintained by the Student Health Care Center.

## **Biosafety and Biosecurity**

The biosafety and biosecurity of animals and students is a top priority for laboratory activities. Disease transmission can have negative consequences on animal and human health that can also be fiscally taxing. To prevent disease transmission, you may not participate in a lab conducted at one of the UF animal facilities if you have been on a different commercial farm with the previous 48 hrs. Please contact Dr. Daigneault if you have specific concerns. Some laboratory activities may require you to bring clean rubber boots that must be washed and disinfected prior to laboratory activities. You must also complete the biosecurity exercise prior to participation in labs conducted at animal units. The use of cell phones or cameras at animal facilities is not permitted without receiving written permission. Instructors and TA's may dismiss students from a lab for violation of biosecurity procedures.

## **Locations**

Laboratories will be held at several locations including room 155 Animal Sciences, Dairy Unit, Swine Teaching Unit, and Horse Teaching Unit. Please refer to the lab schedule to determine where lab will be each week. A map and directions can be found at the end of this syllabus and the course web page. Transport is NOT provided.

## **ADDITIONAL COURSE INFORMATION**

### **Class Demeanor**

Students and attendees in the classroom are expected to act in a professional, polite, and respectful manner. Any person engaging in disruptive behavior will be asked to leave the room. Cell phones should remain in silent mode throughout the class. The use of cell phones is disruptive to others sitting within viewing vicinity, considered disruptive and therefore is not permitted. Personal devices may be used to engage in lecture, but viewing of any other content is considered disruptive to the learning environment. If content that does not strictly pertain to lecture material is displayed on a device, the person in possession of the device will be asked to remove the content or turn off the device.

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- Wellness Coaching

*U Matter, We Care:* If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

*Career Connections Center*, First Floor JWRU, 392-1601, <https://career.ufl.edu/>. • Student Success Initiative, <http://studentsuccess.ufl.edu>. Student Complaints: • Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>. • Online Course: <http://www.distance.ufl.edu/student-complaint-process>

*Counseling and Wellness Center:* [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

*Counseling and Wellness Center:* [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

*Student Health Care Center:* Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

*University Police Department:* [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

*UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road,

Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

### Academic Resources

*E-learning technical support:* Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

*Career Connections Center:* Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

*Library Support:* Various ways to receive assistance with respect to using the libraries or finding resources.

*Teaching Center:* Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

*Writing Studio:* 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

*Student Complaints On-Campus:* [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

*On-Line Students Complaints:* [View the Distance Learning Student Complaint Process](#).

### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.ua.ufl.edu/students/>. Students will be notified when the evaluation period opens and can

complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results/>.

## **Attendance**

Requirements for class attendance and make-up exams, assignments and other work are consistent with University policies located at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

## **Make-up work:**

A student missing an exam will be allowed to make up the exam provided that a documented, valid reason for missing it exists (Please see valid excuses in lab section). Whenever possible, these problems should be discussed with the instructor in advance, preferably by email, excuse note, or handwritten note. A missed exam with no valid excuse will be considered as a “0”.

## **Course Expectations**

Lecture and lab attendance are highly correlated with your final grade, so it is expected that you attend both on a regular basis. Class and lab are “No Cell Phone Areas”. Class and lab decorum require that you act socially, professional, treat fellow students with respect, and appreciate their viewpoints and beliefs.

## **COVID**

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.

Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.

Follow your instructor’s guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.

If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.](#)

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies.](#)

## Reading Material

Improvements in Gene Editing Technology Boost Its Applications in Livestock. Iuri Viotti Perisse<sup>1</sup>, Zhiqiang Fan<sup>1</sup>, Galina N. Singina<sup>2</sup>, Kenneth L. White<sup>1</sup> and Irina A. Polejaeva<sup>1</sup>. *Frontiers in Genetics*, 2019.

Review on Sperm Sorting Technologies and Sperm Properties toward New Separation Methods via the Interface of Biochemistry and Material Science. Katigbak, Robert D, Turchini Giovanni M, de Graaf Simon P, Kong L, Dumeé Ludovic. *Advanced Biosystems*. 2019

Reproductive biology in the “omics” era: what can be done? F.L. D’Alexandri, S. Scolari, C.R. Ferreira. *Anim Reprod*, vol.7, n3, p.177-177, 2010

Factors affecting calf Birth weight: A review. M.D. Holland and K.G. Odde. *Theriogenology* 38:769-798,1992

Genetic effects on beef heifer puberty and subsequent reproduction L. C. Martin, J. S. Brinks, R. M. Bourdon and L. V. Cundiff. *J Anim Sci* 1992. 70:4006-4017.

Management considerations in heifer development and puberty. D. J. Patterson, R. C. Perry, G. H. Kiracofe, R. A. Bellows, R. B. Staigmiller and L. R. Corah. *J Anim Sci* 1992. 70:4018-4035.

Effect of Body Condition on Rebreeding. William E. Kunkle and Robert S. Sand. EDIS AS 51. University of Florida IFAS Extension.

Effects of Body Condition on Productivity in Beef Cattle. William E. Kunkle, Robert S. Sand, and D. Owen Rae. EDIS SP-144. University of Florida IFAS Extension.

Sexing mammalian sperm for production of offspring: the state-of-the-art. L.A. Johnson. *Animal Reproduction Science* 60–61 \_2000. 93–107.

Economics of selecting for sex: the most important genetic trait. G. E. Seidel, *Theriogenology* 59 (2003) 585-598.

Estimation of genetic parameters for scrotal circumference, age at puberty in heifers and hip height in Brahman cattle. C. A. Vargas, M. A. Elzo, C. C. Chase, Jr, P. J. Chenoweth and T. A. Olson. *J Anim Sci* 1998. 76:2536-2541.

Genetic relationships between scrotal circumference and female reproductive traits. G. Martínez-Velázquez, K. E. Gregory, G. L. Bennett and L. D. Van Vleck. *J Anim Sci* 2003. 81:395-401.

The value of reproductive tract scoring as a predictor of fertility and production outcomes in beef heifers. D. E. Holm, P. N. Thompson and P. C. Irons. *J ANIM SCI* 2009, 87:1934-1940.

Breeding heifers at one year of age. Biological and economic considerations. Short, R. E., R. B. Staigmiller, R. A. Bellows, and R. C. Greer. 1990.. In:Proc. 39th Annu. Beef Cattle Short Course. pp. 93-106. Univ. of Florida, Gainesville

Carcass composition in mature hereford cows: estimation and effect on daily metabolizable energy requirement during winter . Wagner, J. J., K.S. Lusby, J. W. Oltjen, J. Rakestraw, R. P. Wettemann, and L. E. Walters. 1988.. *J Anim Sci*. 66:603-612.

## ANS XXXXC - Fall (4 credits) Undergraduate Students

### Applied Ruminant Reproductive Management

**Instructor:** Dr. Joel V. Yelich  
Animal Sciences Building, Room 125h  
[yelich@ufl.edu](mailto:yelich@ufl.edu)

**Office Hours:** Open or by appointment  
**Voice:** 352-392-7560  
**E-Mail:**

**TA:**

**Lecture:** **Tuesday, Thursday 10:40 - 12:00 PM (Period 4/5):** Room 151 Animal Sciences Building

**Lab:** Tuesday 2:00 - 5:00 PM (Periods 7-9): Room 201, Larsen Dairy Sciences Building. Laboratories will also be held at Animal Science Building, Dairy Unit, and Beef Units. Refer to laboratory schedule for weekly lab locations.

**Course Description:** Provide an in depth overview of applied bovine reproductive management and the factors that affect the efficiency of reproduction including managerial, biological, and economical.

**Objectives:**

- 1) Introduce the different components of ruminant reproductive management programs and discuss the underlying physiological mechanisms regulating these components with emphasis on beef cattle.
- 2) Introduce emerging reproductive technologies and discuss how these technologies can be incorporated into reproductive management programs in dairy and beef cattle.
- 3) Provide hands on experience performing reproductive management techniques with emphasis given to pregnancy diagnosis by rectal palpation and artificial insemination in dairy and beef cattle.
- 4) Integration of all the principles covered in class in solving reproductive management problems with an emphasis placed on economic and production efficiency in a beef operation.

**Textbook:** There is no required textbook for the course. Reading assignments will come from research and popular press articles, extension fact sheets, and book chapters.

<b>Grading &amp; Exams:</b>	Three-hour exams (100 pts each)	300 pts
	Final Written Exam (Cumulative)	200 pts
	Reproduction Plan (Plan 100 pts & Presentation 50 pts)	150 pts
	Lab participation & other assignments	150 pts
	<b>Total</b>	<b>800 pts</b>

Letter grades will be awarded on a percentage scale:

<b>A</b>	<b>≥ 94</b>	<b>B+</b>	<b>≥ 87 to &lt; 90</b>	<b>C+</b>	<b>≥ 77 to &lt; 80</b>	<b>D+</b>	<b>≥ 67 to &lt; 70</b>	<b>E &lt; 60</b>
<b>A-</b>	<b>≥ 90 to &lt; 94</b>	<b>B</b>	<b>≥ 83 to &lt; 87</b>	<b>C</b>	<b>≥ 73 to &lt; 77</b>	<b>D</b>	<b>≥ 63 to &lt; 67</b>	
		<b>B-</b>	<b>≥ 80 to &lt; 83</b>	<b>C-</b>	<b>≥ 70 to &lt; 73</b>	<b>D-</b>	<b>≥ 60 to &lt; 63</b>	

Information regarding University Policy on grade point equivalencies and calculation of grade points is located at the following Web address: (<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>).

**Please note:** This course is taught concomitant with ANS XXXX, the graduate version of the course. The graduate students will have different grading requirements than the undergraduate graduate students. The graduate students will be required to perform all of the graded task as listed above and they will also be required to take a final oral exam and write a research paper.

<b>Exams:</b>	<b>Exam 1</b>	<b>September</b>	<b>9 (Friday)</b>
	<b>Exam 2</b>	<b>October</b>	<b>14 (Friday)</b>
	<b>Exam 3</b>	<b>November</b>	<b>11 (Friday)</b>
	<b>Final Exam:</b>	<b>December</b>	

**All requests to be excused from an exam must be submitted in writing or email by the student regardless of the reason.** Any exam or assignment missed for reasons other than those listed below will not be excused and a grade of zero will be recorded.

- 1) Absence for a university-approved field trip or activity (clear one week in advance).
- 2) Absence for death/serious illness in immediate family (verification by obituary).
- 3) Absence resulting from personal illness (verification consisting of a letter of explanation from hospital or doctor on official letterhead). Please review [excuse note policy of the Student Health Care Center](#).

Request to regrade an exam or worksheet must be made within one week from the date the exam was returned during lecture and (or) lab. Only one final exam will be given on the date listed above. Please do not make travel plans for the holiday's that interfere with your ability to take the final exam.

### **Other Important Items**

<b>Important Dates:</b>	Sept. 1 (Monday)	Labor day (No classes).
	Sept. 19 (Friday)	Deadline to withdraw and receive a 25% fee refund (W assigned).
	Oct. 17 (Friday)	Homecoming (No classes).
	Nov. 11 (Tuesday)	Veterans Day (No classes).
	Nov. 24 (Monday)	Deadline to withdraw without receiving failing grades.
		Deadline to drop a course by petition without receiving a WF grade.
	Nov. 26-28 (Wednesday - Friday)	Thanksgiving (no classes).
	Dec. 10 (Wednesday)	Last Day of Classes.
	Dec. 13, 15-19	Final Exams.

### **Academic Honesty:**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>.

**Disability Issues:** The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. 0001 Reid Hall, 392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

**Software Use:** All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

**Campus Assistance:** Students experiencing crises or personal problems that interfere with their general well being are encouraged

to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling

**Resources:** services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- **University Counseling & Wellness Center**, 3190 Radio Road, 352-392-1575  
[www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)

Counseling Services	Groups and Workshops
Outreach and Consultation	Self-Help Library
Training Programs	Community Provider Database
- **Career Resource Center**, First Floor JWRU, 352-392-1601  
[www.crc.ufl.edu/](http://www.crc.ufl.edu/)

If you are having problems comprehending lecture and (or) lab material or other academic, university, or personal issues that are affecting your academic performance, please feel free to visit with the instructors to address the problem(s). **Please do not wait until the end of the semester to address any difficulties you may be having.**

## Reading List

- Factors affecting calf Birth weight: A review. M.D. Holland and K.G. Odde. *Theriogenology* 38:769-798,1992
- Genetic effects on beef heifer puberty and subsequent reproduction L. C. Martin, J. S. Brinks, R. M. Bourdon and L. V. Cundiff. *J Anim Sci* 1992. 70:4006-4017.
- Management considerations in heifer development and puberty. D. J. Patterson, R. C. Perry, G. H. Kiracofe, R. A. Bellows, R. B. Staigmiller and L. R. Corah. *J Anim Sci* 1992. 70:4018-4035.
- Effect of Body Condition on Rebreeding. William E. Kunkle and Robert S. Sand. *EDIS AS 51*. University of Florida IFAS Extension.
- Effects of Body Condition on Productivity in Beef Cattle. William E. Kunkle, Robert S. Sand, and D. Owen Rae. *EDIS SP-144*. University of Florida IFAS Extension.
- Sexing mammalian sperm for production of offspring: the state-of-the-art. L.A. Johnson. *Animal Reproduction Science* 60-61 \_2000. 93-107.
- Economics of selecting for sex: the most important genetic trait. G. E. Seidel, *Theriogenology* 59 (2003) 585-598.
- Estimation of genetic parameters for scrotal circumference, age at puberty in heifers and hip height in Brahman cattle. C. A. Vargas, M. A. Elzo, C. C. Chase, Jr, P. J. Chenoweth and T. A. Olson. *J Anim Sci* 1998. 76:2536-2541.
- Genetic relationships between scrotal circumference and female reproductive traits. G. Martínez-Velázquez, K. E. Gregory, G. L. Bennett and L. D. Van Vleck. *J Anim Sci* 2003. 81:395-401.
- The value of reproductive tract scoring as a predictor of fertility and production outcomes in beef heifers. D. E. Holm, P. N. Thompson and P. C. Irons. *J ANIM SCI* 2009, 87:1934-1940.
- Breeding heifers at one year of age. Biological and economic considerations. Short, R. E., R. B. Staigmiller, R. A. Bellows, and R. C. Greer. 1990.. In:Proc. 39<sup>th</sup> Annu. Beef Cattle Short Course. pp. 93-106. Univ. of Florida, Gainesville
- Carcass composition in mature hereford cows: estimation and effect on daily metabolizable energy requirement during winter . Wagner, J. J., K.S. Lusby, J. W. Oltjen, J. Rakestraw, R. P. Wettemann, and L. E. Walters. 1988.. *J Anim Sci*. 66:603-612.



## Lecture and Lab Schedule

<b>Week #</b>	<b>Lecture Topic</b>	<b>Lab Location and Topic</b>
1	Introduction	<i>ANS Bldg: Female Anatomy Review &amp; Pregnancy Determination</i>
1	Reproductive Losses	
1	Review of the Estrous Cycle	<i>Beef Teaching Unit - Palpation</i>
2	Puberty	
2	Puberty	<i>Beef Teaching Unit - Palpation</i>
3	Heifer Development	
3	Heifer Development	<i>Beef Teaching Unit - Palpation</i>
4	Estrous Synchronization	
4	Estrous Synchronization	<i>Beef Teaching Unit - Palpation</i>
5	Estrous Synchronization	
5	Estrous Detection	<i>Beef Teaching Unit - Palpation</i>
5	Artificial Insemination/Sexed Semen	
6	Embryonic Development	<i>Beef Teaching Unit - Palpation</i>
7	Pregnancy and Parturition	
7	Pregnancy and Parturition	<i>Beef Teaching Unit - Palpation</i>
8	Peripartum Management	
8	Peripartum Management	<i>Beef Teaching Unit - Palpation</i>
9	Postpartum Reproduction	
9	Postpartum Reproduction	<i>Beef Teaching Unit – AI</i>
10	Male Reproduction	
10	Male Reproduction	<i>Beef Teaching Unit – AI</i>
11	Cryopreservation of Semen	
11	Breeding Soundness Exam	<i>Beef Teaching Unit – AI</i>
12	Breeding Soundness Exam	
13	Breeding Season Management	<i>Beef Teaching Unit – AI</i>
13	Breeding Season Management	
14	Embryo Transfer	<i>Southeastern Semen Services Field Trip</i>
14	Reproductive Management/Economics	
15	Reproductive Management/Economics	<i>BRU - Breeding Soundness Exams</i>
16	Repro Plan Presentations	
16	Repro Plan Presentations	<i>BTU and ANS Bldg – Embryo Transfer</i>
<b>Dec</b>	<b>Final Exam</b>	

The instructor reserves the right to modify any part of the lecture and (or) lab syllabus at his discretion. There may also be times during the semester when it is necessary to modify the lecture/lab schedule and (or) material being presented. At such time, the instructor will make the necessary announcements in lecture/lab and (or) by email.

## ANS XXXXC - Fall (4 credits) Graduate Students

### Applied Ruminant Reproductive Management

**Instructor:** Dr. Joel V. Yelich  
Animal Sciences Building, Room 125h  
[yelich@ufl.edu](mailto:yelich@ufl.edu)

**Office Hours:** Open or by appointment  
**Voice:** 352-392-7560  
**E-Mail:**

**TA:**

**Lecture:** **Tuesday, Thursday 10:40 - 12:00 PM (Period 4/5):** Room 151 Animal Sciences Building

**Lab:** Tuesday 2:00 - 5:00 PM (Periods 7-9): Room 201, Larsen Dairy Sciences Building. Laboratories will also be held at Animal Science Building, Dairy Unit, and Beef Units. Refer to laboratory schedule for weekly lab locations.

**Course Description:** Provide an in depth overview of applied bovine reproductive management and the factors that affect the efficiency of reproduction including managerial, biological, and economical.

**Objectives:**

- 1) Introduce the different components of ruminant reproductive management programs and discuss the underlying physiological mechanisms regulating these components with emphasis on beef cattle.
- 2) Introduce emerging reproductive technologies and discuss how these technologies can be incorporated into reproductive management programs in dairy and beef cattle.
- 3) Provide hands on experience performing reproductive management techniques with emphasis given to pregnancy diagnosis by rectal palpation and artificial insemination in dairy and beef cattle.
- 4) Integration of all the principles covered in class in solving reproductive management problems with an emphasis placed on economic and production efficiency in a beef operation.

**Textbook:** There is no required textbook for the course. Reading assignments will come from research and popular press articles, extension fact sheets, and book chapters.

<b>Grading &amp; Exams:</b>	Three-hour exams (100 pts each)	300 pts
	Final Written Exam (Cumulative)	200 pts
	<b>Final Oral exam (Cumulative)</b>	<b>100 pts</b>
	Reproduction Plan (Plan 100 pts & Presentation 50 pts)	150 pts
	Lab participation & other assignments	100 pts
	Research paper (10 page maximum or EDIS publication)	150 pts
	(Paper will be a review of the literature relative to Dairy or Beef Reproductive management. Whereas, publication will be a bovine reproductive management topic with producer as the target audience)	<b>Total 1000 pts</b>

Letter grades will be awarded on a percentage scale:

<b>A</b>	<b>≥ 94</b>	<b>B+</b>	<b>≥ 87 to &lt; 90</b>	<b>C+</b>	<b>≥ 77 to &lt; 80</b>	<b>D+</b>	<b>≥ 67 to &lt; 70</b>	<b>E &lt; 60</b>
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**Please note:** This course is taught concomitant with ANS XXXX, the undergraduate version of the course. The undergraduates will have different grading requirements than the graduate students. The undergraduates will not be required to take the final oral exam or write a research paper but they will be required to perform the remainder of the graded tasks as listed above.

<b>Exams:</b>	<b>Exam 1</b>	<b>September</b>	<b>9 (Friday)</b>
	<b>Exam 2</b>	<b>October</b>	<b>14 (Friday)</b>
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**Software Use:** All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

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[www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)

Counseling Services	Groups and Workshops
Outreach and Consultation	Self-Help Library
Training Programs	Community Provider Database
- **Career Resource Center**, First Floor JWRU, 352-392-1601  
[www.crc.ufl.edu/](http://www.crc.ufl.edu/)

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- Factors affecting calf Birth weight: A review. M.D. Holland and K.G. Odde. *Theriogenology* 38:769-798,1992
- Genetic effects on beef heifer puberty and subsequent reproduction L. C. Martin, J. S. Brinks, R. M. Bourdon and L. V. Cundiff. *J Anim Sci* 1992. 70:4006-4017.
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## Lecture and Lab Schedule

<b>Week #</b>	<b>Lecture Topic</b>	<b>Lab Location and Topic</b>
1	Introduction	<i>ANS Bldg: Female Anatomy Review &amp; Pregnancy Determination</i>
1	Reproductive Losses	
1	Review of the Estrous Cycle	<i>Beef Teaching Unit - Palpation</i>
2	Puberty	
2	Puberty	<i>Beef Teaching Unit - Palpation</i>
3	Heifer Development	
3	Heifer Development	<i>Beef Teaching Unit - Palpation</i>
4	Estrous Synchronization	
4	Estrous Synchronization	<i>Beef Teaching Unit - Palpation</i>
5	Estrous Synchronization	
5	Estrous Detection	<i>Beef Teaching Unit - Palpation</i>
5	Artificial Insemination/Sexed Semen	
6	Embryonic Development	<i>Beef Teaching Unit - Palpation</i>
7	Pregnancy and Parturition	
7	Pregnancy and Parturition	<i>Beef Teaching Unit - Palpation</i>
8	Peripartum Management	
8	Peripartum Management	<i>Beef Teaching Unit - Palpation</i>
9	Postpartum Reproduction	
9	Postpartum Reproduction	<i>Beef Teaching Unit – AI</i>
10	Male Reproduction	
10	Male Reproduction	<i>Beef Teaching Unit – AI</i>
11	Cryopreservation of Semen	
11	Breeding Soundness Exam	<i>Beef Teaching Unit – AI</i>
12	Breeding Soundness Exam	
13	Breeding Season Management	<i>Beef Teaching Unit – AI</i>
13	Breeding Season Management	
14	Embryo Transfer	<i>Southeastern Semen Services Field Trip</i>
14	Reproductive Management/Economics	
15	Reproductive Management/Economics	<i>BRU - Breeding Soundness Exams</i>
16	Repro Plan Presentations	
16	Repro Plan Presentations	<i>BTU and ANS Bldg – Embryo Transfer</i>
<b>Dec</b>	<b>Final Exam</b>	

The instructor reserves the right to modify any part of the lecture and (or) lab syllabus at his discretion. There may also be times during the semester when it is necessary to modify the lecture/lab schedule and (or) material being presented. At such time, the instructor will make the necessary announcements in lecture/lab and (or) by email.

## Cover Sheet: Request 18053

### Add elective FAS 6705 Fisheries Economics to the Natural Resource Policy and Administration Graduate Certificate

#### Info

Process	Certificate Close/Modify Grad Revised
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Sandra Houder shouder@ufl.edu
Created	12/7/2022 10:36:02 AM
Updated	12/8/2022 9:41:43 AM
Description of request	We would like to add elective FAS 6705 Fisheries Economics to the Natural Resource Policy and Administration Graduate Certificate.

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Forest Resources and Conservation 60460000	Terrell Baker III		12/8/2022
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			12/8/2022
No document changes					
Graduate Council					
No document changes					
Graduate School Notified					
No document changes					
University Curriculum Committee Notified					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Academic Assessment Committee Notified					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

## Certificate|Close-Modify for request 18053

### Info

**Request:** Add elective FAS 6705 Fisheries Economics to the Natural Resource Policy and Administration Graduate Certificate

**Description of request:** We would like to add elective FAS 6705 Fisheries Economics to the Natural Resource Policy and Administration Graduate Certificate.

**Submitter:** Sandra Houder shouder@ufl.edu

**Created:** 12/7/2022 10:49:38 AM

**Form version:** 2

### Responses

**Current Certificate Name** Natural Resource Policy and Administration Graduate Certificate

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option will open additional form fields below)

**Change Certificate Name?** No

**Change Certificate Name on Transcript?** No

**Current Transcript Name** Natural Resource Policy and Administration Graduate Certificate

**Change Credit Hours?** No

**Change Certificate Description?** No

**Change Certificate Prerequisites?** No

**Change Certificate Requirements?** Yes

**Current Requirements** Requirements

Natural Resource Policy and Administration Graduate Certificate (NRP)

- All students must earn a grade of B or better in each course to use it towards the NRP certificate.

- UF graduate degree-seeking students who would like to add this certificate must apply for admission before 50% of the credits are complete.

Choose 4 Electives (12 credits) from the following options:

- FNR 5625 Managing Public Lands and Waters (3 credits; Fall)

- FOR 6005 Conservation Behavior (3 credits; Fall, even years only), OR FOR 6934

Conservation Behavior for Practitioners (3 credits; Fall, odd years only)

- FNR 6669 Natural Resource Policy and Economics (3 credits; Spring)

- FOR 6934 Human and Organizational Management in Natural Resources (3 credits; Spring)

- FNR 6061 Conflict, Collaboration, and Community Engagement in Natural Resources (3 credits; Summer C)

- FOR 6543 Natural Resource Economics and Valuation (3 credits; Summer C)

**Proposed Requirements** We seek to add one course as an option, FAS 6705 Fisheries Economics.

Requirements

Natural Resource Policy and Administration Graduate Certificate (NRP)

- All students must earn a grade of B or better in each course to use it towards the NRP certificate.

- UF graduate degree-seeking students who would like to add this certificate must apply for admission before 50% of the credits are complete.

Choose 4 Electives (12 credits) from the following options:

- FNR 5625 Managing Public Lands and Waters (3 credits; Fall)

- FAS 6705 Fisheries Economics (3 credits; Fall)
- FOR 6005 Conservation Behavior (3 credits; Fall, even years only), OR FOR 6934 Conservation Behavior for Practitioners (3 credits; Fall, odd years only)
- FNR 6669 Natural Resource Policy and Economics (3 credits; Spring)
- FOR 6934 Human and Organizational Management in Natural Resources (3 credits; Spring)
- FNR 6061 Conflict, Collaboration, and Community Engagement in Natural Resources (3 credits; Summer C)
- FOR 6543 Natural Resource Economics and Valuation (3 credits; Summer C)

**Impact on Program** Students will have one more elective to choose from to complete their 12 needed credits.

**Rationale for Proposed Change(s)** All other certificate courses are FOR/FNR. Adding an FAS elective gives students the option to further refine their study to their area of interest. The course material/SLOs for FAS 6705 support the certificate SLOs.

**Assessment Data Review** Anecdotally, students have expressed interest throughout the years in adding an FAS option/component to the NRP certificate. FAS 6705 aligns well with the SLOs for the NRP certificate program.

FAS 6705 Learning Outcomes:

- Describe economic opportunities in in the production, use and conservation of seafood resources.
- Describe ways fishers and aquaculturists may create environmental externalities that lead to exploitation of the ecosystem.
- Describe methods by which management systems can protect natural resources.
- Analyze the impacts of management systems design relative to various stakeholder interests.
- Analyze the economic and market effects of various management systems.
- Evaluate costs and benefits associated with various uses of fisheries and coastal resources.
- Evaluate the impact of international trade on fisheries and coastal resources.

NRP Certificate SLOs:

- 1) Apply knowledge of major natural resource policies and institutions, public policy processes, policy evaluation/recommendation, stakeholder communication, and/or organizational management to public policy issues.
- 2) Analyze and synthesize relevant primary information sources, such as technical reports and scientific publications.
- 3) Apply analytic and managerial tools and techniques to identify and address natural resource conflicts, human dimensions of natural resource management, and natural resources public policy issues.
- 4) Assess environmental, social, economic, and institutional implications of natural resource policies on natural resource management.

**Academic Assessment Plan Changes** None. The NRP certificate does not have any required courses, but a set of electives from which to choose 12 credits. SLO data is pulled from SLO-aligned assignments in some, but not all, electives.



## Cover Sheet: Request 18055

Add elective FOR 6340 Physiology of Forest Trees to the Ecological Restoration Graduate Certificate

### Info

Process	Certificate Close/Modify Grad Revised
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Sandra Houder shouder@ufl.edu
Created	12/7/2022 10:49:17 AM
Updated	12/8/2022 9:42:35 AM
Description of request	We would like to add elective FOR 6340 Physiology of Forest Trees to the Ecological Restoration Graduate Certificate.

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Forest Resources and Conservation 60460000	Terrell Baker III		12/8/2022
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			12/8/2022
No document changes					
Graduate Council					
No document changes					
Graduate School Notified					
No document changes					
University Curriculum Committee Notified					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Academic Assessment Committee Notified					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

## Certificate|Close-Modify for request 18055

### Info

**Request:** Add elective FOR 6340 Physiology of Forest Trees to the Ecological Restoration Graduate Certificate

**Description of request:** We would like to add elective FOR 6340 Physiology of Forest Trees to the Ecological Restoration Graduate Certificate.

**Submitter:** Sandra Houder shouder@ufl.edu

**Created:** 4/6/2021 8:11:22 AM

**Form version:** 1

### Responses

**Current Certificate Name** Ecological Restoration Graduate Certificate

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option will open additional form fields below)

**Change Certificate Name?** No

**Change Certificate Name on Transcript?** No

**Current Transcript Name** Ecological Restoration Graduate Certificate

**Change Credit Hours?** No

**Change Certificate Description?** No

**Change Certificate Prerequisites?** No

**Change Certificate Requirements?** Yes

**Current Requirements** Requirements

Ecological Restoration Graduate Certificate Program (ECR)

- All students must earn a grade of B or better in each course to use it towards the ECR certificate.

- UF graduate degree-seeking students who would like to add this certificate must apply for admission before 50% of the credits are complete.

Required Course (3 credits):

- FOR 5157 Ecosystem Restoration Principles and Practice (Fall, 3 credits)

Choose 4 Electives (12 credits) from the following options:

- FAS 6360 Invasion Ecology of Aquatic Animals (Spring, even years only, 3 credits)
- FOR 5159 Ecology & Restoration of Longleaf Pine Ecosystem (Spring, 3 credits)
- FOR 6934 Ecology & Restoration of Invaded Ecosystems (Spring, 3 credits)
- FNR 6669 Natural Resource Conservation Policy & Economics (Spring, 3 credits)
- FOR 6934 Agroforestry of the Southeastern US (TBA, 3 credits)
- HOS 6070 Plant Materials for Conservation & Restoration (Summer, odd years only, 3 credits)
- FOR 6151 Forest Ecosystem Health (Fall, 3 credits)
- FOR 6154 Analysis of Forest Ecosystems (Fall, 3 credits)
- FNR 6628 Watershed Restoration & Management (Fall, even years only, 3 credits)

**Proposed Requirements** We seek to add one course as an elective, FOR 6340 Physiology of Forest Trees.

Requirements

Ecological Restoration Graduate Certificate Program (ECR)

- All students must earn a grade of B or better in each course to use it towards the ECR certificate.

- UF graduate degree-seeking students who would like to add this certificate must apply for admission before 50% of the credits are complete.

Required Course (3 credits):

- FOR 5157 Ecosystem Restoration Principles and Practice (Fall, 3 credits)

Choose 4 Electives (12 credits) from the following options:

- FAS 6360 Invasion Ecology of Aquatic Animals (Spring, even years only, 3 credits)
- FOR 5159 Ecology & Restoration of Longleaf Pine Ecosystem (Spring, 3 credits)
- FOR 6340 Physiology of Forest Trees (Spring, 3 credits)
- FOR 6934 Ecology & Restoration of Invaded Ecosystems (Spring, 3 credits)
- FNR 6669 Natural Resource Conservation Policy & Economics (Spring, 3 credits)
- FOR 6934 Agroforestry of the Southeastern US (TBA, 3 credits)
- HOS 6070 Plant Materials for Conservation & Restoration (Summer, odd years only, 3 credits)
- FOR 6151 Forest Ecosystem Health (Fall, 3 credits)
- FOR 6154 Analysis of Forest Ecosystems (Fall, 3 credits)
- FNR 6628 Watershed Restoration & Management (Fall, even years only, 3 credits)

**Impact on Program** Students will have one more elective to choose from to complete their 12 needed elective credits.

**Rationale for Proposed Change(s)** The course material/SLOs for FOR 6340 Physiology of Forest Trees are topically appropriate for the ECR certificate and support the ECR certificate SLOs.

**Assessment Data Review** The course material/SLOs for FOR 6340 Physiology of Forest Trees are topically appropriate for the ECR certificate and support the ECR certificate SLOs.

FOR 6340 Learning Outcomes:

- I. Apply concepts of the physiological ecology of forest trees to their work or research in forests and natural resources, with special emphasis on
  - (a) the unique morphological and physiological adaptations that set trees apart from other plants;
  - (b) the integration of physiological function across levels of biological organization from the cell to the landscape; and
  - (c) interactions among the environment (including forest management), physiology, and tree and forest productivity.
- II. Critically analyze ecophysiological research literature and integrate physiological concepts into their research.
- III. Formulate research methodology implementing ecophysiological experimental and measurement approaches.

Ecological Restoration Graduate Certificate SLOs:

- 1) Apply theoretical and technical knowledge of ecology, soils, and related biophysical sciences in order to plan real-world restoration projects.
- 2) Analyze and synthesize relevant primary information sources, such as technical reports and scientific publications.
- 3) Describe various techniques used in ecological restoration, monitoring, and evaluation.
- 4) Assess implications of socio-economic, ethical, legal, and political dimensions of ecological restoration.

**Academic Assessment Plan Changes** None. The certificate SLOs are assessed through the required course. This request impacts electives only and not the required course.

## Cover Sheet: Request 18039

### BS in Forest Resources and Conservation - Update 8 semester plan

#### Info

Process	Major Curriculum Modify Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Timothy Martin tamartin@ufl.edu
Created	12/5/2022 2:43:48 PM
Updated	1/14/2023 12:05:55 PM
Description of request	Update 8 semester plan for BS in Forest Resources and Conservation major to reflect reduction in credits for FOR3200C (3 credits to 1 credit, request #17659) and FOR4621 (4 credits to 3 credits, request #17772), both of which are pending in approval system

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Forest Resources and Conservation 60460000	Terrell Baker III		12/6/2022
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			12/6/2022
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
Academic Assessment Committee Notified					
No document changes					
College Notified					
No document changes					

# Major|Modify\_Curriculum for request 18039

## Info

**Request:** BS in Forest Resources and Conservation - Update 8 semester plan

**Description of request:** Update 8 semester plan for BS in Forest Resources and Conservation major to reflect reduction in credits for FOR3200C (3 credits to 1 credit, request #17659) and FOR4621 (4 credits to 3 credits, request #17772), both of which are pending in approval system

**Submitter:** Timothy Martin tamartin@ufl.edu

**Created:** 1/14/2023 12:00:09 PM

**Form version:** 3

## Responses

**Major Name** Forest Resources and Conservation

**Major Code** FRC

**Degree Program Name** Bachelor of Science in Forest Resources and Conservation

**Undergraduate Innovation Academy Program No**

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Current Curriculum for Major** Semester One

Quest 1 (Gen Ed Humanities) (3 credits)

Select one: (3 credits)

CHM 1030, Basic Chemistry Concepts and Applications 1 (Critical Tracking; Gen Ed Biological and Physical Sciences)

CHM 2045, General Chemistry 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences)

FOR 2662 Forests for the Future (Gen Ed Social and Behavioral Sciences; recommended course) (3 credits)

State Core Gen Ed Composition; Writing Requirement (3 credits)

Elective (3 credits)

Semester One Credits: 15

Semester Two

BSC 2010 & 2010L, Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences) (4 credits)

MAC 1105 Basic College Algebra (Critical Tracking; or higher; State Core Gen Ed Mathematics) (3 credits)

FAS 2024, Sustainable Fisheries (recommended elective), (3 credits)

State Core Gen Ed Social and Behavioral Sciences (3 credits)

Elective (3 credits)

Semester Two Credits: 16

Semester Three

AEC 3033C, Research and Business Writing in Agricultural and Life Sciences (Critical Tracking; Writing Requirement; Can substitute ENC 2210 or ENC 3254) (3 credits)

STA 2023, Introduction to Statistics 1 (Critical Tracking; Gen Ed Mathematics) (3 credits)

Elective: FOR 2662, Forests for the Future (recommended, if not already taken, or FOR 3004, recommended) (3credits)

Gen Ed Composition (3 credits)

Elective (2 credits)

Semester Three Credits: 14

Semester Four

Quest 2 (Gen Ed Physical Sciences) (3 credits)

Select one: (3-4 credits)

AEB 2014, Economic Issues, Food and You (Critical Tracking)

ECO 2013, Principles of Macroeconomics (Critical Tracking)

ECO 2023, Principles of Microeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences)

Select one: (3 credits)

AEC 3030C, Effective Oral Communication (Critical Tracking)

SPC 2608, Introduction to Public Speaking (Critical Tracking)

FAS 2024, Sustainable Fisheries (recommended elective, if not already taken) (3 credits)

State Core Gen Ed Humanities (3 credits)

Semester Four Credits: 15-16

Summer After Semester Four

FOR 3200C, Foundations of Natural Resources and Conservation (Summer B only) (3 credits)

FOR 3434C, Forest Resources Information Systems (Summer B only) (3 credits)

Summer After Semester Four Credits: 6

Semester Five

FNR 3410C, Natural Resource Sampling (3 credits)

FNR 3131C, Dendrology/Forest Plants (3 credits)

FOR 3153C, Forest Ecology (Critical Tracking) (3 credits)

FOR 3342C, Tree Biology (3 credits)

FNR 3020, Professional Practice in Natural Resources (1 credit)

Semester Five Credits: 13

Semester Six

FOR 3162C, Silviculture (Critical Tracking) (4 credits)

SWS 3022, Introduction to Soils in the Environment (3 credits)

FOR 3430C, Forest Mensuration (3 credits)

Select one:

FOR 3202, Society and Natural Resources (3 credits) OR

FOR 4060, Global Forests (3 credits)

FNR 4660, Natural Resource Policy and Economics (3 credits)

Semester Six Credits: 16

Semester Seven

FOR 4664, Sustainable Ecotourism Development (3 credits)

FOR 4621, Forest Economics and Management (4 credits)

FNR 4624C, Field Operations for Management of Ecosystems (Critical Tracking) (3 credits)

Certificate coursework or advisor-approved electives (3 credits)

Semester Seven Credits: 13

Semester Eight

FNR 4343C, Forest Water Resources (3 credits)

FOR 3214, Fire Ecology and Management (2 credits)

FNR 4623C, Integrated Natural Resource Management (Critical Tracking) (3 credits)

FOR 4624C, Forest Health Management (3 credits)

Certificate coursework or advisor-approved electives (1 credits)

Semester Eight Credits: 12

Total Credits: 120

**Proposed Curriculum Changes** Update to 8 semester plan to reflect reduction in credits for FOR3200C (3 credits to 1 credit) and FOR4621 (4 credits to 3 credits), both of which are pending in approval system

SUMMARY OF PROPOSED CHANGES:

SUMMER AFTER SEMESTER FOUR:

Reduce FOR3200C from 3 credits to 1 credit to reflect pending change in that course

Reduce total credits for that semester from 6 to 4

SEMESTER SEVEN:

Reduce FOR4621 from 4 credits to 3 credits to reflect pending change in that course

Increase "Certificate coursework or advisor approved electives" from 3 credits to 4 credits

SEMESTER EIGHT:

Increase "Certificate coursework or advisor approved electives" from 1 credit to 3 credits

Increase total credits for that semester to 14

Changes result in the same total credits for the degree: 120

HERE IS THE FULL PROPOSED CURRICULUM (see also catalog edits):

Semester One

Quest 1 (Gen Ed Humanities) (3 credits)

Select one: (3 credits)

CHM 1030, Basic Chemistry Concepts and Applications 1 (Critical Tracking; Gen Ed Biological and Physical Sciences)

CHM 2045, General Chemistry 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences)

FOR 2662 Forests for the Future (Gen Ed Social and Behavioral Sciences; recommended course) (3 credits)

State Core Gen Ed Composition; Writing Requirement (3 credits)

Elective (3 credits)

Semester One Credits: 15

Semester Two

BSC 2010 & 2010L, Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences) (4 credits)

MAC 1105 Basic College Algebra (Critical Tracking; or higher; State Core Gen Ed Mathematics) (3 credits)

FAS 2024, Sustainable Fisheries (recommended elective), (3 credits)

State Core Gen Ed Social and Behavioral Sciences (3 credits)

Elective (3 credits)

Semester Two Credits: 16

Semester Three

AEC 3033C, Research and Business Writing in Agricultural and Life Sciences (Critical Tracking; Writing Requirement; Can substitute ENC 2210 or ENC 3254) (3 credits)

STA 2023, Introduction to Statistics 1 (Critical Tracking; Gen Ed Mathematics) (3 credits)

Elective: FOR 2662, Forests for the Future (recommended, if not already taken, or FOR 3004, recommended) (3credits)

Gen Ed Composition (3 credits)

Elective (2 credits)

Semester Three Credits: 14

Semester Four

Quest 2 (Gen Ed Physical Sciences) (3 credits)

Select one: (3-4 credits)

AEB 2014, Economic Issues, Food and You (Critical Tracking)

ECO 2013, Principles of Macroeconomics (Critical Tracking)

ECO 2023, Principles of Microeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences)

Select one: (3 credits)

AEC 3030C, Effective Oral Communication (Critical Tracking)

SPC 2608, Introduction to Public Speaking (Critical Tracking)

FAS 2024, Sustainable Fisheries (recommended elective, if not already taken) (3 credits)

State Core Gen Ed Humanities (3 credits)

Semester Four Credits: 15-16



Summer After Semester Four

FOR 3200C, Foundations of Natural Resources and Conservation (Summer B only) (1 credits)

FOR 3434C, Forest Resources Information Systems (Summer B only) (3 credits)

Summer After Semester Four Credits: 4

Semester Five

FNR 3410C, Natural Resource Sampling (3 credits)

FNR 3131C, Dendrology/Forest Plants (3 credits)

FOR 3153C, Forest Ecology (Critical Tracking) (3 credits)

FOR 3342C, Tree Biology (3 credits)

FNR 3020, Professional Practice in Natural Resources (1 credit)

Semester Five Credits: 13

Semester Six

FOR 3162C, Silviculture (Critical Tracking) (4 credits)

SWS 3022, Introduction to Soils in the Environment (3 credits)

FOR 3430C, Forest Mensuration (3 credits)

Select one:

FOR 3202, Society and Natural Resources (3 credits) OR

FOR 4060, Global Forests (3 credits)

FNR 4660, Natural Resource Policy and Economics (3 credits)

Semester Six Credits: 16

Semester Seven

FOR 4664, Sustainable Ecotourism Development (3 credits)

FOR 4621, Forest Economics and Management (3 credits)

FNR 4624C, Field Operations for Management of Ecosystems (Critical Tracking) (3 credits)

Certificate coursework or advisor-approved electives (4 credits)

Semester Seven Credits: 13

Semester Eight

FNR 4343C, Forest Water Resources (3 credits)

FOR 3214, Fire Ecology and Management (2 credits)

FNR 4623C, Integrated Natural Resource Management (Critical Tracking) (3 credits)

FOR 4624C, Forest Health Management (3 credits)

Certificate coursework or advisor-approved electives (3 credits)

Semester Eight Credits: 14

Total Credits: 120

**UF Online Curriculum Change** No

**Pedagogical Rationale/Justification** Update to 8 semester plan to reflect reduction in credits for FOR3200C (3 credits to 1 credit, request #17659) and FOR4621 (4 credits to 3 credits, request #17772), both of which are pending in approval system

**Impact on Enrollment, Retention, Graduation** None

**Assessment Data Review** NA

**Academic Learning Compact and Academic Assessment Plan** NA

**Catalog Copy** Yes

# FOREST RESOURCES AND CONSERVATION

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Providing students with a solid understanding of ecology, this major prepares students to manage and develop forest areas for economic, recreational, and ecological purposes. Forest Resources and Conservation students study natural resource management and analysis, soil and water sciences, plant identification, law and policy, fire management, and natural resource economics.

## About this Program

- **College:** Agricultural and Life Sciences (<http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/>)
- **Degree:** Bachelor of Science in Forest Resources and Conservation
- **Credits for Degree:** 120
- **Contact:** Email ([khaselier@ufl.edu?Subject=Forest%20Resources%20and%20Conservation%20Major](mailto:khaselier@ufl.edu?Subject=Forest%20Resources%20and%20Conservation%20Major))
- **More Info**

*To graduate with this major, students must complete all university, college, and major requirements.*

## School Information

The School of Forest, Fisheries, and Geomatics Sciences is a unit within the Institute of Food and Agricultural Sciences (IFAS) and the College of Agricultural and Life Sciences (CALs). The school is home to three distinct yet integrated program areas: Fisheries and Aquatic Sciences (<http://sfrc.ufl.edu/fish/>), Forest Resources and Conservation (<http://sfrc.ufl.edu/forest/>), and Geomatics (<http://sfrc.ufl.edu/geomatics/>). The school's faculty, staff, and students conduct research, teaching, and extension that cuts across a wide range of environments and disciplines.

**Website (<http://sfrc.ufl.edu/>)**

## CONTACT

Email ([sfrc@ifas.ufl.edu](mailto:sfrc@ifas.ufl.edu)) | 352.846.0850 (tel) | 352.392.1707 (fax)

P.O. Box 110410  
 1745 McCarty Drive  
 136 NEWINS-ZIEGLER HALL  
 GAINESVILLE FL 32611-0410  
 Map (<http://campusmap.ufl.edu/#/index/0832>)

## Curriculum

- Combination Degrees
- Fire Ecology and Management Certificate
- Fisheries and Aquatic Sciences Minor
- Forest Resources and Conservation
- Forest Resources and Conservation Minor
- Geomatics
- Geomatics Certificate
- Mapping with Small Unmanned Aerial Systems Certificate
- Natural Resource Conservation

The Forest Resources and Conservation major prepares students to sustainably manage forests to meet some combination of ecological, economic, and social/recreational objectives. Graduates are commonly employed in managing public or private land, in areas such as timber management, habitat restoration, outdoor recreation management, environmental law and policy, and similar.

Coursework is diverse, with an emphasis on field experiences which give students hands-on exposure to topics in ecology and biology, economics, administration and planning, and the use of various tools and techniques to manage forests to meet society's needs. Students have the option to complete a certificate in Fire Ecology and Management, Urban Forestry, Recreation Resource Management, or Environmental Policy, Law, and Regulation. This major is accredited by the Society of American Foresters.

## Critical Tracking

Critical Tracking records each student's progress in courses that are required for progress toward each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (<http://www.flvc.org/cpp/displayRecord.jsp?cip=030501&track=02>) may be used for transfer students.

## Semester 1

- Complete 1 of 7 critical-tracking courses: AEB 2014 or ECO 2013 or ECO 2023, AEC 3030C or SPC 2608, AEC 3033C, BSC 2010/BSC 2010L, CHM 1030 or CHM 2045, MAC 1105, STA 2023
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 2

- Complete 2 additional critical-tracking courses: AEB 2014 or ECO 2013 or ECO 2023, AEC 3030C or SPC 2608, AEC 3033C, BSC 2010/BSC 2010L, CHM 1030 or CHM 2045, MAC 1105, STA 2023
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 3

- Complete 2 additional critical-tracking courses: AEB 2014 or ECO 2013 or ECO 2023, AEC 3030C or SPC 2608, AEC 3033C, BSC 2010/BSC 2010L, CHM 1030 or CHM 2045, MAC 1105, STA 2023
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 4

- Complete all remaining critical-tracking courses
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 5

- Complete 5 of the required major courses: FNR 3131C, FOR 3200C, FNR 3410C, FOR 3202 or FOR 4060, FOR 3153C, FOR 3162C, FNR 4660 FNR 3020, FNR 4343C, FNR 4623C, FOR 3434C, FOR 3214, FOR 3342C, SWS 3022 FOR 3430C, FOR 4664, FOR 4621, FNR 4624C, FOR 4624C
- 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 6

- Complete 5 of the required major courses: FNR 3131C, FOR 3200C, FNR 3410C, FOR 3202 or FOR 4060, FOR 3153C, FOR 3162C, FNR 4660 FNR 3020, FNR 4343C, FNR 4623C, FOR 3434C, FOR 3214, FOR 3342C, SWS 3022 FOR 3430C, FOR 4664, FOR 4621, FNR 4624C, FOR 4624C
- 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 7

- Complete 5 of the required major courses: FNR 3131C, FOR 3200C, FNR 3410C, FOR 3202 or FOR 4060, FOR 3153C, FOR 3162C, FNR 4660 FNR 3020, FNR 4343C, FNR 4623C, FOR 3434C, FOR 3214, FOR 3342C, SWS 3022 FOR 3430C, FOR 4664, FOR 4621, FNR 4624C, FOR 4624C
- 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 8

- Complete all remaining required major courses: FNR 3131C, FOR 3200C, FNR 3410C, FOR 3202 or FOR 4060, FOR 3153C, FOR 3162C, FNR 4660 FNR 3020, FNR 4343C, FNR 4623C, FOR 3434C, FOR 3214, FOR 3342C, SWS 3022 FOR 3430C, FOR 4664, FOR 4621, FNR 4624C, FOR 4624C
- 2.0 upper division GPA required
- 2.0 UF GPA required

### Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

*This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.*

Course	Title	Credits
<b>Semester One</b>		
Quest 1 (Gen Ed Humanities)		3
Select one:		3
CHM 1030	Basic Chemistry Concepts and Applications 1 ( <b>Critical Tracking</b> ; Gen Ed Biological and Physical Sciences)	
CHM 2045	General Chemistry 1 ( <b>Critical Tracking</b> ; State Core Gen Ed Biological and Physical Sciences)	
FOR 2662	Forests for the Future (Gen Ed Social and Behavioral Sciences; recommended course)	3
State Core Gen Ed Composition ( <a href="http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext">http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext</a> ); Writing Requirement		3
Elective		3
	<b>Credits</b>	<b>15</b>
<b>Semester Two</b>		
BSC 2010 & 2010L	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 ( <b>Critical Tracking</b> ; State Core Gen Ed Biological and Physical Sciences)	4
FAS 2024	Sustainable Fisheries (recommended elective)	3
MAC 1105	Basic College Algebra ( <b>Critical Tracking</b> ; State Core Gen Ed Mathematics)	3
State Core Gen Ed Social and Behavioral Sciences ( <a href="http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext">http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext</a> )		3
Elective		3
	<b>Credits</b>	<b>16</b>
<b>Semester Three</b>		
AEC 3033C	Research and Business Writing in Agricultural and Life Sciences ( <b>Critical Tracking</b> ; Writing Requirement) <sup>1</sup>	3
STA 2023	Introduction to Statistics 1 ( <b>Critical Tracking</b> ; Gen Ed Mathematics)	3
FOR 2662	Forests for the Future (recommended, if not already taken) <sup>2</sup>	3
Gen Ed Composition		3
Elective		2
	<b>Credits</b>	<b>14</b>
<b>Semester Four</b>		
Quest 2 (Gen Ed Physical Sciences)		3
Select one:		3-4
AEB 2014	Economic Issues, Food and You ( <b>Critical Tracking</b> )	
ECO 2013	Principles of Macroeconomics ( <b>Critical Tracking</b> )	
ECO 2023	Principles of Microeconomics ( <b>Critical Tracking</b> ; Gen Ed Social and Behavioral Sciences)	
Select one:		3
AEC 3030C	Effective Oral Communication ( <b>Critical Tracking</b> )	
SPC 2608	Introduction to Public Speaking ( <b>Critical Tracking</b> )	
FAS 2024	Sustainable Fisheries (recommended elective, if not already taken)	3
State Core Gen Ed Humanities ( <a href="http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext">http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext</a> )		3
	<b>Credits</b>	<b>15-16</b>
<b>Summer After Semester Four</b>		
FOR 3200C	Foundations of Natural Resources and Conservation ( <b>Critical Tracking</b> ; Summer B only)	31
FOR 3434C	Forest Resources Information Systems ( <b>Critical Tracking</b> ; Summer B only)	3
	<b>Credits</b>	<b>64</b>
<b>Semester Five</b>		
FNR 3131C	Dendrology/Forest Plants	3
FNR 3410C	Natural Resource Sampling	3
FOR 3153C	Forest Ecology ( <b>Critical Tracking</b> )	3
FOR 3342C	Tree Biology	3
FNR 3020	Professional Practice in Natural Resources	1
	<b>Credits</b>	<b>13</b>
<b>Semester Six</b>		
FOR 3162C	Silviculture ( <b>Critical Tracking</b> )	4
SWS 3022	Introduction to Soils in the Environment	3
FOR 3430C	Forest Mensuration	3
FOR 4060	Global Forests	3
or FOR 3202	or Society and Natural	
FNR 4660	Natural Resource Policy and Economics	3
	<b>Credits</b>	<b>16</b>

**Semester Seven**

FOR 4621	Forest Economics and Management	43
FNR 4624C	Field Operations for Management of Ecosystems ( <b>Critical Tracking</b> )	3
FOR 4664	Sustainable Ecotourism Development	3
Certificate coursework or advisor-approved electives		34
ad		
<b>Credits</b>		<b>4313</b>

**Semester Eight**

FNR 4343C	Forest Water Resources	3
FNR 4623C	Integrated Natural Resource Management ( <b>Critical Tracking</b> )	3
FOR 3214	Fire Ecology and Management	2
FOR 4624C	Forest Health Management	3
Certificate coursework or advisor-approved elective		13
ad		
<b>Credits</b>		<b>4214</b>
<b>Total Credits</b>		<b>120</b>

**Academic Learning Compact**

The forest resources and conservation major provides a broad education in the ecological, economic and social aspects of forest and natural resources and their management. The major also provides national accreditation from the Society of American Foresters.

**Before Graduating Students Must**

- Pass the forest resources and conservation competency exam, given in five parts. One part will be given in each of these required courses:

Code	Title	Credits
FNR 3131C	Dendrology/Forest Plants	3
FNR 3410C	Natural Resource Sampling	3
<del>FNR 4040C</del>		
FNR 4623C	Integrated Natural Resource Management	3
FNR 4660	Natural Resource Policy and Economics	3

- Complete requirements for the baccalaureate degree, as determined by faculty.

**Students in the Major Will Learn to****Student Learning Outcomes (SLOs)****Content**

- Demonstrate competency in biology/ecology, quantification, policy/administration and management of forest and related natural resources.
- Analyze, interpret, synthesize and communicate information and data, including the use of mathematical and statistical methods.

**Critical Thinking**

- Solve novel problems in forest and natural resource management.

**Communication**

- Create, interpret and analyze written text, oral messages and multimedia presentations.

**Curriculum Map**

*I = Introduced; R = Reinforced; A = Assessed*

Courses	SLO 1	SLO 2	SLO 3	SLO 4
FNR 3131C	I			I
FNR 3410C	I			
FNR 4343C	R	R		R
FNR 4623C	R		A	A
FNR 4660	I		R	R
FOR 3153C	I	I	R	I
FOR 3162C	R	R		R
FOR 3200C	I	I	I	I
FOR 3202	I		R	R
FOR 3214	R	R	R	R

FOR 3434C	I	I		
FOR 4020			R	R

## Assessment Types

- Final group project
- Exams
- Program exit exam

## Cover Sheet: Request 18041

Natural Resource Conservation major - update 8 semester plan

### Info

Process	Major Curriculum Modify Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Timothy Martin tamartin@ufl.edu
Created	12/5/2022 3:38:35 PM
Updated	12/5/2022 3:58:27 PM
Description of request	Change 8 semester plan to reflect reduction in credit for FOR3200C (3 credits to 1 credit) which is currently pending in the approval system as request #17659

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Forest Resources and Conservation 60460000	Terrell Baker III		12/5/2022
NRC_BSF 8 semester plan modification 202212.docx					12/5/2022
College	Pending	CALS - College of Agricultural and Life Sciences			12/5/2022
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
Academic Assessment Committee Notified					
No document changes					
College Notified					
No document changes					



# Major|Modify\_Curriculum for request 18041

## Info

**Request:** Natural Resource Conservation major - update 8 semester plan

**Description of request:** Change 8 semester plan to reflect reduction in credit for FOR3200C (3 credits to 1 credit) which is currently pending in the approval system as request #17659

**Submitter:** Timothy Martin tamartin@ufl.edu

**Created:** 1/14/2023 12:10:50 PM

**Form version:** 3

## Responses

**Major Name** Natural Resource Conservation

**Major Code** NRC

**Degree Program Name** Bachelor of Science in Forest Resources and Conservation

**Undergraduate Innovation Academy Program No**

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Current Curriculum for Major** Semester One

Quest 1 (Gen Ed Humanities) - 3

Select One – 3

CHM 1030 Basic Chemistry Concepts and Applications 1 (Critical Tracking)

CHM 2045 General Chemistry 1 (Critical Tracking; Gen Ed Biological Sciences and

Physical Sciences)

FOR 2662 Forests for the Future (recommended; Gen Ed Social and Behavioral Sciences and Diversity) – 3

State Core Gen Ed Composition (<http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext>); Writing Requirement – 3

Elective - 3

Credits Semester One – 15

Semester Two

MAC 1105 Basic College Algebra (Critical Tracking; State Core Gen Ed Mathematics) – 3

BSC 2010 & 2010L Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences) – 4

FAS 2024 Sustainable Fisheries (recommended; or elective) – 3

State Core Gen Ed Social and Behavioral Sciences (<http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext>) – 3

Elective – 3

Credits Semester Two – 16

Semester Four

Quest 2 (Gen Ed Physical Sciences) – 3

Select One – 3-4

AEB 2014 Economic Issues, Food and You (Critical Tracking; Gen Ed Social and Behavioral Sciences)

ECO 2013 Principles of Macroeconomics (Critical Tracking; Gen Ed Social and

Behavioral Sciences)

ECO 2023 Principles of Microeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences)

Select One – 3

AEC 3030C Effective Oral Communication (Critical Tracking)

SPC 2608 Introduction to Public Speaking (Critical Tracking)

State Core Gen Ed Humanities (<http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext>) – 3

Elective – 3

Credits Semester Four – 15-16

Summer After Semester Four

Summer B

Select One – 3

FOR 3200C Foundations of Natural Resources and Conservation (Critical Tracking)

FOR 4934 Topics in Natural Resources (Professional Practice in Natural Resources)

Credits Summer After Semester Four – 3

Semester Five

Select One – 3-4

- FAS 4202C Biology of Fishes (Critical Tracking)
- FNR 3131C Dendrology/Forest Plants (fall only; Critical Tracking)
- WIS 3402 & 3402L Wildlife of Florida and Wildlife of Florida Laboratory (spring only;

Critical Tracking)

Select One – 3-4

FAS 4932 Topics in Fisheries and Aquatic Sciences (Applied Fisheries Statistics; Critical Tracking)

- FNR 3410C Natural Resource Sampling (Critical Tracking)
- WIS 4601 Quantitative Wildlife Ecology
- WIS 4945 Wildlife Techniques

Select One – 3-4

- FAS 4270 Marine Ecological Processes
- FAS 4932 Topics in Fisheries and Aquatic Sciences (Freshwater Ecology)
- FOR 3153C Forest Ecology (Critical Tracking)
- WIS 3404 Natural Resource Ecology (Critical Tracking)
- WIS 4443 Wetland Ecology

FOR 3434C Forest Resources Information Systems  
or GIS 3072C Geographic Information Systems – 3

Credits Semester Five – 12-15

Semester Six

Select One - 3

- FOR 3202 Society and Natural Resources (Critical Tracking)
- FOR 4060 Global Forests
- FOR 4934 Topics in Natural Resources (Environment and Society)

Approved Courses – 12

Credits Semester Six – 15

Semester Seven

Select One – 3

- FAS 4305C Introduction to Fishery Science
- FAS 4932 Topics in Fisheries and Aquatic Sciences (Field Ecology of Aquatic

Organisms)

- FNR 4070C Environmental Education Program Development
- FNR 4624C Field Operations for Management of Ecosystems (Critical Tracking)
- FOR 3214 & 3214L Fire Ecology and Management and Fire Ecology and Management

Laboratory

- FOR 4664 Sustainable Ecotourism Development
- WIS 4427C Wildlife Habitat Management

FNR 4660 Natural Resource Policy and Economics (Critical Tracking)  
or FOR 4621 Forest Economics and Management – 3

Approved Courses - 9

Credits Semester Seven – 15

Semester Eight

Select One – 3

- FAS 4905 Individual Study
- FOR 4905 Individual Study in Natural Resources
- FOR 4934 Topics in Natural Resources
- FNR 4623C Integrated Natural Resource Management
- FOR 4941 Internship in Natural Resources
- WIS 4905 Individual Problems

Approved Courses – 12

Credits Semester Eight – 15

Total Credits - 120

**Proposed Curriculum Changes** Change 8 semester plan to reflect reduction in credit for FOR3200C (3 credits to 1 credit) which is currently pending in the approval system as request #17659

SUMMARY OF PROPOSED CHANGES:

SUMMER AFTER SEMESTER FOUR:

Change credits for "select one" to "1-3" to reflect pending reduction in credits of FOR3200C from 3 credits to 1 credit  
Change total credits for that semester to "1-3"

#### SEMESTER EIGHT:

Change credit for "Approved courses" to "12-14" to reflect the fact that some may need to take 2 additional credits based on the previous change described  
Change total credits for that semester to "15-17"

#### HERE IS THE FULL PROPOSED CURRICULUM AFTER CHANGES:

##### Semester One

Quest 1 (Gen Ed Humanities) - 3

Select One – 3

CHM 1030 Basic Chemistry Concepts and Applications 1 (Critical Tracking)

CHM 2045 General Chemistry 1 (Critical Tracking; Gen Ed Biological Sciences and Physical Sciences)

FOR 2662 Forests for the Future (recommended; Gen Ed Social and Behavioral Sciences and Diversity) – 3

State Core Gen Ed Composition (<http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext>); Writing Requirement – 3

Elective - 3

Credits Semester One – 15

##### Semester Two

MAC 1105 Basic College Algebra (Critical Tracking; State Core Gen Ed Mathematics) – 3

BSC 2010 & 2010L Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking; State Core Gen Ed Biological and Physical Sciences) – 4

FAS 2024 Sustainable Fisheries (recommended; or elective) – 3

State Core Gen Ed Social and Behavioral Sciences (<http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext>) – 3

Elective – 3

Credits Semester Two – 16

##### Semester Four

Quest 2 (Gen Ed Physical Sciences) – 3

Select One – 3-4

AEB 2014 Economic Issues, Food and You (Critical Tracking; Gen Ed Social and Behavioral Sciences)

ECO 2013 Principles of Macroeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences)

ECO 2023 Principles of Microeconomics (Critical Tracking; Gen Ed Social and Behavioral Sciences)

Select One – 3

AEC 3030C Effective Oral Communication (Critical Tracking)

SPC 2608 Introduction to Public Speaking (Critical Tracking)

State Core Gen Ed Humanities (<http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext>) – 3

Elective – 3

Credits Semester Four – 15-16

##### Summer After Semester Four

###### Summer B

Select One – 1-3

FOR 3200C Foundations of Natural Resources and Conservation (Critical Tracking)

FOR 4934 Topics in Natural Resources (Professional Practice in Natural Resources)

Credits Summer After Semester Four – 1-3

##### Semester Five

Select One – 3-4

FAS 4202C Biology of Fishes (Critical Tracking)

FNR 3131C Dendrology/Forest Plants (fall only; Critical Tracking)

WIS 3402 & 3402L Wildlife of Florida and Wildlife of Florida Laboratory (spring only;

Critical Tracking)

Select One – 3-4

FAS 4932 Topics in Fisheries and Aquatic Sciences (Applied Fisheries Statistics; Critical

Tracking)

FNR 3410C Natural Resource Sampling (Critical Tracking)  
WIS 4601 Quantitative Wildlife Ecology  
WIS 4945 Wildlife Techniques

Select One – 3-4

FAS 4270 Marine Ecological Processes  
FAS 4932 Topics in Fisheries and Aquatic Sciences (Freshwater Ecology)  
FOR 3153C Forest Ecology (Critical Tracking)  
WIS 3404 Natural Resource Ecology (Critical Tracking)  
WIS 4443 Wetland Ecology

FOR 3434C Forest Resources Information Systems  
or GIS 3072C Geographic Information Systems – 3

Credits Semester Five – 12-15

Semester Six

Select One - 3

FOR 3202 Society and Natural Resources (Critical Tracking)  
FOR 4060 Global Forests  
FOR 4934 Topics in Natural Resources (Environment and Society)

Approved Courses – 12

Credits Semester Six – 15

Semester Seven

Select One – 3

FAS 4305C Introduction to Fishery Science  
FAS 4932 Topics in Fisheries and Aquatic Sciences (Field Ecology of Aquatic

Organisms)

FNR 4070C Environmental Education Program Development  
FNR 4624C Field Operations for Management of Ecosystems (Critical Tracking)  
FOR 3214 & 3214L Fire Ecology and Management and Fire Ecology and Management

Laboratory

FOR 4664 Sustainable Ecotourism Development  
WIS 4427C Wildlife Habitat Management

FNR 4660 Natural Resource Policy and Economics (Critical Tracking)  
or FOR 4621 Forest Economics and Management – 3

Approved Courses - 9

Credits Semester Seven – 15

Semester Eight

Select One – 3

FAS 4905 Individual Study  
FOR 4905 Individual Study in Natural Resources  
FOR 4934 Topics in Natural Resources  
FNR 4623C Integrated Natural Resource Management  
FOR 4941 Internship in Natural Resources  
WIS 4905 Individual Problems

Approved Courses – 12-14

Credits Semester Eight – 15-17

Total Credits - 120

**UF Online Curriculum Change No**

**Pedagogical Rationale/Justification** Change 8 semester plan to reflect reduction in credit for FOR3200C (3 credits to 1 credit) which is currently pending in the approval system as request #17659

**Impact on Enrollment, Retention, Graduation** None

**Assessment Data Review** NA

**Academic Learning Compact and Academic Assessment Plan** NA

**Catalog Copy** Yes

# NATURAL RESOURCE CONSERVATION

Conservationists protect and sustain our world's natural resources for future generations. Well-versed in economics and communications, Natural Resource Conservation students are equipped with strong analytical, critical thinking, and interpersonal skills. Natural Resource Conservation students study chemistry; biology; ecology; and forest, wildlife, fisheries, and aquatic resources.

## About this Program

- **College:** Agricultural and Life Sciences (<http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/>)
- **Degree:** Bachelor of Science in Forest Resources and Conservation
- **Credits for Degree:** 120
- **Contact:** Email ([khaselier@ufl.edu?Subject=Natural%20Resource%20Conservation%20Major](mailto:khaselier@ufl.edu?Subject=Natural%20Resource%20Conservation%20Major))
- **More Info**

*To graduate with this major, students must complete all university, college, and major requirements.*

## Department Information

The Department of Wildlife Ecology and Conservation fosters education, expands knowledge, and rewards scholarship, using multi-disciplinary approaches for the purpose of understanding, managing, and conserving biological resources.

**Website** (<https://wec.ifas.ufl.edu/>)

## CONTACT

Email ([ccwillia@ufl.edu](mailto:ccwillia@ufl.edu)) | 352.846.0643 (tel) | 352.392.6984

P.O. Box 110430

110 NEWINS-ZIEGLER HALL

GAINESVILLE FL 32611-0430

Map (<http://campusmap.ufl.edu/#/index/0832>)

## Curriculum

- Combination Degrees
- Wildlife Ecology and Conservation
- Wildlife Ecology and Conservation Minor

The Natural Resource Conservation (NRC) major provides students an interdisciplinary curriculum preparing them to address a broad range of natural resource-related issues. The core set of courses provides students with a solid foundation in natural history (floral and faunal), ecology, policy and economics, field applications, quantitative assessment and analysis, human dimensions, and spatial analysis. Working with a faculty advisor, students can elect to focus on a wide range of natural resource-related courses. In the required capstone experience, students demonstrate their understanding and proficiency in the core skill sets, as well as further develop their area of concentration.

Graduates seek advanced degrees in a variety of fields, or are successfully employed in a wide range of environmental careers. The major is cooperatively offered by faculty in the School of Forest, Fisheries, and Geomatics Sciences, the Department of Wildlife Ecology and Conservation, and the Program in Fisheries and Aquatic Sciences, and students are paired with one of these faculty members to develop a curriculum that suits their needs. Students interested in more structured and/or accredited curricula in professional natural resource management are encouraged to look at majors in Forest Resources and Conservation, Wildlife Ecology and Conservation, or Interdisciplinary Studies | Marine Sciences.

All NRC majors are required to complete core work in nine content areas (minimum 25 credits): professional seminar, ecology, quantitative analysis and assessment, natural history, human dimensions, policy and economics, field applications, spatial analysis, and capstone experience. These courses embrace a variety of conservation objectives and span local to global scales. They stress the complexities in achieving social, environmental, and economic sustainability; develop critical thinking skills; create significant and valuable field experience; and provide the tools needed for graduates to manage, conserve, and educate people about natural resources.

Students work closely with a faculty advisor to select the remaining 35 upper-division credits to create a curriculum plan designed to meet the specific goals of each student. Each curriculum plan must be approved by the program's undergraduate coordinator before the student reaches 70 credits.

This major is also offered at the West Florida Research and Education Center in Milton, FL. Ideal for place-bound students, this version of the NRC major provides a broad ecology/conservation curriculum.

## Critical Tracking

Critical Tracking records each student's progress in courses that are required for progress toward each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (<http://www.flvc.org/cpp/displayRecord.jsp?cip=030501&track=01>) may be used for transfer students.

## Semester 1

- Complete at least 1 of 7 critical-tracking courses (excluding labs): AEB 2014 or ECO 2013 or ECO 2023, AEC 3030C or SPC 2608, AEC 3033C, BSC 2010/BSC 2010L, CHM 1030 or CHM 2045, MAC 1105, STA 2023
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 2

- Complete at least 2 additional critical-tracking courses, excluding labs
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 3

- Complete at least 2 additional critical-tracking course, excluding labs
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 4

- Complete at least 2 additional critical-tracking courses, excluding labs
- 2.5 GPA required for all critical-tracking courses
- 2.0 UF GPA required

## Semester 5

- Complete all critical-tracking courses, including labs
- 2.5 GPA required for all critical-tracking courses
- 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 6

- Complete 1 of the remaining required major courses from FNR 3131C or WIS 3402/WIS 3402L or FAS 4932 or ZOO 4205C, FOR 3200C, FNR 3410C, FOR 3202, FOR 3153C or WIS 3404, FNR 4624C, FNR 4660, FNR 4623C
- Submit faculty advisor-approved Curriculum Plan (<http://sfrc.ufl.edu/forest/degreeprograms/nrc/>)
- 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 7

- Complete 3 additional remaining required major courses from FNR 3131C or WIS 3402/WIS 3402L or FAS 4932 or ZOO 4205C, FOR 3200C, FNR 3410C, FOR 3202, FOR 3153C or WIS 3404, FNR 4624C, FNR 4660, FNR 4623C
- 2.0 upper division GPA required
- 2.0 UF GPA required

## Semester 8

- Complete all remaining required major courses from FNR 3131C or WIS 3402/WIS 3402L or FAS 4932 or ZOO 4205C, FOR 3200C, FNR 3410C, FOR 3202, FOR 3153C or WIS 3404, FNR 4624C, FNR 4660, FNR 4623C
- 2.0 upper division GPA required
- 2.0 UF GPA required

### Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

*This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.*

Course	Title	Credits
<b>Semester One</b>		
Quest 1 (Gen Ed Humanities)		3
Select one:		3
CHM 1030	Basic Chemistry Concepts and Applications 1 ( <b>Critical Tracking</b> )	
CHM 2045	General Chemistry 1 ( <b>Critical Tracking</b> ; Gen Ed Biological Sciences and Physical Sciences)	
FOR 2662	Forests for the Future (recommended; Gen Ed Social and Behavioral Sciences and Diversity)	3
State Core Gen Ed Composition ( <a href="http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext">http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext</a> ); Writing Requirement		3
Elective		3
	<b>Credits</b>	<b>15</b>
<b>Semester Two</b>		
MAC 1105	Basic College Algebra ( <b>Critical Tracking</b> ; State Core Gen Ed Mathematics) <sup>1</sup>	3
BSC 2010 & 2010L	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 ( <b>Critical Tracking</b> ; State Core Gen Ed Biological and Physical Sciences)	4
FAS 2024	Sustainable Fisheries (recommended; or elective)	3
State Core Gen Ed Social and Behavioral Sciences ( <a href="http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext">http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext</a> )		3
Elective		3
	<b>Credits</b>	<b>16</b>
<b>Semester Three</b>		
AEC 3033C	Research and Business Writing in Agricultural and Life Sciences ( <b>Critical Tracking</b> ; Writing Requirement) <sup>2</sup>	3
STA 2023	Introduction to Statistics 1 ( <b>Critical Tracking</b> ; Gen Ed Mathematics)	3
FOR 3004	Forests, Conservation and People (recommended; or elective)	3
Gen Ed Composition		3
Elective		2
	<b>Credits</b>	<b>14</b>
<b>Semester Four</b>		
Quest 2 (Gen Ed Physical Sciences)		3
Select one:		3-4
AEB 2014	Economic Issues, Food and You ( <b>Critical Tracking</b> ; Gen Ed Social and Behavioral Sciences)	
ECO 2013	Principles of Macroeconomics ( <b>Critical Tracking</b> ; Gen Ed Social and Behavioral Sciences)	
ECO 2023	Principles of Microeconomics ( <b>Critical Tracking</b> ; Gen Ed Social and Behavioral Sciences)	
Select one:		3
AEC 3030C	Effective Oral Communication ( <b>Critical Tracking</b> )	
SPC 2608	Introduction to Public Speaking ( <b>Critical Tracking</b> )	
State Core Gen Ed Humanities ( <a href="http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext">http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext</a> )		3
Elective <sup>3</sup>		3
	<b>Credits</b>	<b>15-16</b>
<b>Summer After Semester Four</b>		
Summer B		
Select one:		1-3
FOR 3200C	Foundations of Natural Resources and Conservation ( <b>Critical Tracking</b> )	
FOR 4934	Topics in Natural Resources (Professional Practice in Natural Resources)	
	<b>Credits</b>	<b>1-3</b>
<b>Semester Five</b>		
Select one:		3-4
FAS 4202C	Biology of Fishes ( <b>Critical Tracking</b> )	
FNR 3131C	Dendrology/Forest Plants (fall only; <b>Critical Tracking</b> )	
WIS 3402 & 3402L	Wildlife of Florida and Wildlife of Florida Laboratory (spring only; <b>Critical Tracking</b> )	
Select one:		3-4
FAS 4932	Topics in Fisheries and Aquatic Sciences (Applied Fisheries Statistics; <b>Critical Tracking</b> )	
FNR 3410C	Natural Resource Sampling ( <b>Critical Tracking</b> )	
WIS 4601	Quantitative Wildlife Ecology	
WIS 4945	Wildlife Techniques	
Select one:		3-4

FAS 4270	Marine Ecological Processes	
FAS 4932	Topics in Fisheries and Aquatic Sciences (Freshwater Ecology)	
FOR 3153C	Forest Ecology ( <b>Critical Tracking</b> )	
WIS 3404	Natural Resource Ecology ( <b>Critical Tracking</b> )	
WIS 4443	Wetland Ecology	
FOR 3434C or GIS 3072C	Forest Resources Information Systems or Geographic Information Systems	3
<b>Credits</b>		<b>12-15</b>
<b>Semester Six</b>		
Select one:		3
FOR 3202	Society and Natural Resources ( <b>Critical Tracking</b> )	
FOR 4060	Global Forests	
FOR 4934	Topics in Natural Resources (Environment and Society)	
Approved courses		12
<b>Credits</b>		<b>15</b>
<b>Semester Seven</b>		
Select one:		3
FAS 4305C	Introduction to Fishery Science	
FAS 4932	Topics in Fisheries and Aquatic Sciences (Field Ecology of Aquatic Organisms)	
FNR 4070C	Environmental Education Program Development	
FNR 4624C	Field Operations for Management of Ecosystems ( <b>Critical Tracking</b> )	
FOR 3214 & 3214L	Fire Ecology and Management and Fire Ecology and Management Laboratory	
FOR 4664	Sustainable Ecotourism Development	
WIS 4427C	Wildlife Habitat Management	
FNR 4660 or FOR 4621	Natural Resource Policy and Economics ( <b>Critical Tracking</b> ) or Forest Economics and Management	3
Approved courses		9
<b>Credits</b>		<b>15</b>
<b>Semester Eight</b>		
Select one:		3
FAS 4905	Individual Study	
FOR 4905	Individual Study in Natural Resources	
FOR 4934 & FNR 4623C	Topics in Natural Resources and Integrated Natural Resource Management	
FOR 4941	Internship in Natural Resources	
WIS 4905	Individual Problems	
Approved courses		12-14
<b>Credits</b>		<b>15-17</b>
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Or higher level course.

<sup>2</sup> May substitute ENC 2210 or ENC 3254.

<sup>3</sup> FAS 2024 recommended, if not already taken.

## Approved Courses

Given the flexible, advisor/student-driven nature of this major, students may deviate significantly from this plan relative to course timing. As part of their curriculum plan, students are required to complete at least one course from the following nine content areas:

Code	Title	Credits
<b>Professional Seminar</b>		
FOR 3200C	Foundations of Natural Resources and Conservation	3
FOR 4934	Topics in Natural Resources (Professional Practice in Natural Resources)	1-4
<b>Ecology</b>		
FAS 4270	Marine Ecological Processes	3
FAS 4932	Topics in Fisheries and Aquatic Sciences (Freshwater Ecology)	1-4
FOR 3153C	Forest Ecology	3
WIS 3404	Natural Resource Ecology	3
WIS 4443	Wetland Ecology	3



<b>Quantitative Analysis and Assessment</b>		
FAS 4932	Topics in Fisheries and Aquatic Sciences	1-4
FNR 3410C	Natural Resource Sampling	3
WIS 4601	Quantitative Wildlife Ecology	3
WIS 4935C	Wildlife Techniques	3
<b>Natural History</b>		
FAS 4202C	Biology of Fishes	4
FNR 3131C	Dendrology/Forest Plants	3
WIS 3402 & 3402L	Wildlife of Florida and Wildlife of Florida Laboratory	4
<b>Human Dimensions</b>		
FOR 3202	Society and Natural Resources	3
FOR 4060	Global Forests	3
FOR 4934	Topics in Natural Resources (Environment and Society)	1-4
<b>Policy and Economics</b>		
FNR 4660	Natural Resource Policy and Economics	3
FOR 4621	Forest Economics and Management	4
<b>Field Applications</b>		
FAS 4305C	Introduction to Fishery Science	3
FAS 4932	Topics in Fisheries and Aquatic Sciences (Field Ecology of Aquatic Organisms)	1-4
FNR 4070C	Environmental Education Program Development	3
FNR 4624C	Field Operations for Management of Ecosystems	3
FOR 3214 & 3214L	Fire Ecology and Management and Fire Ecology and Management Laboratory	3
FOR 4664	Sustainable Ecotourism Development	3
WIS 4427C	Wildlife Habitat Management	3
<b>Spatial Analysis</b>		
FOR 3434C	Forest Resources Information Systems	3
GIS 3072C	Geographic Information Systems	3
<b>Capstone Experience</b>		
FAS 4905	Individual Study	1-4
FOR 4905	Individual Study in Natural Resources	1-4
FOR 4934 & FNR 4623C	Topics in Natural Resources and Integrated Natural Resource Management (Integrated Management and Assessment)	6
FOR 4941	Internship in Natural Resources	1-4
WIS 4905	Individual Problems	1-4

The summer term between the junior and senior year is normally reserved for professional work experience.

## Academic Learning Compact

The natural resource conservation major provides a broad education in the ecological, economic and social aspects of forest and natural resources and their management. The individualized nature of the major allows students to create a curriculum specific to their interests.

## Before Graduating Students Must

- Pass the forest resources and conservation competency exam, given in five parts. One part will be given in each of these required courses:

Code	Title	Credits
FNR 3131C	Dendrology/Forest Plants	3
FNR 3410C	Natural Resource Sampling	3
FNR 4040C		
FNR 4623C	Integrated Natural Resource Management	3
FNR 4660	Natural Resource Policy and Economics	3

- Complete requirements for the baccalaureate degree, as determined by faculty.

## Students in the Major Will Learn to

### Student Learning Outcomes (SLOs)

#### Content

- Demonstrate competency in biology/ecology, quantification, policy/administration and management of natural resources.
- Analyze, interpret, synthesize and communicate information and data, including the use of mathematical and statistical methods.

**Critical Thinking**

3. Solve novel problems in natural resource management.

**Communication**

4. Create, interpret and analyze written text, oral messages and multimedia presentations.

**Curriculum Map**

*I = Introduced; R = Reinforced; A = Assessed*

<b>Courses</b>	<b>SLO 1</b>	<b>SLO 2</b>	<b>SLO 3</b>	<b>SLO 4</b>
FOR 3153C	I	I	R	I
FOR 3200C	I	I	I	I
FOR 3202	I		R	R
FNR 3131C	I			I
FNR 3410C	I	I		
FNR 4623C	R	R	A	A
FNR 4624C	R	R		
FNR 4660	I		R	R
Exit Exam	A	A		

**Assessment Types**

- Group project
  - Presentation
  - Final exam
-

## Cover Sheet: Request 18103

### Modifications to the Animal Biology specialization

#### Info

Process	Specialization New/Modify/Close Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Albert De Vries devries@ufl.edu
Created	1/3/2023 5:14:45 PM
Updated	1/3/2023 5:16:10 PM
Description of request	<p>We are asking approval for 3 modifications of the Animal Biology specialization:</p> <p>Replace MAC 2311 Analytic Geometry and Calculus 1 (Critical Tracking; State Core Gen Ed Mathematics) with MAC 1147 Pre-Calculus Algebra and Trigonometry (Critical Tracking: State Core Gen Ed Mathematics)</p> <p>Require ANS 3934 Careers in the Livestock Industry OR ANS 2090 Survey of Veterinary Professions</p> <p>Require ANS 3384C Genetics of Domestic Animals</p>

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		1/3/2023
ANS-BIO UF Catalog - new.docx					1/3/2023
College	Pending	CALS - College of Agricultural and Life Sciences			1/3/2023
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

# Specialization|Modify for request 18103

## Info

**Request:** Modifications to the Animal Biology specialization

**Description of request:** We are asking approval for 3 modifications of the Animal Biology specialization:

Replace MAC 2311 Analytic Geometry and Calculus 1 (Critical Tracking; State Core Gen Ed Mathematics) with MAC 1147 Pre-Calculus Algebra and Trigonometry (Critical Tracking: State Core Gen Ed Mathematics)

Require ANS 3934 Careers in the Livestock Industry OR ANS 2090 Survey of Veterinary Professions

Require ANS 3384C Genetics of Domestic Animals

**Submitter:** Albert De Vries devries@ufl.edu

**Created:** 1/3/2023 4:50:02 PM

**Form version:** 1

## Responses

**Specialization Name** Animal Biology

**Change name of Specialization** No

**Specialization Code** AB

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Is this an Undergraduate Innovation Academy Program** No

**Current Curriculum for Specialization** Current curriculum includes:

MAC 2311 Analytic Geometry and Calculus

No careers course is required

Students select one genetics course from: ANS 3384C Genetics of Domestic Animals; AGR 3303 Genetics; PCB 3063 Genetics

**Proposed Changes** Replace MAC 2311 Analytic Geometry and Calculus 1 (Critical Tracking; State Core Gen Ed Mathematics) with MAC 1147 Pre-Calculus Algebra and Trigonometry (Critical Tracking: State Core Gen Ed Mathematics)

Require ANS 3934 Careers in the Livestock Industry OR ANS 2090 Survey of Veterinary Professions

Require ANS 3384C Genetics of Domestic Animals

**UF Online curriculum change** No

**Pedagogical Rationale/Justification** Replace MAC 2311 Analytic Geometry and Calculus 1 (Critical Tracking; State Core Gen Ed Mathematics) with MAC 1147 Pre-Calculus Algebra and Trigonometry (Critical Tracking: State Core Gen Ed Mathematics)

o Reason: veterinary schools no longer require MAC 2311

Require ANS 3934 Careers in the Livestock Industry OR ANS 2090 Survey of Veterinary Professions

o Currently no careers course is required. ANS students often do not know what they can do with an ANS degree, other than apply to veterinary schools.

o We require a careers course in our other specializations

o Many students already take ANS 2090 Survey of Veterinary Professions

o Animal Biology specialization is not only a path to veterinary school, therefore also allow ANS 3934 Careers in the Livestock Industry

o We submitted a separate request to rename ANS 3934 Careers in the Livestock Industry into ANS 2XXX Careers in Animal Sciences. This includes reducing the level to a 2000 course because no

prerequisite will be required and to match ANS 2090

Require ANS 3384C Genetics of Domestic Animals

o Currently genetics is an approved elective: Select one of 3:

? ANS 3384C Genetics of Domestic Animals

? AGR 3303 Genetics

? PCB 3063 Genetics

o Reason: in the past, animal sciences genetics was not accepted by many veterinary schools. This has changed.

o Most students already take ANS 3384C

o We consider ANS 3384C of the ANS Major core

o AGR 3303 and PCB 3063 have less animal genetics than ANS 3384C

**Impact on Other Programs** Little impact is expected. Perhaps lower enrollment in AGR 3303 and PCB 3063. Most ANS students already take ANS 3384C

**Assessment Data Review** Student Learning Outcome #2: Apply fundamental concepts, skills and processes in animal sciences.

The proposed changes follow from the 2020 ANS Curriculum Revision Report

**Academic Learning Compact and Academic Assessment Plan** The Academic Learning Compact is not affected.

[https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/#academiclearningcompacttext](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/#academiclearningcompacttext)

The Academic Assessment Plan will include better evaluation of how much students know what career options they have with an Animal Sciences degree.

**Catalog Copy** Yes

## SEMESTER ONE

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<a href="#">CHM 2045</a> & <a href="#">2045L</a>	General Chemistry 1 and General Chemistry 1 Laboratory ( <b>Critical Tracking</b> ; State Core Gen Ed Biological and Physical Sciences)	4
<a href="#">ENC 1101</a>	Expository and Argumentative Writing ( <a href="#">State Core Gen Ed Composition</a> ; Writing Requirement)	3
<a href="#">State Core Gen Ed Humanities</a>		3
Elective		3
<b>Credits</b>		<b>13</b>

## SEMESTER TWO

Quest 1 (Gen Ed Humanities)		3
<a href="#">AEC 3030C</a> or <a href="#">SPC 2608</a>	Effective Oral Communication or Introduction to Public Speaking	3
<a href="#">CHM 2046</a> & <a href="#">2046L</a>	General Chemistry 2 and General Chemistry 2 Laboratory ( <b>Critical Tracking</b> ; Gen Ed Physical Sciences)	4
<a href="#">ECO 2013</a>	Principles of Macroeconomics ( <a href="#">State Core Gen Ed Social and Behavioral Sciences</a> )	4
<a href="#">ENC 1102</a>	Argument and Persuasion (Gen Ed Composition)	3
<b>Credits</b>		<b>17</b>

## SEMESTER THREE

Quest 2 (Gen Ed Social and Behavioral Sciences)		3
<a href="#">AEC 3033C</a> or <a href="#">ENC 2210</a>	Research and Business Writing in Agricultural and Life Sciences (Writing Requirement) or Technical Writing	3
<a href="#">BSC 2010</a> & <a href="#">2010L</a>	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 ( <b>Critical Tracking</b> ; Gen Ed Biological Sciences)	4
Electives		6
<b>Credits</b>		<b>16</b>

## SEMESTER FOUR

<a href="#">BSC 2011</a> & <a href="#">2011L</a>	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 ( <b>Critical Tracking</b> ; Gen Ed Biological Sciences)	4
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<u>MAC 2311</u>	Analytic Geometry and Calculus 1 ( <b>Critical Tracking: State Core Gen Ed Mathematics</b> )	4
	<u>MAC1147 Pre-Calculus Algebra and Trigonometry (Critical Tracking: State Core Gen Ed Mathematics)</u>	
Gen Ed Diversity or International		3
Electives		4
<b>Credits</b>		<b>15</b>
<b>SEMESTER FIVE</b>		
<u>ANS 3006</u> & <u>3006L</u>	Introduction to Animal Science and Introduction to Animal Science Laboratory ( <b>Critical Tracking</b> )	4
<u>ANS 3440</u>	Principles of Animal Nutrition	4
<u>CHM 2210</u>	Organic Chemistry 1 ( <b>Critical Tracking</b> )	3
Elective		3
<b>Credits</b>		<b>14</b>
<b>SEMESTER SIX</b>		
<u>ANS 3319C</u>	Reproductive Physiology and Endocrinology in Domestic Animals ( <b>Critical Tracking</b> )	4
<u>CHM 2211</u> & <u>2211L</u>	Organic Chemistry 2 and Organic Chemistry Laboratory	5
Approved elective		3
<u>Elective</u>		<u>3</u>
<u>ANS3934 Careers in the Livestock Industry</u> <b>OR</b> <u>ANS2090 Survey of Veterinary Professions</u>		
<b>Credits</b>		<b>15</b>
<b>SEMESTER SEVEN</b>		
<u>ANS 3043</u>	Growth and Development of Farm Animals ( <b>Critical Tracking</b> )	3
<u>BCH 3025</u> or <u>BCH 4024</u>	Fundamentals of Biochemistry <sup>1</sup> or Introduction to Biochemistry and Molecular Biology	4
<u>STA 2023</u>	Introduction to Statistics 1 (Gen Ed Mathematics)	3
Approved elective		3
Elective		3
<b>Credits</b>		<b>16</b>

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SEMESTER EIGHT

MCB 3020 & 3020L Basic Biology of Microorganisms and Laboratory for Basic Biology of Microorganisms (**Critical Tracking**) 4

ANS3384C Genetics of Domestic Animals Approved elective 3

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Electives 86

**Credits** **1415**

**Total Credits** **120**

Plan of Study Grid



## Cover Sheet: Request 18105

### Change of Approved Electives

#### Info

Process	Specialization New/Modify/Close Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Albert De Vries devries@ufl.edu
Created	1/4/2023 3:22:37 PM
Updated	1/4/2023 3:23:44 PM
Description of request	•Replace 6 credits of Approved Food and Resource Economics electives with 6 credits of Approved Agricultural and Life Science electives

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries		1/4/2023
ANS-Food Animal UF Catalog - new.docx					1/4/2023
CALS CC checklist.pdf					1/4/2023
College	Pending	CALS - College of Agricultural and Life Sciences			1/4/2023
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

# Specialization|Modify for request 18105

## Info

**Request:** Change of Approved Electives

**Description of request:** •Replace 6 credits of Approved Food and Resource Economics electives with 6 credits of Approved Agricultural and Life Science electives

**Submitter:** Albert De Vries devries@ufl.edu

**Created:** 1/4/2023 2:48:10 PM

**Form version:** 1

## Responses

**Specialization Name** Food Animal

**Change name of Specialization** No

**Specialization Code** FA

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Is this an Undergraduate Innovation Academy Program** No

**Current Curriculum for Specialization** Electives (current):

- 6 credits of approved Food and Resource Economics electives

**Proposed Changes** Electives (proposed):

- 6 credits of approved Agricultural and Life Sciences electives

**UF Online curriculum change** No

**Pedagogical Rationale/Justification** oCurrently 6 credits of Approved FRE courses are required in this specialization. However, ANS students ask for more choices to take other CALS courses, such as in agronomy, agricultural operations management, soil and water science, etc.

o Approved Agricultural and Life Science electives: must be 6 electives that are not already

Approved Electives (ANS + FOS), therefore come from other CALS departments

[https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/ANS\\_BS03/#approvedelectivestext](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS03/#approvedelectivestext)

o AEB 3133 Principles of Agribusiness Management remains a required course

o Students can still take 6 credits of Approved FRE courses if they so choose

**Impact on Other Programs** We expect approximately 20 students to take fewer approved FRE courses and more approved CALS courses

**Assessment Data Review** SLO1 Describe and explain fundamental concepts, skills and processes in animal sciences

SLO2 Apply fundamental concepts, skills and processes in animal sciences

SLO3 Critically evaluate information (or data) in animal sciences

SLO4 Solve problems in animal sciences

**Academic Learning Compact and Academic Assessment Plan** No changes expected

**Catalog Copy** Yes

# CALS Curriculum Committee Submission Checklist

**NOTE: This checklist must be included with all course and certificate submissions.**

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

## CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

You MUST comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site (<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

Submission of a course modification requires both the current version of the course syllabus and the proposed version.

Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. ([https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf)). Do not use the words demonstrate or understand when listing learning objectives.

The course schedule should be concise and include the appropriate number of weeks in the semester.

All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

### Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl ([brendj@ufl.edu](mailto:brendj@ufl.edu)) for further instruction)

SEMESTER ONE		CREDITS
<a href="#"><u>BSC 2010</u></a> & <a href="#"><u>2010L</u></a>	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 ( <b>Critical Tracking</b> ; State Core Gen Ed Biological and Physical Sciences)	4
<a href="#"><u>ENC 1101</u></a>	Expository and Argumentative Writing ( <a href="#"><u>State Core Gen Ed Composition</u></a> ; Writing Requirement)	3
<a href="#"><u>MAC 1147</u></a>	Precalculus Algebra and Trigonometry ( <b>Critical Tracking</b> ; State Core Gen Ed Mathematics)	4
<a href="#"><u>State Core Gen Ed Humanities with Diversity</u></a>		3
<b>Credits</b>		<b>14</b>
SEMESTER TWO		
Quest 1 (Gen Ed Humanities)		3
<a href="#"><u>AEC 3030</u></a> <a href="#"><u>C</u></a> or <a href="#"><u>SPC 2608</u></a>	Effective Oral Communication or Introduction to Public Speaking	3
<a href="#"><u>BSC 2011</u></a> & <a href="#"><u>2011L</u></a>	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 ( <b>Critical Tracking</b> ; Gen Ed Biological Sciences)	4
<a href="#"><u>ECO 2013</u></a>	Principles of Macroeconomics ( <b>Critical Tracking</b> ; State Core Gen Ed Social and Behavioral Sciences)	4
<a href="#"><u>ENC 1102</u></a>	Argument and Persuasion (Gen Ed Composition)	3
<b>Credits</b>		<b>17</b>
SEMESTER THREE		
Quest 2 (Gen Ed Social and Behavioral Sciences)		3
Select one:		3
<a href="#"><u>AEC 3033</u></a> <a href="#"><u>C</u></a>	Research and Business Writing in Agricultural and Life Sciences (Writing Requirement)	
<a href="#"><u>ENC 2210</u></a>	Technical Writing	
<a href="#"><u>CHM 2045</u></a> & <a href="#"><u>2045L</u></a>	General Chemistry 1 and General Chemistry 1 Laboratory ( <b>Critical Tracking</b> ; Gen Ed Physical Sciences)	4
Electives		5

<b>Credits</b>		<b>15</b>
<b>SEMESTER FOUR</b>		
<u>MCB 2000</u> & <u>2000L</u>	Microbiology and Microbiology Laboratory (Gen Ed Biological Sciences)	4
<u>STA 2023</u>	Introduction to Statistics 1 ( <b>Critical Tracking</b> ; Gen Ed Mathematics)	3
Gen Ed Diversity or International		3
Elective		3
<b>Credits</b>		<b>13</b>
<b>SEMESTER FIVE</b>		
<u>AEB 3133</u>	Principles of Agribusiness Management	3
<u>ANS 3006</u> & <u>3006L</u>	Introduction to Animal Science and Introduction to Animal Science Laboratory ( <b>Critical Tracking</b> )	4
<u>ANS 3440</u>	Principles of Animal Nutrition	4
<u>ANS 3634</u> <u>C</u>	Meats	3
<u>ANS 3934</u>	Careers in the Livestock Industry	2
<b>Credits</b>		<b>16</b>
<b>SEMESTER SIX</b>		
<u>AGR 4231</u> <u>C</u>	Forage Science and Range Management	4
<u>ANS 3319</u> <u>C</u>	Reproductive Physiology and Endocrinology in Domestic Animals ( <b>Critical Tracking</b> )	4
<u>ANS 3384</u> <u>C</u>	Genetics of Domestic Animals	3
<u>ANS 3404</u> <u>C</u>	Food Animal Nutrition and Feeding	3
<u>ANS 3613</u> <u>C</u>	Value determination of meat animals	3
<b>Credits</b>		<b>17</b>
<b>SUMMER AFTER SEMESTER SIX</b>		
<u>ANS 4941</u>	Full-Time Practical Work Experience in Animal Science ( <b>Critical Tracking</b> )	3-8

<b>Credits</b>	<b>3-8</b>
<b>SEMESTER SEVEN</b>	
<u>ANS 3043</u> Growth and Development of Farm Animals ( <b>Critical Tracking</b> )	3
<del>Approved Food and Resource Economics elective</del> <u>Approved Agricultural and Life Sciences electives</u>	3
Approved Electives	6
<b>Credits</b>	<b>12</b>
<b>SEMESTER EIGHT</b>	
<u>ANS 4931</u> Senior Seminar ( <b>Critical Tracking</b> )	1
<del>Approved Food and Resource Economics elective</del> <u>Approved Agricultural and Life Sciences electives</u>	3
Approved Electives	6
Electives	3
<b>Credits</b>	<b>13</b>
<b>Total Credits</b>	<b>120</b>
Plan of Study Grid	

## Cover Sheet: Request 18106

### Change of Approved Electives

#### Info

Process	Specialization New/Modify/Close Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Albert De Vries devries@ufl.edu
Created	1/4/2023 4:34:38 PM
Updated	1/4/2023 4:36:09 PM
Description of request	Replace 6 credits of Approved Food and Resource Economics electives with 6 credits of Approved Agricultural and Life Sciences electives

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries	Same changes as for the Food Animal specialization.	1/4/2023
ANS-Equine UF Catalog - new.docx					1/4/2023
CALS CC checklist.pdf					1/4/2023
College	Pending	CALS - College of Agricultural and Life Sciences			1/4/2023
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					



# Specialization|Modify for request 18106

## Info

**Request:** Change of Approved Electives

**Description of request:** Replace 6 credits of Approved Food and Resource Economics electives with 6 credits of Approved Agricultural and Life Sciences electives

**Submitter:** Albert De Vries devries@ufl.edu

**Created:** 1/4/2023 4:15:19 PM

**Form version:** 1

## Responses

**Specialization Name** Equine

**Change name of Specialization** No

**Specialization Code** EQ

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Is this an Undergraduate Innovation Academy Program** No

**Current Curriculum for Specialization** 6 credits of approved Food and Resource Economics electives

**Proposed Changes** 6 credits of approved Agricultural and Life Sciences electives

**UF Online curriculum change** No

**Pedagogical Rationale/Justification** Currently 6 credits of Approved FRE courses are required in this specialization. However, ANS students ask for more choices to take other CALS courses, such as in agronomy, agricultural operations management, soil and water science, etc.

- o Approved Agricultural and Life Science electives: must be 6 electives that are not already Approved Equine Practicum Electives and not any other ANS courses, therefore come from other CALS departments [https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/ANS\\_BS03/#approvedelectivestext](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS03/#approvedelectivestext)
- o AEB 3133 Principles of Agribusiness Management remains a required course
- o Students can still take 6 credits of Approved FRE courses if they so choose

**Impact on Other Programs** We expect approximately 20 students to take fewer approved FRE courses and more approved CALS courses

**Assessment Data Review** SLO1 Describe and explain fundamental concepts, skills and processes in animal sciences

SLO2 Apply fundamental concepts, skills and processes in animal sciences

SLO3 Critically evaluate information (or data) in animal sciences

SLO4 Solve problems in animal sciences

**Academic Learning Compact and Academic Assessment Plan** No changes expected

**Catalog Copy** Yes

# CALS Curriculum Committee Submission Checklist

**NOTE: This checklist must be included with all course and certificate submissions.**

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

**CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.**

It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

You MUST comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site (<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

Submission of a course modification requires both the current version of the course syllabus and the proposed version.

Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. ([https://cals.ufl.edu/content/PDF/Faculty\\_Staff/cals-course-objectives.pdf](https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf)). Do not use the words demonstrate or understand when listing learning objectives.

The course schedule should be concise and include the appropriate number of weeks in the semester.

All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

### Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl ([brendj@ufl.edu](mailto:brendj@ufl.edu)) for further instruction)

SEMESTER ONE		CREDITS
<a href="#"><u>BSC 2010</u></a> & <a href="#"><u>2010L</u></a>	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 ( <b>Critical Tracking</b> ; State Core Gen Ed Biological and Physical Sciences)	4
<a href="#"><u>MAC 1147</u></a>	Precalculus Algebra and Trigonometry ( <a href="#"><u>State Core Gen Ed Mathematics</u></a> )	4
<a href="#"><u>ENC 1101</u></a>	Expository and Argumentative Writing ( <a href="#"><u>State Core Gen Ed Composition</u></a> ; Writing Requirement)	3
<a href="#"><u>State Core Gen Ed Humanities with Diversity</u></a>		3
<b>Credits</b>		<b>14</b>
SEMESTER TWO		
Quest 1 (Gen Ed Humanities)		3
<a href="#"><u>AEC 3030C</u></a> or <a href="#"><u>SPC 2608</u></a>	Effective Oral Communication or Introduction to Public Speaking	3
<a href="#"><u>BSC 2011</u></a> & <a href="#"><u>2011L</u></a>	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 ( <b>Critical Tracking</b> ; Gen Ed Biological Sciences)	4
<a href="#"><u>ECO 2013</u></a>	Principles of Macroeconomics ( <b>Critical Tracking</b> ; State Core Gen Ed Social and Behavioral Sciences)	4
<a href="#"><u>ENC 1102</u></a>	Argument and Persuasion (Gen Ed Composition)	3
<b>Credits</b>		<b>17</b>
SEMESTER THREE		
Quest 2 (Gen Ed Social and Behavioral Sciences)		3
Select one:		3
<a href="#"><u>AEC 3033C</u></a>	Research and Business Writing in Agricultural and Life Sciences (Writing Requirement)	
<a href="#"><u>ENC 2210</u></a>	Technical Writing	
<a href="#"><u>CHM 2045</u></a> & <a href="#"><u>2045L</u></a>	General Chemistry 1 and General Chemistry 1 Laboratory ( <b>Critical Tracking</b> ; Gen Ed Biological and Physical Sciences)	4
Electives		5
<b>Credits</b>		<b>15</b>

<b>SEMESTER FOUR</b>		
<u>MCB 2000</u> & <u>2000L</u>	Microbiology and Microbiology Laboratory (Gen Ed Biological Sciences)	4
<u>STA 2023</u>	Introduction to Statistics 1 ( <b>Critical Tracking</b> ; Gen Ed Mathematics)	3
	Gen Ed Diversity or International	3
	Electives	5
	<b>Credits</b>	<b>15</b>
<b>SEMESTER FIVE</b>		
<u>AEB 3133</u>	Principles of Agribusiness Management	3
<u>ANS 3006</u> & <u>3006L</u>	Introduction to Animal Science and Introduction to Animal Science Laboratory ( <b>Critical Tracking</b> )	4
<u>ANS 3217C</u>	Equine Health Management	2
<u>ANS 3440</u>	Principles of Animal Nutrition	4
<u>ANS 3934</u>	Careers in the Livestock Industry	2
	<b>Credits</b>	<b>15</b>
<b>SEMESTER SIX</b>		
<u>AGR 4231C</u>	Forage Science and Range Management	4
<u>ANS 3319C</u>	Reproductive Physiology and Endocrinology in Domestic Animals ( <b>Critical Tracking</b> )	4
<u>ANS 3384C</u>	Genetics of Domestic Animals	3
	<del>Approved Food and Resource Economics elective</del> <u>Approved Agricultural and Life Sciences electives</u>	3
	<b>Credits</b>	<b>14</b>
<b>SUMMER AFTER SEMESTER SIX</b>		
<u>ANS 4941</u>	Full-Time Practical Work Experience in Animal Science ( <b>Critical Tracking</b> )	3-8
	<b>Credits</b>	<b>3-8</b>
<b>SEMESTER SEVEN</b>		
<u>ANS 3043</u>	Growth and Development of Farm Animals ( <b>Critical Tracking</b> )	3
<u>ANS 3405</u>	Equine Nutrition and Feeding Management	2

Approved Equine Practicum elective	2
<del>Approved Food and Resource Economics elective</del> <u>Approved Agricultural and Life Sciences electives</u>	3
Electives	4
<b>Credits</b>	<b>14</b>
<b>SEMESTER EIGHT</b>	
<u>ANS 4079C</u> Relationship of Form to Function in Horses	3
<u>ANS 4234</u> Horse Enterprise Management	2
<u>ANS 4931</u> Senior Seminar ( <b>Critical Tracking</b> )	1
Approved Equine Practicum elective	1
Electives	6
<b>Credits</b>	<b>13</b>
<b>Total Credits</b>	<b>120</b>
Plan of Study Grid	