

Cover Sheet: Request 10760

ANS4XXX Applied Ruminant Reproduction

Info

Process	Course New Ugrad/Pro
Status	Pending
Submitter	Imler, Amie M amie.taylor@ufl.edu
Created	2/4/2016 6:52:12 PM
Updated	11/21/2016 9:59:08 AM
Description of request	Provide an in depth overview of applied bovine reproductive management and the factors that affect the efficiency of reproduction including managerial, biological, and economical.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 514909000	Tenbroeck, Sandra Hodge		2/4/2016
Deleted 4932_yelich.pdf					2/4/2016
College	Recycled	CALS - College of Agricultural and Life Sciences	Brendemuhl, Joel H	See notes from CALS CC on 2-12-16.	2/22/2016
No document changes					
Department	Approved	CALS - Animal Sciences 514909000	Tenbroeck, Sandra Hodge		9/6/2016
Deleted ANS 4932 - NEW - AppRumRepro.docx					3/3/2016
Replaced ANS 4932 - NEW - AppRumRepro.docx					5/4/2016
College	Approved	CALS - College of Agricultural and Life Sciences	Brendemuhl, Joel H	Corrections required by the CALS CC have been made. The graduate course is also pending at the GCC.	11/21/2016
Replaced ANS 4932 - NEW - AppRumRepro.docx					11/21/2016
Added ANS4932CAppReproSyllabus UG Request 2016 V4.docx					11/21/2016
Added ANS5312CAppReproSyllabus Grad Request 2016 V4.docx					11/21/2016
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			11/21/2016
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					

Step	Status	Group	User	Comment	Updated
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 10760

Info

Request: ANS4XXX Applied Ruminant Reproduction

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

Submitter: Imler, Amie M amie.taylor@ufl.edu

Created: 5/4/2016 1:58:43 PM

Form version: 4

Responses

Recommended PrefixANS

Course Level 4

Number XXX

Lab Code C

Course TitleApplied Ruminant Reproductive Management

Transcript TitleApplied Rum Repro

Effective Term Earliest Available

Effective YearEarliest Available

Rotating Topic?No

Amount of Credit4

Repeatable Credit?No

S/U Only?No

Contact Type Regularly Scheduled

Degree TypeBaccalaureate

Weekly Contact Hours 5

Category of Instruction Joint (Ugrad/Grad)

Delivery Method(s)On-Campus

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

Prerequisites ANS 3319C

Co-requisites none

Rationale and Placement in Curriculum to provide students in Animal Sciences with an advanced ruminant reproductive management course that teaches them palpation and breeding skills needed for careers in the dairy and beef industry

Course Objectives 1) Discuss the underlying physiological mechanisms regulating components of ruminant reproductive management programs with emphasis in beef and dairy cattle.

2) Introduce the utilization of emerging reproductive technologies including semen collection, semen cryopreservation, AI, estrous synchronization, embryo transfer, and IVF and discuss how these technologies can be incorporated into reproductive management programs in dairy and beef cattle.

3) Demonstrate and provide hands on experience so students will learn how to determine pregnancy status by rectal palpation and artificially inseminate dairy and beef cattle.

4) Be capable of solving reproductive management problems utilizing the reproductive technologies previously discussed with an emphasis on economic &

production efficiency in beef & dairy operations.

Course Textbook(s) and/or Other Assigned Reading There is no required textbook for the course. Reading assignments will come from research and popular press articles, extension fact sheets, and book chapters.

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. 39th Annual 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.

Weekly Schedule of Topics Week: 1

Lecture - Introduction, Reproductive Losses, Review of the Estrous Cycle

Lab - ANS Bldg: Female Anatomy Review & Pregnancy Determination, Palpation

Week 2:

Lecture: Puberty

Lab: Palpation

Week 3:

Lecture: Heifer Development

Lab: Palpation

Week 4:

Lecture: Estrous Synchronization

Lab: Palpation

Week 5:

Lecture: Estrous Synchronization, Estrous Detection, Artificial Insemination/Sexed Semen

Lab: Palpation

Week 6:

Lecture: Embryonic Development

Lab: Palpation

Week 7:

Lecture: Pregnancy and Parturition

Lab: Palpation
 Week 8:
 Lecture: Peripartum Management
 Lab: AI
 Week 9:
 Lecture: Postpartum Reproduction
 Lab: AI
 Week 10:
 Lecture: Male Reproduction
 Lab: AI
 Week 11:
 Lecture: Cyropreservation of Semen, Breeding Soundness Exam
 Lab: AI
 Week 12: Breeding Soundness Exam
 Lab: AI
 Week 13:
 Lecture: Breeding Season Management
 Lab: AI
 Week 14:
 Lecture: Embryo Transfer, Reproductive Management/Economics
 Lab: Southeastern Semen Services Field Trip
 Week 15:
 Lecture: Reproductive Management/Economics
 Lab: Breeding Soundness Exams
 Week 16:
 Lecture: Repro Plan Presentations
 Lab: Embryo Transfer

Grading Scheme	Two-hour exams (100 pts each)	200 pts
	Final Written Exam (Cumulative)	200 pts
	Reproduction Plan (Plan 50 pts & Presentation 50 pts)	100 pts total (Computer simulation on estrous synchronization economics)
	Lab attendance (Each lab missed results in -5 pts)	100 pts
	Lab assignments (10 pts each) 50 pts total (Instructions provided at time of assignment)	
	Total	650 pts

A = 94
 A- = 90 to < 94
 B+ = 87 to < 90
 B = 83 to < 87
 B- = 80 to < 83
 C+ = 77 to < 80
 C = 73 to < 77
 C- = 70 to < 73
 D+ = 67 to < 70
 D = 63 to < 67
 D- = 60 to < 63
 E < 60

Instructor(s) Joel Yelich

**ANS 4XXXC Fall XXXX
(4 Credits)**

Applied Ruminant Reproductive Management

Instructor: Dr. Joel V. Yelich
Animal Sciences Building, Room 125h
Office Hours: Open or by appointment
Voice: 352-392-7560 **E-Mail:** yelich@ufl.edu

Lecture: **Tuesday** 10:40-11:30 AM (Period 4); **Thursday** 10:40 AM-12:35 PM (Periods 4/5); Rm 151 Animal Sciences

Lab: **Tuesday** 1:55-4:55 PM (Periods 7-9). Laboratories will be held at Animal Science Building, Dairy Unit, and Beef Units. Refer to laboratory schedule for weekly lab locations.

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

Prerequisites: ANS 3319C Reproductive Physiology and Endocrinology of Farm Animals

Learning

- Objectives:**
- 1) Discuss the underlying physiological mechanisms regulating components of ruminant reproductive management programs with emphasis in beef and dairy cattle.
 - 2) Introduce the utilization of emerging reproductive technologies including semen collection, semen cryopreservation, AI, estrous synchronization, embryo transfer, and IVF and discuss how these technologies can be incorporated into reproductive management programs in dairy and beef cattle.
 - 3) Demonstrate and provide hands on experience so students will learn how to determine pregnancy status by rectal palpation and artificially inseminate dairy and beef cattle.
 - 4) Be capable of solving reproductive management problems utilizing the reproductive technologies previously discussed with an emphasis on economic & production efficiency in beef & dairy operations.

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. See attached reading list.

Grading & Exams:	Two-hour exams (100 pts each)	200 pts
	Final Written Exam (Cumulative)	200 pts
	Reproduction Plan (Plan 50 pts & Presentation 50 pts) (Computer simulation on estrous synchronization economics)	100 pts
	Lab attendance (Each lab missed results in -5 pts)	100 pts
	Lab assignments (10 pts each) (Instructions provided at time of assignment)	50 pts

Total 650 pts

Letter grades will be awarded on a percentage scale calculated from the points listed above:

A	≥ 94	B+	≥ 87 to < 90	C+	≥ 77 to < 80	D+	≥ 67 to < 70	E < 60
A-	≥ 90 to < 94	B	≥ 83 to < 87	C	≥ 73 to < 77	D	≥ 63 to < 67	
		B-	≥ 80 to < 83	C-	≥ 70 to < 73	D-	≥ 60 to < 63	

Information regarding University Policy on grade point equivalencies and calculation of grade points can be found at this web address: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Please note: This course is taught concomitant with ANS 5312C, the graduate student version of the course. The graduate students will have different grading requirements compared to the undergraduate 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.

Exams:	Exam 1	October, 1 (Thursday in class)
	Exam 2	November, 5 (Thursday in class)
	Final Exam:	December, 18 (Friday 7:30-9:30 AM)

Attendance & Make-up Work:

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, activity, or religious holiday (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](#).
- 4) Other absences may be excused if consistent with university 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>.

Important Dates:

Sept. 7 (Monday)	Labor day (No classes).
Sept. 18 (Friday)	Deadline to withdraw and receive a 25% fee refund (W assigned).
Nov. 6 (Friday)	Homecoming (No classes).
Nov. 11 (Wednesday)	Veterans Day (No classes).
Nov. 23 (Monday)	Deadline to withdraw without receiving failing grades. Deadline to drop a course by petition without receiving a WF.
Nov. 25-28 (Wednesday - Friday)	Thanksgiving (no classes).
Dec. 9 (Wednesday)	Last Day of Classes.
Dec. 12, 14-18	Final Exams.

Online course Evaluation:

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.u.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.u.edu>."

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 Services:

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/

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 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/

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

- **Career Resource Center**, First Floor JWRU, 352-392-1601 www.crc.ufl.edu/
- **U Matter We Care**, www.umatter.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.**

Student**Complaints:**

Residential Course: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

Online Course: <http://www.distance.ufl.edu/student-complaint-process>

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. 39th Annual 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 4xxxC Lecture and Lab Schedule

Week #	Lecture Topic	Lab Location and Topic
1	Introduction	<i>ANS Bldg: Female Anatomy Review & Pregnancy Determination</i>
1	Reproductive Losses	
1	Review of the Estrous Cycle	<i>Palpation</i>
2	Puberty	
2	Puberty	<i>Palpation</i>
3	Heifer Development	
3	Heifer Development	<i>Palpation</i>
4	Estrous Synchronization	
4	Estrous Synchronization	<i>Palpation</i>
5	Estrous Synchronization	
5	Estrous Detection	<i>Palpation</i>
5	Artificial Insemination/Sexed Semen	
6	Embryonic Development	<i>Palpation</i>
7	Pregnancy and Parturition	
7	Pregnancy and Parturition	<i>Palpation</i>
8	Peripartum Management	
8	Peripartum Management	<i>Beef Teaching Unit - AI</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>Santa Fe Beef Unit- Breeding Soundness Exams</i>
16	Repro Plan Presentations	
16	Repro Plan Presentations	<i>BTU and ANS Bldg – Embryo Transfer</i>
Dec	<i>Final Exam</i>	

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 6312C Fall XXXX
(4 Credits)**

Applied Ruminant Reproductive Management

Instructor: Dr. Joel V. Yelich
Animal Sciences Building, Room 125h
Office Hours: Open or by appointment
Voice: 352-392-7560 **E-Mail:** yelich@ufl.edu

Lecture: **Tuesday** 10:40-11:30 AM (Period 4); **Thursday** 10:40 AM-12:35 PM (Periods 4/5); Rm 151 Animal Sciences

Lab: **Tuesday** 1:55 – 4:55 PM (Periods 7-9). Laboratories will be held at Animal Science Building, Dairy Unit, and Beef Units. Refer to laboratory schedule for weekly lab locations.

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

Prerequisites: ANS 3319C Reproductive Physiology and Endocrinology of Farm Animals

Learning Objectives:

- 1) Introduction to the utilization of emerging reproductive technologies including semen collection, semen cryopreservation, AI, estrous synchronization, embryo transfer, and IVF and discuss how these technologies can be incorporated into reproductive management programs in dairy and beef cattle.
- 2) To discuss the underlying physiological mechanisms that regulate the effectiveness of the reproductive management technologies from Learning Objective 1, with the objective of being able to teach either undergraduates and/or producers the important concepts of management programs.
- 3) Demonstrate and provide hands on experience so students can determine pregnancy status by rectal palpation and how to artificially inseminate dairy and beef cattle.
- 4) Be capable of solving cowherd reproductive problems using the management and reproductive technologies discussed in this class with an emphasis on economic & production efficiency.
- 5) Utilizing the knowledge gained from this class, write a paper on a reproductive management topic of ones choice that can be used to educate beef and/or dairy producers and be published by the student.

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. See attached reading list.

Grading & Exams:	Two-hour exams (100 pts each)	200 pts
	Final Written Exam (Cumulative)	200 pts
	Final Oral exam	100 pts
	Reproduction Plan (Plan 50 pts & Presentation 50 pts)	100 pts
	(Computer simulation on estrous synchronization economics)	
	Lab attendance (Each lab missed results in -5 pts)	100 pts
	Lab worksheets (10 pts each)	50 pts
	(Instructions provided at time of assignment)	
	Research paper (10 page maximum) or EDIS publication	150 pts
	(Paper can be either a review of the literature relative to dairy or beef reproductive management or an EDIS publication on a bovine reproductive management topic)	<u>Total 900 pts</u>

Letter grades will be awarded on a percentage scale calculated from the points listed above:

A	≥ 94	B+	≥ 87 to < 90	C+	≥ 77 to < 80	D+	≥ 67 to < 70	E < 60
A-	≥ 90 to < 94	B	≥ 83 to < 87	C	≥ 73 to < 77	D	≥ 63 to < 67	
		B-	≥ 80 to < 83	C-	≥ 70 to < 73	D-	≥ 60 to < 63	

Information regarding University Policy on grade point equivalencies and calculation of grade points can be found at this web address: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Please note: This course is taught concomitant with ANS 4XXXC, the undergraduate version of the course. Undergraduates will have different grading requirements compared to 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 listed above.

Exams:	Exam 1	October, 1 (Thursday in class)
	Exam 2	November, 5 (Thursday in class)
	Final Exam:	December, 18 (Friday 7:30-9:30 AM)

Attendance & Make-up Work:

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, activity, or religious holiday (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](#).
- 4) Other absences may be excused if consistent with university 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>.

Important Dates:

Sept. 7 (Monday)	Labor day (No classes).
Sept. 18 (Friday)	Deadline to withdraw and receive a 25% fee refund (W assigned).
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Nov. 25-28 (Wednesday - Friday)	Thanksgiving (no classes).
Dec. 9 (Wednesday)	Last Day of Classes.
Dec. 12, 14-18	Final Exams.

Online course Evaluation:

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.u.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.u.edu>."

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 Services:

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/

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 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/
Counseling Services, Groups & Workshops, Outreach & Consultation, Self-Help Library, Wellness Coaching
- **Career Resource Center**, First Floor JWRU, 352-392-1601 www.crc.ufl.edu/
- **U Matter We Care**, www.umatter.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.**

Student**Complaints:**

Residential Course: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

Online Course: <http://www.distance.ufl.edu/student-complaint-process>

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.
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ANS 6312C Lecture and Lab Schedule

Week #	Lecture Topic	Lab Location and Topic
1	Introduction	<i>ANS Bldg: Female Anatomy Review & Pregnancy Determination</i>
1	Reproductive Losses	
1	Review of the Estrous Cycle	<i>Palpation</i>
2	Puberty	
2	Puberty	<i>Palpation</i>
3	Heifer Development	
3	Heifer Development	<i>Palpation</i>
4	Estrous Synchronization	
4	Estrous Synchronization	<i>Palpation</i>
5	Estrous Synchronization	
5	Estrous Detection	<i>Palpation</i>
5	Artificial Insemination/Sexed Semen	
6	Embryonic Development	<i>Palpation</i>
7	Pregnancy and Parturition	
7	Pregnancy and Parturition	<i>Palpation</i>
8	Peripartum Management	
8	Peripartum Management	<i>Beef Teaching Unit - AI</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>Santa Fe Beef Unit- Breeding Soundness Exams</i>
16	Repro Plan Presentations	
16	Repro Plan Presentations	<i>BTU and ANS Bldg – Embryo Transfer</i>
Dec	Final Exam	

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.