

For Academic Affairs and Research Use Only	
Proposal Number	
CIP Code:	
Degree Code:	

## NEW OR MODIFIED COURSE PROPOSAL FORM

- Undergraduate Curriculum Council
- Graduate Council

<input checked="" type="checkbox"/> New Course, <input type="checkbox"/> Experimental Course (1-time offering), or <input type="checkbox"/> Modified Course	(Check one box)
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Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

	ENTER DATE...
<b>Department Curriculum Committee Chair</b>	

<i>Donald W. Kennedy</i>	2-27-23 ENTER DATE...
<b>Department Chair</b>	

<i>[Signature]</i>	2-24-23 ENTER DATE...
<b>College Curriculum Committee Chair</b>	

	ENTER DATE...
<b>Director of Assessment (new courses only)</b>	

<i>Shirley A. [Signature]</i>	2/22/23 ENTER DATE...
<b>College Dean</b>	

	ENTER DATE...
<b>General Education Committee Chair (if applicable)</b>	

	ENTER DATE...
<b>COPE Chair (if applicable)</b>	

	ENTER DATE...
<b>Head of Unit (if applicable)</b>	

	ENTER DATE...
<b>Undergraduate Curriculum Council Chair</b>	

	ENTER DATE...
<b>Graduate Curriculum Committee Chair</b>	

	ENTER DATE...
<b>Vice Chancellor for Academic Affairs</b>	

**1. Contact Person (Name, Email Address, Phone Number)**  
 Jerica Rich  
[jerich@astate.edu](mailto:jerich@astate.edu)  
 870-972-3392

**2. Proposed starting term and Bulletin year for new course or modification to take effect**

Fall 2023

**Instructions:**

Please complete all sections unless otherwise noted. For course modifications, sections with a "Modification requested?" prompt need not be completed if the answer is "No."

3.

	Current (Course Modifications Only)	Proposed (New or Modified) <i>(Indicate "N/A" if no modification)</i>
Prefix		ANSC
Number*		6073
Title		<b>Cattle Reproduction &amp; Artificial Insemination Management</b> <b>(short title: Cattle Repro &amp; AI Mgmt)</b>
Description**		Field-based course to understand the reproductive physiology and endocrinological processes governing estrous cyclicity. Understanding of management decisions regarding reproduction of the cow-calf herd and inclusion of reproductive technologies like estrous synchronization and artificial insemination and their application. Summer.

\* (Confirm with the Registrar's Office that number chosen has not been used before and is available for use. For variable credit courses, indicate variable range. *Proposed number for experimental course is 9.*)

\*\*Forty words or fewer as it should appear in the Bulletin.

**4. Proposed prerequisites and major restrictions [Modification requested? Yes/No]**

(Indicate all prerequisites. If this course is restricted to a specific major, which major. If a student does not have the prerequisites or does not have the appropriate major, the student will not be allowed to register.)

a. NO Are there any prerequisites?

a. If yes, which ones?

b. Why or why not?

This is a very specialized topic, students will learn all of the advanced techniques needed during the duration of the course. While previous livestock experience is preferable, it is not necessary.

b. NO Is this course restricted to a specific major?

a. If yes, which major?

**5. Proposed course frequency [Modification requested? Yes/No]**

(e.g. Fall, Spring, Summer; if irregularly offered, please indicate, "irregular.") *Not applicable to Graduate courses.*

Summer (May Interim)

**6. Proposed course type [Modification requested? Yes/No]**

Will this course be lecture only, lab only, lecture and lab, activity (e.g., physical education), dissertation/thesis, capstone, independent study, internship/practicum, seminar, special topics, or studio? Please choose one.

Other: **Experiential Learning**

**7. Proposed grade type [Modification requested? Yes/No]**

What is the grade type (i.e. standard letter, credit/no credit, pass/fail, no grade, developmental, or other [please elaborate])  
**Standard letter**

**8. YES** Is this course dual-listed (undergraduate/graduate)? **ANSC 4723**

**9. NO** Is this course cross-listed?

*(If it is, all course entries must be identical including course descriptions. Submit appropriate documentation for requested changes. It is important to check the course description of an existing course when adding a new cross-listed course.)*

a. - If yes, please list the prefix and course number of the cross-listed course.

Enter text...

b. - **NO** Can the cross-listed course be used to satisfy the prerequisite or degree requirements this course satisfies?

Enter text...

**10. NO** Is this course in support of a new program?

a. If yes, what program?

Enter text...

**11. NO** Will this course be a one-to-one equivalent to a deleted course or previous version of this course (please check with the Registrar if unsure)?

a. If yes, which course?

Enter text...

## Course Details

**12. Proposed outline [Modification requested? Yes/No]**

(The course outline should be topical by weeks and should be sufficient in detail to allow for judgment of the content of the course.)

<b>Cattle Reproduction &amp; AI Management Schedule</b>			
Week	Materials	Assignments Open	Assignments Due
<b>1</b> May 10 <sup>th</sup> – 15 <sup>th</sup>	1. Anatomy & Estrous Cycle (pre-rec lecture) 2. Estrus Synchronization (pre-rec lecture) 3. Insemination technique (session 1/in person) 4. Insemination technique (session 2/in person) 5. Semen handling (videos/in person)	Quiz 1 (Graduate students: Essay Q1)	Quiz 1 Exam 1

<p style="text-align: center;"><b>2</b> May 17<sup>th</sup> – 21<sup>st</sup></p>	<ol style="list-style-type: none"> <li>1. AI vs NS (pre-rec lecture)</li> <li>2. Perform AI on the cow-calf herd (in-person)</li> <li>3. Pregnancy Detection Methods (pre-rec lecture)</li> <li>4. Expected Pregnancy Rates (video)</li> </ol>	<p style="text-align: center;">Quiz 2 (Graduate students: Essay Q2) Exam 2</p>	<p style="text-align: center;">Quiz 2</p>
<p style="text-align: center;"><b>3</b> May 24<sup>th</sup> – 28<sup>th</sup></p>	<ol style="list-style-type: none"> <li>1. Management Factors (video)</li> <li>2. All Things Beef Reproduction Webinar (video)</li> <li>3. Summary Class Discussion &amp; Closing Survey &amp; Open Question Forum for students</li> </ol>	<p style="text-align: center;">Quiz 3 (Graduate students: Essay Q3)</p>	<p style="text-align: center;">Exam 2 Quiz 3</p>
<p style="text-align: center;"><b>4</b> May 31<sup>st</sup></p>	<ol style="list-style-type: none"> <li>1. Graduate Student Research Papers Due</li> <li>2. Final Exam</li> </ol>		<p style="text-align: center;">Exam 3 Final Exam</p>

**13. Proposed special features** [Modification requested? Yes/No]

(e.g. labs, exhibits, site visitations, etc.)

Field-based experiences will be provided at the ASU Agricultural Teaching and Research Center on campus.

**14. Department staffing and classroom/lab resources**

Enter text...

a. Will this require additional faculty, supplies, etc.?

**Yes, some PPE materials for artificial insemination will be provided for student use.**

1. O/B non-spermicidal lubricant
2. O/B palpation sleeves
3. Gloves

**15. NO** Does this course require course fees?

*If yes: please attach the New Program Tuition and Fees form, which is available from the UCC website.*

## Justification

### Modification Justification (Course Modifications Only)

#### 16. Justification for Modification(s)

Enter text...

### New Course Justification (New Courses Only)

#### 17. Justification for course. Must include:

- a. Academic rationale and goals for the course (skills or level of knowledge students can be expected to attain)

This course is intended to offer advanced technical training and application of topics pertaining to cattle reproductive management and inclusion of reproductive technologies proven to enhance profitability and efficiency of the cow-calf herd. The course will include essential traditional classroom learning and also provide a unique and structured opportunity for application of that information while providing hands-on and individual experience with a large livestock species. Courses such as this, with a focus on hands-on/experiential learning (high impact activities) are part of an area of emphasis in the College of Agriculture strategic plan.

- b. How does the course fit with the mission of the department? If course is mandated by an accrediting or certifying agency, include the directive.

The mission of the College of Agriculture is to discover, develop, and disseminate knowledge in agricultural and environmental systems to serve and benefit our students, the agricultural community and society. This course serves our students by preparing them with the technical knowledge and skills needed to handle large livestock in a safe low-stress manner, understand principles of reproductive management, and tie them back to the intricate physiology of the animal. In this course students will be required to integrate and apply multiple facets of information to help breed the cow-calf herd.

- c. Student population served.

**This serves graduate college of agriculture and animal science students. The college of agriculture is lacking 6000 level graduate courses, and this advanced and highly specialized field-based course provides a unique learning opportunity while allowing students aiming to attain a master's degree in animal science or agriculture to meet the credit requirements of their degree programs.**

- d. Rationale for the level of the course (lower, upper, or graduate).

This course serves as a 6000 level graduate elective for students in the college of agriculture. This experiential learning course deals with advanced topics of reproductive management specific to beef cattle. Students will be taught the underlying physiology of reproduction, how to perform the technique of artificial insemination, and to understand the connection between the intricate science and physiology of cattle and why we manage reproduction the way we do.

## Assessment

### Assessment Plan Modifications (Course Modifications Only)

- 18. NO** Do the proposed modifications result in a change to the assessment plan?  
*If yes, please complete the Assessment section of the proposal*

**Relationship with Current Program-Level Assessment Process (Course modifications skip this section unless the answer to #18 is “Yes”)**

- 19.** What is/are the intended program-level learning outcome/s for students enrolled in this course? Where will this course fit into an already existing program assessment process?

PLO: Students will demonstrate mastery of fundamental concepts in animal science.

PLO: Students will demonstrate depth in an emphasis area to support their professional goals.

This course provides a hands-on technical learning experience in advanced topics of reproductive management and will serve students in the animal science program within the college of agriculture; it also expands upon the fundamental concepts learned in lower level courses.

- 20.** Considering the indicated program-level learning outcome/s (from question #19), please fill out the following table to show how and where this course fits into the program’s continuous improvement assessment process.

*For further assistance, please see the ‘Expanded Instructions’ document available on the UCC - Forms website for guidance, or contact the Office of Assessment at 870-972-2989.*

<b>Program-Level Outcome 1 (from question #19)</b>	Students will demonstrate mastery of fundamental concepts in plant and soil sciences.
<b>Assessment Measure</b>	Rubric to assess content knowledge, student presentations, and student survey
<b>Assessment Timetable</b>	ANSC 6003 - Current Issues in Animal Science, taught every semester for senior standing students
<b>Who is responsible for assessing and reporting on the results?</b>	Dr. David Newman (course instructor) along with the College of Agriculture Animal Science faculty.

*(Repeat if this new course will support additional program-level outcomes)*

**Course-Level Outcomes**

- 21.** What are the course-level outcomes for students enrolled in this course and the associated assessment measures?

<b>Outcome 1</b>	Students will understand fundamental anatomy and physiology of cattle reproductive physiology and endocrinology
<b>Outcome 2</b>	Students will gain experience in animal behavior and handling, specifically low-stress handling that is conducive to successful reproduction and they will learn how to identify reproductive behaviors (“estrus / standing heat”).
<b>Which learning activities are responsible for this outcome?</b>	Students will watch lectures, professional presentations, and informational webinars regarding animal handling, reproductive anatomy, endocrinology and detection of estrus. Specific lecture materials will include pictures and video clips of outward displays of “estrus”, visualization of abattoir sourced cattle reproductive tracts, pharmaceutical products that allow for natural manipulation of the estrous cycle, students will also learn about estrus detection aids. All of these topics will then be applied for use on the ASU spring cow-calf herd.

Assessment Measure	Grading rubric and assessment of content knowledge via class discussions, quizzes, and examinations.
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<b>Outcome 3</b>	Students will learn the technique of artificial insemination. This requires transrectal palpation and manipulation of the reproductive tract to pass the artificial insemination catheter through the cervix and into the body of the uterus of the reproductive tract, where semen is deposited.
Which learning activities are responsible for this outcome?	Visual and tactile learning with the abattoir sources cattle reproductive tracts.
Assessment Measure	Grading rubric and instructor verification of catheter placement in the body of the uterus, both with the abattoir sourced "practice" reproductive tracts and with the ASU spring cow-calf herd.

*(Repeat if needed for additional outcomes)*

## Bulletin Changes

### Instructions

Please visit <http://www.astate.edu/a/registrar/students/bulletins/index.dot> and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Please include a before (with changed areas highlighted) and after of all affected sections.

\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.

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**ANSC 5743. Equine Nutrition** Principles of nutrition and their application to feeding horses will be taught. Digestive physiology, sources of nutrients, feeding and grazing programs for various classes of horses and interactions of nutrition, diseases, and environment will be discussed.

**ANSC 6003. Current Issues in Animal Agriculture** A discussion of current issues affecting production and human use of animal products for food, fiber, and medicine (D).

**ANSC 6007. Cattle Reproduction & AI Management** In this field-based course students will gain an understanding of reproductive physiology and endocrinological processes governing estrous cyclicity. Students will gain an understanding of management decisions regarding reproduction of the cow-calf herd and inclusion of reproductive technologies like estrous synchronization and artificial insemination. Students will then apply this advanced knowledge by serving as technicians to help breed the spring ASU cow-calf herd.

**ANSC 679V. Thesis**