

**Animal Science 425**  
**Gamete Physiology and Fertilization**  
([www.ansci.cornell.edu/courses/as425](http://www.ansci.cornell.edu/courses/as425))  
Course Policies, Fall, 2007

**Instructor**

Dr. John E. Parks, 201 Morrison Hall, 255-2865, jep5@cornell.edu

**Course Objectives**

The purpose of this course is to provide a forum for students with special interest in reproductive physiology to learn about current concepts related specifically to the structure and function of mammalian gametes, their union during fertilization, and early development of the totipotent mammalian embryo. Emphasis will be on cytological and molecular aspects of gametes and their interaction.

**Policies and Format**

- AS425 will meet in 163 Morrison throughout the term. Class will begin at 2:30 p.m. and end by 4:25 p.m.
- An overview of each scheduled topic will be presented in a lecture format during the first half of the period with a more focused discussion of a related research article, assigned in advance, during the first half of the following class period.
- One class period will be devoted to demonstrating a variety of laboratory procedures used in gamete physiology.
- All students are expected to participate in class discussions and attendance in class is mandatory. Discussions will focus on experimental design, methodology, and scientific data and its interpretation; but some historical perspective, information about authors, and other information should be included where pertinent.
- Student Discussion Leaders will be assigned each week to facilitate the discussion and will meet in advance with Dr. Parks to review the assigned article.

- Student Discussion Leaders are required to prepare and submit a 2-3 page (750 words) typewritten critique of the assigned article. The critique is due on the date that the paper is discussed.
- All students are responsible for reading research papers prior to class and discussing papers during class.
- A Reference List and Guidelines for Evaluating Scientific Articles will be distributed and posted on the AS425 web site.
- All students are encouraged to submit questions or observations about the assigned article to Dr. Parks in advance of the class. Questions may be about anything - background information, specific points in the paper that need clarification (scientific terms, techniques, etc.), the relevance of the information, anything! Responses to questions submitted by 11:00 p.m. on Tuesday prior to class will be posted on the eBulletin Board by 11:00 p.m. Wednesday.
- In addition to assigned reading, students are encouraged to share information from unassigned scientific articles, popular press, or other sources during in-class discussion or through the electronic Bulletin Board.

## Grading

Grades will be based on completing the assigned reading, participation in discussion groups, effectiveness in leading weekly discussions, and on written lecture exams. Exams will cover lecture material and major points from assigned articles. The format of exams will be short essays and discussion with some interpretation of figures and tables related to assigned reading. The second exam will cover only material presented after the first exam. Final grades will be determined as follows:

Graded Activity		Percent of Grade
Discussion	Participant	20%
	Leader	20%
	Critique	10%
Lecture Examinations	Exam I	25%
	Exam II	25%
Total		100%