

SEMINAR IN MOLECULAR EVOLUTION (ZOO 6930)

INSTRUCTOR

Stuart McDaniel, Professor, Department of Biology

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Office hours: By appointment, or drop in

COURSE DESCRIPTION

This class is a two-credit seminar course in evolution, genetics, and genomics. The class provides each student the opportunity to lead discussion and to exchange ideas with others on various student-selected topics in any area of the broad interdisciplinary fields of evolution, genetics, and genomics.

CLASS MEETINGS

Thursday Periods 5-6 (10:40-12:35).

Carr 222 (Zoology Library)

LEARNING OUTCOMES

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

1. Explain some current advances in the field of molecular evolution
2. Evaluate and synthesize journal articles
3. Lead a discussion with classmates
4. Develop discourse with scientists in differing fields of research

TEXTBOOKS

There are no required textbooks for this course, although you may find *Molecular Population Genetics* by Matthew W. Hahn a useful reference.

MATERIALS AND SUPPLIES FEES

None

WEEKLY TOPICS AND ASSIGNMENTS

Two students per class meeting will each select an article for the entire class to read and discuss. Thus, each student will have two opportunities to select papers and lead discussions. As Discussion Leaders will differ from week to week, the weekly topics will also vary according to the interests of the student leaders and the entire class.

Students are encouraged to select articles from any area within the broad interdisciplinary fields of evolution, genetics, and genomics. For example, previous courses reviewed articles on evolutionary rates and protein function and structure; protein evolution and bioinformatics; the origin of life; statistical models of DNA evolution; coalescent theory; the historical demography of humans; conservation genetics; and estimating the tree of life. I also will suggest some papers that were influential to me in developing my understanding of key questions in the field, although students are under no obligation to choose to discuss these papers.

STUDENT ATTENDANCE

Requirements for class attendance and work in this class are consistent with university policies that can be found in the catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Attendance is required and essential for success in this course and is a component of your grade. I understand that absences happen, but if you make this a habit, you are guaranteed to perform poorly. If you have a valid documented excuse and notify me in advance, you will be able to make up missed discussion assignments. I will determine this on an as-needed basis.

STUDENT EVALUATIONS

You will be evaluated on your participation in our weekly group discussions according to the following rubric:

0 points = Absent

1 point = Present but does not contribute

2 points = Participates in discussion by adding an opinion or asking a question

3 points = Participates in discussion by adding an opinion, posing a thoughtful question, and answering questions

4 points = Makes exemplary contributions to discussion by integrating concepts, introducing novel perspectives, and drawing out additional contributions from classmates.

We will meet 13 times this semester, and thus, the maximum point total is 52 points (i.e., $13 \cdot 4$). Your final grade will be based on the percentage of these total 52 points earned.

<u>Point Range (%)</u>	<u>Letter Grade</u>
≥90%	A
≥87%	A-
≥83%	B+
≥80%	B
≥77%	B-
≥73%	C+
≥70%	C
≥65%	C-
≥55%	D
<55%	E

CURRENT UF GRADING POLICIES FOR ASSIGNING GRADE POINTS

This information is available at <http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

UNIVERSITY'S HONESTY POLICY

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

ONLINE COURSE EVALUATION PROCESS

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.ufl.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.ufl.edu>.

UF COUNSELING SERVICES

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

STUDENTS WITH DISABILITIES

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. Please see the University of Florida Disability Resource Center website for more information at: <https://www.dso.ufl.edu/drc>.