BIOL 4110.02 - Undergraduate Seminar in Biology Spring 2018

Meeting time: 4:00 – 4:50 pm Tuesdays in LDB125

Instructor: Dr. Monte L. Thies

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Office hours: 11:00 - 12:00 TTh and by appointment

Course Description: BIOL 4110 is an undergraduate seminar designed to acquaint you with the profession of science, specifically the literature and work of scientists. This class seeks to help you develop skills in analyzing and critiquing scientific data, and in presenting data to your colleagues. Formal lecturing will be minimal. Most of this course consists of your individual effort, researching, formulating, practicing and delivering your seminar.

Course Objective: With completion of this course, the student will be have become familiar with the process and importance of reviewing and critically evaluating scientific literature by examining in detail a series of selected works written by Dr. Edward O. Wilson.

Required Text: Wilson, Edward O. 2006. *Nature revealed: selected writings, 1949-2006.* Johns Hopkins University Press, Baltimore.

CLASS ASSIGNMENTS AND GRADING

Presentation:

Each student will make a 10-15 minute PowerPoint presentation and lead a short discussion following that presentation twice during the course of the semester on two papers extracted from the book *Nature revealed: selected writings, 1949-2006*. The entire class will read all of the papers as preparation for a short discussion following each presentation and be expected to participate fully in the discussions. Presentation grades will be partially determined through peer review, whereby each class participant will fill out a short presentation evaluation form. The results of the student evaluations will be averaged and will account for 50% of the final presentation grades, with the other 50% coming from the instructor's evaluation. Score sheets (with the exception of my own) will be anonymous and will be returned to the presenters the following week.

Your two presentations will account for 40% (20% each) of your course grade.

Critiques:

Each student will be required to prepare a series of short critical reviews of the papers we will be discussing each week that were written by Dr. E. O. Wilson over the course of his academic career. This critique should not be a simple summary of the paper but also a critical review of the study in terms of objectives or hypotheses, experimental design, statistical methods, background research, clarity of presentation and accuracy.

Your paper critiques will account for 30% of your course grade.

Class Participation and Attendance:

Participation includes attendance, participation in discussion, and background reading. You will be expected to attend seminar every week.

Participation in class meetings consists of 1) being actively involved in class discussions; 2) offering constructive comments on your classmates' presentations and; 3) asking thoughtful questions and adding constructive comments, observations, and elements of interest to the open discussion about each paper being presented.

Only students with written documentation of an illness, family emergency, religious event or required participation in a college organized event will not be penalized for missing class. I will keep a written record of your attendance and participation in the form of questions or comments made during discussion. Weekly evaluation of student engagement will be recorded on a scale of 0 through 10 using the following guideline:

- 0-2 rarely, if ever, contributes;
- 3-4 occasional participation, but generally non-substantive, adding little new information;
- 5-6 occasional participation, but generally well thought out, useful contributions;
- 7-8 regular participation, sometimes useful, sometimes not;
- 9-10 regular participation, always useful.

Participation is worth 30% of your final grade.

Final Exam:

A final exam will **NOT** be administered in this class.

Final Grade Determination:

Presentation: 40% Paper critique: 30% Participation: 30%

90% and above will earn an A, 80% to 89% a B, and so on, using a standard 10-point scale.

BIOL 4110.02 CLASS SCHEDULE - SPRING 2018

Week	Topics
January 23/Week 1	Introduction/Overview/Presentation Schedule
January 30/Week 2	Open discussion regarding presentation and critique construction – "does" and "don'ts"
February 6/Week 3 Presenters	Student presentations: Papers 1 & 2 Bermudez, Yarima Scott, Maya
February 13/Week 4 Presenters	Student presentations: Papers 7 & 8 Medina, Jose Ryan, Aaliyah
February 20/Week 5 Presenters	Student presentations: Papers 13 & 14 Covington, Bethaney Wilson, Katelynn
February 27/Week 6	NO CLASS – Assignment will be posted to Blackboard
March 6/Week 7 Presenters	Student presentations: Papers 15 & 19 Ryan, Aaliyah Villarreal, Jovinna
March 13/Week 8	NO CLASS – Spring Break
March 20/Week 9 Presenters	Student presentations: Papers 31 & 32 Abulatan, Isaac Medina, Jose
March 27/Week 10 Presenters	Student presentations: Papers 37 & 39 <u>Lakhani, Shanila</u> <u>Baxter, Lydia</u>
April 3/Week 11 Presenters	Student presentations: Papers 43 & 44 Baxter, Lydia Lakhani, Shanila
April 10/Week 12 Presenters	Student presentations: Papers 47 & 52 Brown, Taylor Abulatan, Isaac
April 17/Week 13 Presenters	Student presentations: Papers 49 & 50 Scott, Maya Brown, Taylor
April 24/Week 14 Presenters	Student presentations: Papers 54 & 55 Wilson, Katelynn Bermudez, Yarima
May 1/Week 15 Presenters	Student presentations: Papers 58 & 59 Villarreal, Jovinna Covington, Bethaney

COURSE POLICIES

CLASSROOM RULES OF CONDUCT: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Students are to treat faculty and students with respect at all times. Students may use electronic devices such as computers, cell phones, and tablets in the classroom ONLY for course-related activities.

ACADEMIC DISHONESTY: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused in any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

VISITORS IN THE CLASSROOM: Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

RELIGIOUS HOLY DAYS: University policy states that a student who is absent from class for the observance of a religious holy day must be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. Students must be excused to travel for observance of a religious holy day. A student who wishes to be excused for a religious holy day must present the instructor with a written statement describing the holy day(s) and the travel involved. The instructor will provide the student with a written description of the deadline for the completion of the missed exams or assignments.

STUDENTS WITH DISABILITIES POLICY: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies may be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: NO accommodation can or will be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see