

**SUL ROSS STATE UNIVERSITY
EVOLUTION - BIO 4305 - FALL SEMESTER 2014**

PROFESSOR: Jim Zech
Office: 218 Warnock Science
Phone: 837-8114
E-MAIL: jzech@sulross.edu
OFFICE HOURS: By appointment *or* MWF: 10:00 –10:50 A.M.; T: 9:00 –9: 50 A.M.; 1:00 –1:50 P.M.

TIME AND PLACE: Web Delivered, Your Time and Place!

WEBINAR/IN PERSON MEETINGS: To Be Scheduled

TEXTS: Evolution, 3rd Edition; Douglas J. Futuyma (optional)
The Origin of Species; Charles Darwin (not optional!)
Various Papers! (not optional!)

PARTS:

Introduction
Evolution
Foundations: Definitions and History
Modern Synthesis
Speciation and Macroevolution

ASSIGNMENTS: Each assignment is self-explanatory. While some may vary in the amount of time required, all should be submitted, typed, double spaced, standard font (12), standard margins (1"), paragraphs indented, spell checked, grammar checked, in writing embedded within or as an e-mail attachment to Dr. Zech (jzech@sulross.edu). Each part of this course will be available for a limited amount of time (approximately 3 weeks; see important dates below) and all assignments within a specific part are due within that time period. **NO LATE ASSIGNMENTS WILL BE ACCEPTED.** Each assignment is worth 20 points with a single point lost for each format, grammar, and spelling mistake for maximum of 5 points per assignment. Each assignment should be approximately 1 page. My best advice is don't delay! Read the part as soon as it's available and complete the assignments before each deadline.

BEHIND THE SCENES (BTS): A BTS is a break from the current focus. It will contain additional information that may or may not include assignments.

BOOK REPORT AND RESEARCH PAPER:

The book report and research paper are extended assignments, and therefore have an extended due date. Regardless of when the book report and research paper appears, all are due the last day of the semester (see important dates below). Like regular assignments, the book report and research paper (following the format of the journal *Evolution*) should be submitted, typed, double spaced, standard font (12), standard margins (1"), paragraphs indented, spell checked, grammar checked, in writing embedded within or as an e-mail attachment to Dr. Zech (jzech@sulross.edu). While the book

report and research paper will be longer than a single page, there is no specific length required. The important thing will be to include all required aspects and answer all indicated questions.

IMPORTANT DATES:

25 AUG: INTRODUCTION AVAILABLE (MAINTAINED ENTIRE SEMESTER)

2 SEPT: EVILUTION AVAILABLE

29 SEPT: EVILUTION ASSIGNMENTS DUE

29 SEPT: FOUNDATIONS: DEFINITIONS AND HISTORY AVAILABLE

27 OCT: FOUNDATINS: DEFINITIONS AND HISTORY ASSIGNMENTS DUE

27 OCT: MODERN SYNTHESIS AVAILABLE

14 NOV: Last day to withdraw from any class with a W

17 NOV: MODERN SYNTHESIS ASSIGNMENTS DUE

17 NOV: SPECIATION AND MACROEVOLUTION AVAILABLE

26-28 NOV: THANSGIVING BREAK

3 DEC: SPECIATION AND MACROEVOLUTION ASSIGNMENTS DUE

3 DEC: Last class day, book report due, research paper due

8 DEC: Final Exam Available

9 DEC: Final Exam Due

POINT DISTRIBUTION:

Introduction:

- Assignments: 1 @ 20 = 20
- Evolution of Paper = 100

Evilution:

- Assignments: 10 @ 20 = 200

Foundations: Definitions and History:

- Assignments: 17 @ 20 = 340
- *Origin of Species* = 100

Modern Synthesis:

- Assignments: 8 @ 20 = 160

Speciation and Macroevolution:

- Assignments: 9 @ 20 = 180

Final Exam = 100

TOTAL POINTS: 1200

GRADING:

Your final grade in Evolution will be determined by the total points you receive divided by the total points possible and the scale listed below, with no deviation from this scale.

Grading Scale (percent of total points): A: 90-100; B: 80-89; C: 70-79; D: 60-69; and F: 59 and lower

RULES TO LIVE BY:

Don't plagiarize. Your words should be your own.

Don't just cut and paste from the internet.

Use citations for the material that you have used (format is your choice).

No team work, work alone.

Similar to exact assignments will receive zero points for all parties involved.

Watch those deadlines (see dates listed above)!

No late assignments will be accepted.

Anything that isn't clear, contact Dr. Zech (jzech@sulross.edu; 432-837-8114).

Messages will be sent via e-mail and/or posted on blackboard, get in the habit of checking both.

PROGRAM LEARNING OUTCOMES:

- Demonstrate a mastery of aerobic respiration and its significance for living organisms.
- Be able to identify evolution and the processes that influence it.
- Be able to identify the components of cell structure and their functions.
- Compare the fundamental concepts of Mendelian genetics.
- Compare and contrast the process of photosynthesis to other cellular processes.
- Be able to identify the processes of molecular biology.

OBJECTIVES OF THIS COURSE:

- Address current topics including evolution vs. intelligent design.
 - Understand the role of key figures and events in the history of evolution.
 - Study *Origin of Species* in order to understand its content and impact.
 - Explore natural selection, genetic drift, gene flow, and mutation as mechanisms of evolution.
 - Compare and contrast micro- and macroevolution.
 - Explore the different speciation concepts.
 - Research and present current knowledge surrounding the evolution of a particular topic.
-

DISTANCE EDUCATION STATEMENT: Students enrolled in distance education courses have equal access to the university's academic support services, library resources, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should submit online assignments through Blackboard or SRSU email (*e-mail for Evolution!*), which require secure login information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU webpage.

DISABILITIES INFORMATION:

Qualified students with disabilities needing academic or other accommodations to ensure full participation in the programs, services and activities at SRSU should contact Counseling and Accessibility Services, 112 Ferguson Hall, Box C-122, 432-837-8203.