

BSC 414 – Evolutionary Biology

Instructor: Dr. JP Slovak

Office: Science 231

Hours: mtwr 8-9

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Course objectives: The objective of this course is to develop a proper understanding of evolutionary biology.

Grading

Exam 1	50 points
Exam 2	50 points
Exam 3	50 points
FINAL Comprehensive EXAM	100 points
Writing	50 points
Total	300 points

A >270

B 240-269

C 210-239

D 180-209

Textbook: Evolution, 5th Edition, by Brian Hall. Jones and Bartlett Learning.

Student Learning Outcomes:

1. *Students can distinguish between natural selection and genetic drift.*
2. *Students can explain sources of variation in a population.*

Writing/Presentation A total of eight(8) abstracts will be written over the semester. These will consist of a summary of a current article more recent than 2006. Each paper should be between 1-2 pages. Limit your reading to refereed journals or respected popular science journals. These 8 articles should have a common theme. Each student will give a short weekly presentation on their paper(s). The abstracts will be due weekly except for weeks in which tests are scheduled or as instructed. It is imperative that you attend class and participate in the class discussion of the papers.

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment (see Student's Guide Handbook, Policies and Procedures, Conduct).

Plagiarism is a criminal activity. You must cite all sources of information. Copying of material, whether parts of sentences, whole sentences, paragraphs or entire articles, will result in a score of zero for your assignment and can result in further disciplinary action

Students with Disabilities: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services, Texas A&M University-Commerce, Gee Library, Room 132, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, StudentDisabilityServices@tamuc.edu

Schedule (Tentative)

Introduction(1)

Species(2)

Similarity and Patterns of Evolution(3)

Origin of Life(6)

Molecules and Protocells(7)

The first Cells(8)

Eukaryotic Cells(9)

Natural Selection(10,11)

Genes and Inheritance(12,13)

Natural Selection II (14,15)

Variation(16,17,18)

Speciation(22,23)

Attendance and Absences: You are expected to attend ALL scheduled lectures and labs and take the exams as scheduled. You will be held responsible for all information covered in lecture. Sign-in sheets will be circulated; please sign your name clearly. Do not sign anyone's name but your own... signing in for someone else is a form of academic dishonesty and will not be tolerated. Excessive unexcused absences will result in loss of points from your grade. For each five unexcused absences a reduction of ten (10) points will be subtracted from your final grade.

