BIOL 2371.001
Principals of Evolution
Life Sciences
Fall 2015

A. **COURSE INFORMATION**

BIOL 2371.001  
Class meeting time: 9:00-9:50 a.m. MWF  
Class location: CI 108  
Course Website: bb9.tamucc.edu

B. **INSTRUCTOR INFORMATION**

Instructor: Dr. Bart Cook III  
Office location: EN 309  
Office hours: 8:00 a.m. – 9:00 a.m MWF;  
Course meeting time 9:00-9:50A.M. MWF; CI 108  
Telephone: 825-2683  
e-mail: Bart.Cook@tamucc.edu  
Appointments: 10:00-11:00 a.m Friday

C. **COURSE DESCRIPTION**

Principles of Evolution (BIOL 2371) is a lower division lecture course that examines aspects of organismal evolution placing particular emphasis on adaption, diversity, speciation, selection, variation, and philosophy. Upon completion of the course, students will be expected to:

- Understand the history and development of the “modern evolutionary synthesis”
- Describe different modes and tempos of evolutionary change.
- Explain how the random, heritable variation occurs in organisms.
- Discuss how population genetics is the basis for treating evolution quantitavely.
- Explain how organisms adapt to different (and changing) environments.
- Use examples to illustrate basic trends in evolution (e.g., extinction, ecological release, competitive exclusion, gradualism, punctuated equilibrium. ) Discuss the relationship between evolution, systematics and development.

D. **PREREQUISITES AND COREQUISITES**

Prerequisite required BIOL 1407

E. **REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES**

Kardong, Kenneth 2008 2nd Edition  
An Introduction to Biological Evolution, McGraw Hill, Boston
F. INSTRUCTIONAL METHODS AND ACTIVITIES

There will be three (3) lecture exams, equally weighed during the semester. The mean(-x) of the two highest test scores represent the student course grade. All three (3) exams must be taken.

In general there will be no makeup exams. The only exceptions are makeup lecture exams based on prior approval of the instructor with a stipulated date for the makeup exam. The exceptions will be made only for students whose exams were in direct conflict with a University sanctioned activity.

G. MAJOR COURSE REQUIREMENTS AND GRADING

The following grade scale will be used in determining the course grade:

- A=90-100%
- B=80-90%
- C=70-80%
- D=60-70%
- F=0-60%

*At the discretion of the instructor, “curve points” may be added to the students final class average. If “curve points” are given each and every student will receive the same number of points. No extra credit is permitted.

H. COURSE CONTENT/SCHEDULE

BIOLOGY 2371
Reading Assignments

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<thead>
<tr>
<th>Chapters</th>
<th>TOPICS</th>
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<tbody>
<tr>
<td>1</td>
<td>Intro to Biological evolution, historical development</td>
</tr>
<tr>
<td>3,8</td>
<td>Hereditary, inheritance, Basis Genetics, Mutations</td>
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<td>4</td>
<td>Chemical basis of life, chemical coding</td>
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<tr>
<td>12</td>
<td>Populations, dynamics and some the factors influencing</td>
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<tr>
<td>3, Appendix 1</td>
<td>Cell Division, review of mitosis and meiosis</td>
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<tr>
<td>7,8</td>
<td>Natural selection, patterns, variation, Genetic drift</td>
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<tr>
<td>9,10</td>
<td>Origin of species and subspecies, co-evolution</td>
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<tr>
<td>2,4</td>
<td>The History and Origin if Life On Earth</td>
</tr>
<tr>
<td>5,6,13</td>
<td>Pattern of Evolution Extinction</td>
</tr>
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IMPORTANT NOTICE:
Every student is urged to keep abreast of and all opportunities about scholarships and research opportunities:

To subscribe to this information listserve:
1. Send an email to: opportunities-list-request@sci.tamucc.edu
2. In the subject field above, type: Subscribe

COLLEGE AND UNIVERSITY POLICIES

- Academic Integrity (University)
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
  See Full University Policy at http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity

- Deadline for Dropping a Course with a Grade of W (University)
  The grade of W will be assigned to any student officially dropping a course by November 6, 2015. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must submitted. After November 6, 2015 a student will not be allowed to drop a course.

- Grade Appeals (College of Science and Engineering)
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.
**Disability Services**

Disability Services (DS) is the hub for coordinating services and accommodations to ensure accessibility and utilization of all programs for all Texas A&M University-Corpus Christi students with disabilities. Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individual’s documentation of disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office at 116 Corpus Christi Hall or go to [http://disabilityservices.tamucc.edu/](http://disabilityservices.tamucc.edu/)

**GENERAL DISCLAIMER**

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.