Biology 1406 Introductory Biology  
Department of Life Sciences  
FALL 2016

A. COURSE INFORMATION
Course number/section: BIOL 1406_004 (Lec)  
Class meeting time: 8:00am-9:15am TR  
Class location: EN106  
Course Website: posted on Blackboard

B. INSTRUCTOR INFORMATION
Instructor: Terri Nicolau  
Office: EN 310 B  
Phone: 361-825-2166  
Office Hrs: M&W 11-12, T&R 930-11  
Email: terri.nicolau@tamucc.edu

C. COURSE DESCRIPTION
Catalog Course Description
This course is an overview of the major concepts in biological diversity and plant and animal biology. Laboratory work will include individual/team activities as well as technology-related assignments. This course counts toward the natural science component of the University Core Curriculum.

D. PREREQUISITES AND COREQUISITES
Co-requisites
- You must be registered for BOTH Lecture & Lab COMPONENTS of this course
- You must complete the safety seminar prior to lab (SMTE0091)

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
Required Textbook(s):
Campbell Biology in Focus 2nd ed., By Urry  
TEXT ISBN 9780134433769  
PUBLISHER: PEARSON

INTERNET AND WEBSITE REQUIREMENTS:
This course requires the use of the internet (Islander TAMU-CC email account, listserv, and web) to foster the technological abilities of the student. All students are expected to subscribe to and utilize the course Blackboard account regularly. If you don’t receive your TAMU-CC Islander email, you should check it and Blackboard prior to class.

Supplies
Note taking supplies are required for class. Lab Coats, closed toed and closed heel shoes for lab.
F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

Course Objectives:

- The Texas Higher Education Coordinating Board course objectives for courses such as bio 1406 that fulfill the core curriculum.
- All core courses address critical thinking and communications.
- Each core course addresses an additional two core objectives. Objectives addressed by bio 1406 are teamwork and Empirical and Quantitative reasoning.

- For the critical thinking objective, students will gather and assess information relevant to a question. In lab and lecture students will gather data about a situation, graph those data, interpret these data and explain to others what these data tell us about the situation.

- For the communication skills objective, students will develop, interpret, and express ideas through written communication in lecture, on assignments and on exams.

- For the empirical and quantitative reasoning objective, in lecture and lab students will manipulate and analyze numerical data and arrive at an informed conclusion. This objective will be linked to the communication skills objective because students will report their conclusions on lab reports, classroom assignments and exams.

- For the teamwork objective, students will integrate different viewpoints as a member of a team during group work in lecture and in lab. Because science is a group endeavor and interdisciplinary groups are increasing important in many fields within biology, assignments done in your team learning groups make up a large percentage of your grade in the course.

Student Learning Outcomes:

Students who complete this course will:

1. Experience for themselves the process of scientific inquiry and experimentation.
   - Construct hypotheses, identify relevant variables, and design experiments to test hypotheses.
   - Generate and analyze data using computer-assisted technologies.
   - Gain skills interpreting graphs and tables and using mathematics and statistics to evaluate data.
As a result, students will be able to distinguish between science and pseudo-science.

2. Appreciate the importance of ethics in science.
   - Understand the vital importance of an ethical approach to scientific inquiry.
   - Explore ethical issues that new technologies raise when applied to human society and to our biosphere.

3. Develop a working understanding of major biological concepts.
   - Evolution is the major unifying theme in biology.
   - Bioethics involved in biological decision making.

4. Learn to work as a part of a collaborative team in problem solving and will engage with other students in the learning process.
   - Practice scientific terminology.
   - Apply biological principles and the process of scientific inquiry to real-world problems.
   - Demonstrate their abilities to explain processes and relationships in a logical and precise manner.

5. Improve problem-solving skills and build abilities to critically evaluate scientific information.
   - Analyze claims of others as presented in the popular press, movies, and television.
   - Recognize that scientific understandings and the scientific process of inquiry are relevant to everyday life decisions.

Communication skills are improved through the development of both oral and written skills. Students will be introduced to appropriate scientific communication skills through technical writing and scientific presentation exercises. Students will have the opportunity to convey concepts by learning to represent information in illustrations, charts, and graphs and also through oral presentations.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course uses a variety of instructional methods and activities in order to facilitate student’s learning, including but not limited to: lecture, labs, group activities, student projects, research, and presentations.
H. MAJOR COURSE REQUIREMENTS AND GRADING

GRADE COMPUTATION:
Laboratory average (reports, quizzes, assignments, practical, etc.) 25%
Lecture average . 75%

The lecture average will be determined on a weighted percentage scale:

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of LECTURE GRADE</th>
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<tbody>
<tr>
<td>Lecture Exams</td>
<td>60%</td>
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<tr>
<td>Comprehensive final exam*</td>
<td>10%</td>
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<tr>
<td>Assignments, projects, quizzes,</td>
<td>20%</td>
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<tr>
<td>homework</td>
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<tr>
<td>Attendance &amp; participation</td>
<td>10%</td>
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Grades are weighted, so the point system often conflicts with the grades which are weighted and the percentage determined.

Grades are input into Blackboard as quickly as possible. Students should check Blackboard for their current lecture and lab averages, noting which assignments are recorded in Blackboard.

It is the student’s responsibility to check grades in Blackboard on a daily basis. Once grades are posted in Blackboard, the student will have only one week in which to address any errors regarding the grade. Bring any errors to the instructor’s attention immediately, so that the instructor can correct an error and address any question in a timely manner.
<table>
<thead>
<tr>
<th>Week</th>
<th>TOPIC</th>
<th>Topics</th>
<th>CH.</th>
<th>Reading &amp; other ASSNMTS* (add’l as assigned)</th>
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<tbody>
<tr>
<td>1</td>
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<td>Info sheet, syllabus, class policies</td>
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<tr>
<td>2</td>
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<td>Assignment: Read Ch1 &amp; 2</td>
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<td>Prefix/suffix assignment</td>
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<tr>
<td>3</td>
<td>Ch 2</td>
<td>Chemical Context of Life.</td>
<td>1-2</td>
<td>PREFIX SUFFIX ALL CHAPTERS READ PRIOR TO CLASS</td>
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<td></td>
<td>Ch 3</td>
<td>Carbon and the Molecular Div of Life</td>
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<td>POP QUIZZES OVER READING ASSIGNMENTS!!</td>
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<tr>
<td>4</td>
<td>Tue</td>
<td>TEST 1 (Tues)</td>
<td>TEST CH 1, 2, 3</td>
<td>TEST 1</td>
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<td>Thur</td>
<td>CH 4 (Thur)</td>
<td>Cell</td>
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<td>6</td>
<td>Ch 4</td>
<td>Cells</td>
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<td></td>
<td>CH 5</td>
<td>Membrane Transport and Cell Signaling</td>
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<td>7</td>
<td>Ch 6</td>
<td>Cellular Respiration and Fermentation</td>
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<td>8</td>
<td>Tue</td>
<td>TEST 2 (Tue)</td>
<td>TEST CH 4, 5, 6</td>
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<td>CH 7</td>
<td>Energy</td>
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<td>9</td>
<td>Ch 8</td>
<td>Photosynthesis</td>
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<td>Ch 9</td>
<td>The Cell Cycle</td>
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<td>10</td>
<td>Tue</td>
<td>TEST 3 (Tue)</td>
<td>TEST CH 7,8,</td>
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<td>CH 9</td>
<td>The Cell Cycle</td>
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<tr>
<td>11</td>
<td>Ch10</td>
<td>Meiosis and Sexual Life Cycles</td>
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<td>12</td>
<td>Ch 11</td>
<td>Mendel and the Gene Idea</td>
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<tr>
<td>13</td>
<td>Tue</td>
<td>TEST 4 (Tue)</td>
<td>TEST CH 9,10,11</td>
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<td></td>
<td>CH 12</td>
<td>The Chromosomal Basis of Inheritance</td>
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<td>14</td>
<td>Ch 13</td>
<td>The Molecular Basis of Inheritance</td>
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<td>Ch 14</td>
<td>Gene Expression: From Gene to Protein/Regulation of Gene Expression</td>
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<tr>
<td>15</td>
<td>Tue</td>
<td>TEST 5 (Tue)</td>
<td>TEST CH 12,13,14</td>
<td>FINAL</td>
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<td>Final review</td>
<td>FINAL CHAPTERS 1-15</td>
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<td>16</td>
<td>FINAL</td>
<td>TBA</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor.
The schedule may require adjustment. Additional assignments may or may not be provided at the Instructor’s discretion. Such assignments might include homework, group projects, reading assignments, quizzes, etc. Every attempt will be made to follow the time and evaluation schedules shown here. It is the student’s duty to attend each class and regularly visit BlackBoard to be aware of all assignments, deadlines, and changes to such.

I. COURSE POLICIES

ATTENDANCE POLICIES
Attendance is mandatory. Excused absences require contacting the instructor, prior to absence if possible. Students with a university approved scheduled absence (athletics, military duty, etc.) MUST contact the instructor well in advance of a scheduled absence.

Family vacations and celebrations of your birthday are worthwhile, but are not classified as excused absences. If you book an airplane flight or non-emergency appointment which conflicts with class, I do NOT consider that to be an excused absence. Routine events should be scheduled to avoid class conflicts. In general, only unavoidable and documented absences are excused (major family illness or accidents, deaths, funerals).

I WILL BE TAKING ATTENDANCE EACH CLASS. STUDENTS ARE GIVEN ONE UNEXCUSED ABSENCE PER SEMESTER FOR THIS CLASS. AFTER THAT ABSENCE, THEY WILL RECEIVE A FIVE (5) POINT DROP IN THEIR FINAL GRADE FOR EACH ADDITIONAL UNEXCUSED ABSENCE. LEAVING CLASS EARLY/ARRIVING LATE FOR CLASS WILL COUNT AS HALF (½) OF AN ABSENCE.

Unacceptable Excuses: Only unavoidable absences are excused (see above), so you should schedule routine personal events (e.g., vacations, wedding, reunions, non-emergency medical or dental visits, parent-teacher conferences, household or auto repairs) to avoid conflicts with your classes. Oversleeping is never an acceptable excuse. Employment conflicts are not acceptable excuses for absences, tardiness, or leaving class early. Texas waves jury duty for students, so jury duty is not an acceptable excuse. If you arrange to take any test at an alternate time and do not show for that appointment, then you forfeit the opportunity to take the test except at its originally scheduled time.

It is the responsibility of the student to obtain any material missed during an absence from his/her classmates. It is always your responsibility to determine what happened in class or laboratory during your absence. If you are absent, you must obtain any handouts or assignments from me in my office on your own time: I rarely bring assignments to class more than once. You must obtain class notes from other students.
Special circumstances may warrant deviating from these guidelines (including administering a “make-up” examination). This also applies to any situations for which you cannot provide an acceptable excuse as outlined above.

Late Work and Make-up Exams

Quizzes, Labs, and points missed because of an unexcused absence (including tardiness and leaving early) cannot be recovered. An excused absence (with documentation) allows me to make alternative arrangements for completing SOME assignments. The documentation required for an absence to be excused must be:

- from an appropriate source (e.g., doctor, dentist, funeral director) who states the nature of the event that caused (or will cause) your absence.
- in writing, on official stationary, and signed. (I do not return excuses to you.) Telephone calls, FAXes, and e-mails are not acceptable.
- presented prior to the absence for a scheduled event (e.g., university-sponsored activity, recognized religious holiday, military service).
- presented no more than one week after the date of an unexpected absence.

Extra Credit

I do not provide extra credit assignments for the course. I do occasionally offer extra credit points, but these are rare.

Cell Phone & Laptop Use

No cell phone, computer, iPad, iPod etc. use during class unless specified or approved by instructor. TEXTING – not during class or lab. For emergency purposes, (you must discuss with me first), you may have your cell phone ON SILENT, on your desk. If you get an emergency call, or text, please take it outside.

Missed Exam

No makeup exams will be allowed for an unexcused absence. All make up exams will be given the last week of the semester.

Participation

Group work, class activities, labs, and quizzes cannot be made up. So attendance and active participation are required of all students.

Other

ASSIGNMENTS are due on time. I do not accept late work. If you don’t understand an assignment, please do NOT wait until 10:00 the night before it is due to contact me about it. The same goes for studying for a test – please don’t wait until the last minute to demonstrate that you haven’t started studying yet. Procrastination on your part does NOT constitute an emergency on my part.
J. **COLLEGE AND UNIVERSITY POLICIES**

- **Academic Integrity (University)**
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **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. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/calendar/](http://www.tamucc.edu/academics/calendar/)) for the last day 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**
  The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816. http://disabilityservices.tamucc.edu/

- **Statement of Academic Continuity**
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

K. **OTHER INFORMATION**

- **Academic Advising**
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check
availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

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.