A. COURSE INFORMATION

Course number/section: SMTE 3316_001 (Lec)  SMTE 3316_101 (Lab)
Class meeting time: Mon-Thu 9:00am-11:50am
Class location: EN201
Course Website: Blackboard

B. INSTRUCTOR INFORMATION

Instructor: Terri Nicolau  Office: EN 310 B
Phone: 361-825-2166  Office Hrs: 12pm-1pm M-T
Email: terri.nicolau@tamucc.edu

C. COURSE DESCRIPTION

Emphasis on teaching biological concepts including cells, plants, vertebrate and invertebrate structural systems, cell biology, ecology, and other concepts relevant for K-8 science classrooms and associated with the Texas Essential Knowledge and Skills (TEKS). Instruction regarding pedagogical foundations are those that are contained in the Science Content Standards and Science Teaching Standards as prescribed by the National Science Education Standards, the National Science Teachers Association and the Texas Education Agency.

D. PREREQUISITES AND COREQUISITES

Co-requisites
You must be registered for BOTH COMPONENTS of this course: SMTE3316_001 & SMTE3316_101 AND FOR THE LAB SAFETY COURSE.

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
SMTE 3316 Foundations of Biological Sciences by C. McCollough course packet (available in Islander bookstore )
TAKS Reader : An interactive Student Textbook – McGraw-Hill Glencoe (optional)

INTERNET AND WEBSITE REQUIREMENTS:

This course requires the use of the internet (email, listserv, and worldwide web) to foster the technological abilities of the student. All students are expected to subscribe to and utilize the course Blackboard account regularly.
OTHER RESOURCES: The instructor will make additional learning resources (e.g., books, handouts, reserve articles, software, and websites) available during the semester. You will be given information about these resources. In addition, invited speakers may address various topics during this class.

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 expected to learn in this process is making clear the course's student learning outcomes.

Student Learning Outcomes:

Students who complete this course will:

1. Compare and contrast plant and animal cells and tissues
2. Demonstrate ability to use the microscope
3. Classify organisms as bacteria, protists or fungi
4. Identify basic plant structures
5. Outline a variety of plant life processes
6. Describe the basic life processes of animals
7. Discuss the scientific foundation of evolutionary processes.
8. Describe general classification of animals
9. Demonstrate the use of the scientific method in problem solving
10. Describe/demonstrate/discuss the theoretical and pedagogical methods in teaching the above material to elementary and middle school students. Such methods are according to the NSES, NSTA, TEA and other professional organizations that prescribes methods that are based on scientific research.
11. Learn the importance of culturally relevant teaching and use family learning events as an example of culturally relevant teaching; participate in a family learning event.

Communication skills are improved through the development of both oral and written skills. Students will be introduced to appropriate scientific communication skills through 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**

**EVALUATION**

Please refer to handouts for rubrics, criteria, and examples of completed assignments and examinations in order to identify expectations for these assignments.

Every student should have a clear idea of expectations prior to completion of the following assignments/test administration.

Any and all questions regarding expectations should be immediately referred to the instructor. Please do not wait until the day before the assignment is due to ask questions!

**NO E-MAILED ASSIGNMENTS WILL BE ACCEPTED! HARD COPIES MUST BE SUBMITTED WHEN DUE TO RECEIVE CREDIT!**

The course average will be determined on a percentage scale:

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of LECTURE GRADE</th>
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<tbody>
<tr>
<td>Lecture Exams</td>
<td>35</td>
</tr>
<tr>
<td>Comprehensive final exam*</td>
<td>10%</td>
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<tr>
<td>Family Science Project</td>
<td>10%</td>
</tr>
<tr>
<td>Assignments, projects, quizzes, homework</td>
<td>40%</td>
</tr>
<tr>
<td>Attendance &amp; participation</td>
<td>5%</td>
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### I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Time: CLASS</th>
<th>Time: LAB</th>
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<tbody>
<tr>
<td>TO BE ANNOUNCED</td>
<td>FAMILYSCIENCE NIGHT (1 Events)</td>
<td>Attendance is required</td>
</tr>
<tr>
<td>1</td>
<td>Syllabus, Intro, Expectations, Surveys</td>
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<tr>
<td>1</td>
<td>How People Learn</td>
<td>DR. CHERIE MCCOLLOUGH</td>
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<tr>
<td>1</td>
<td>A. Beliefs about Science  B. FOUNDATION II: Inquiry and Standards of Science Education</td>
<td>Candle Lab</td>
</tr>
<tr>
<td>1</td>
<td>Culturally Relevant Teaching in Science</td>
<td>Science DR. CHERIE MCCOLLOUGH</td>
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<tr>
<td>1</td>
<td>Evolution and Natural Selection(D)/ Teaching Evolution According to the State standards (E)</td>
<td>Evolution - Why Bother</td>
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<tr>
<td>2</td>
<td><strong>Exam 1</strong></td>
<td>Family Science Construction</td>
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<td>2</td>
<td>Ecology and Cycles</td>
<td>Family Science Construction</td>
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<tr>
<td>2</td>
<td>Family Science Construction</td>
<td>Wolves Assignment</td>
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<td>2</td>
<td>Cell Theory/Cell Structure assignment</td>
<td>Microscopes</td>
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<td>2</td>
<td>Mitosis/Meiosis and associated lab</td>
<td>Mitosis/Meiosis Lab</td>
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<tr>
<td>3</td>
<td><strong>Exam 2</strong> (Ecology, Cell Theory, Cells &amp; Cell structures, Mitosis/Meiosis)</td>
<td>Family Science Peer Evaluation</td>
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<tr>
<td>3</td>
<td>Classification and the Five Kingdoms</td>
<td>Viruses</td>
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<tr>
<td>3</td>
<td>Monera, Fungi, Protista</td>
<td>Porifera, Cnideria, Platyhelminthes</td>
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<tr>
<td>3</td>
<td>Porifera, Cnidera, Platyhelminthes</td>
<td>Mollusca</td>
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<tr>
<td>3</td>
<td>Annelida</td>
<td>Earthworm Dissection</td>
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<tr>
<td>4</td>
<td><strong>Exam 3</strong> Classification/5 Kingdoms, Monera, Fungi, Protista, Porifera, Cnideria, Mollusca, Annelida</td>
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<tr>
<td>4</td>
<td>Arthropoda/Echinodermata</td>
<td>Starfish Dissection</td>
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<tr>
<td>4</td>
<td>The Chordates:Fish, Amphibians</td>
<td>Fish Dissection</td>
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<tr>
<td>4</td>
<td>Reptiles, Birds</td>
<td>Dissect owl pellets/ Mammals</td>
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<tr>
<td>5</td>
<td><strong>Exam 4</strong> Arthropoda/Echinodermata, chordates, amphibians, reptiles, birds</td>
<td>Flowering plants, roots, stems, leaves</td>
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<tr>
<td>5</td>
<td>Circulatory/Respiratory System - heart dissection</td>
<td>Flower Dissection/ Viruses</td>
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<tr>
<td>5</td>
<td>Muscular System/Skeletal System</td>
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<tr>
<td>5</td>
<td>Final Exam</td>
<td>Final Exam</td>
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J. COURSE POLICIES

ATTENDANCE POLICIES
Attendance is mandatory. Excused absences require contacting the instructor. 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 AT 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) and will be referred to the Vice President of Student Affairs. 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. 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, 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.

K. 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/) 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.

L. **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.