The instructor of record is Dr. David J. Grisé.

Office EN 311, e-mail david.grise@tamucc.edu, phone 825 3477
class web site: Please see Blackboard.
Office hours will be posted on Blackboard. Other hours by appointment

Please note that class will meet Friday, 8 March and Friday, 29 March. Should you have a conflict and not be able to attend class on either of these days please let me know at least a week in advance. Decisions as to excuse a student from the assignment for these days will be made in accordance with University policies.

Schedule of exams and TLAs

1st TLA chapter 23, 1 February
2nd TLA chapter 24, 8 February
1st exam 15 February
3rd TLA chapter 26, 22 February
4th TLA chapter 27, 1 March
2nd exam 8 March
5th TLA chapter 36, 22 March
6th TLA chapter 38, 29 March
7th TLA chapter 40, 5 April
3rd exam 12 April
8th TLA chapter 45, 19 April
9th TLA chapter 53, 26 April
10th TLA chapter 54, 3 May
4th exam and comprehensive final, 13 May, 11:00 to 1:30

OVERALL CONTEXT

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.

- The Texas Higher Education Coordinating Board course objectives for courses such as bio 1407 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 critical thinking objective CT 2, gather and assess information relevant to a question, in lab and lecture students will gather data about a situation, graph their data, interpret these data and explain to others what these data tell us about the situation.
-For the communication skills objective CS 1 develop, interpret, and express ideas through written communication, students will develop, interpret, and express ideas through written communication in lecture, on Calibrated Peer Review assignments and on exams.

-For the empirical and quantitative reasoning objective EQS 1 manipulate and analyze numerical data and arrive at an informed conclusion, 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 TW 1 integrate different viewpoints as a member of a team, students will work as a member of a team during assignments 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 approximately 30% of your grade in the course.

**Specific learning outcomes for bio 1407**

- To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry.
- Be able to formulate testable hypotheses and predcations from these hypotheses.
- Have a functional knowledge of the theory of evolution and understand its importance as the unifying theme in biology.
- Understand how the modern synthesis combines evolutionary theory with Mendelian genetics and advances in other fields
- Have a working knowledge of the Hardy-Weinberg Law or Equilibrium. Understand that this is the basis of comparison and it is the as the expectation when no evolutionary forces at work in a population
- Understand how evolutionary forces (gene flow, genetic drift, mutation) act in populations and how these forces can lead to speciation or prevent speciation.
- Understand how the fundamental differences in animal and plant life cycles influence inheritance of mutations and speciation.
- Understand how natural selection can lead to a loss of genetic diversity in populations or can lead to maintenance of genetic diversity in populations
- Understand the mechanisms that can lead to speciation.
- Have an understanding of phylogeny and systematics.
- Understand a portion of the vast biological diversity on our planet
- Have a working knowledge of ecological concepts in population and community ecology
- Understand aspects of physiology including animal and plant body organization, transport in both groups and homeostasis.
- Understand that this is an important part of the syllabus to read because it summarizes what you should take away from the course.

**A community of learners.** You are part of the community of learners at Texas A&M University-Corpus Christi. I hope you are, or will become, an active member of this community. Each time I teach a course, I learn from students. I hope to establish an atmosphere in which students learn from each other. As a result of taking my class and working with your fellow students, I hope you learn how to learn about issues that have a biological basis. We should all be learning from each other.
and learning how to learn from each other. As a result of our collective efforts, I hope I continue to
improve as an instructor and that you benefit from taking my course.

**STUDENT-CENTERED LEARNING**

**-Lecture:** This is not an instructor-based class. If you do not start making the transition to become
an active, independent, self-directed learner you will not do well in this class. You have assistance
in making the transition to become an active, independent, self-directed learner. The instructor is
not the only person in the room with information about the topics covered in lecture. The lectures
are structured so that students can interact with other students during the class. If you have
questions about what is being covered in class, ask questions of other students during the time
allotted to discuss in-class Qwizdom questions.

**-Team Learning Assignments:** We will use a team learning approach in this class. The goal of a
team learning approach is to assist students in their development as independent learners. Students
will read material in the text. **The material for Team Learning Assignments will NOT be
covered in lecture.** Rather than lecturing on this material students can ask other students questions
about the material or ask questions during office hours. Students are expected to better understand
the material as a result of discussing the material during the group portion of the team learning
assignments.

Permanent team learning groups will be established at the start of the course. Students will answer
questions on their own then team learning groups will answer the SAME questions. Team learning
groups will submit group consensus answers to questions. Research examining team learning
assignments show that the group score is HIGHER than individual scores and that students
understand concepts much better as a result of discussing questions and course material in groups.
We will use the team learning approach on in-class team learning assignments as described below.

**In-class team learning assignments:** Students will come to class having read the assigned portion of
the text. These readings will be announced in lecture in advance of the in-class team learning
assignment. These readings will also be listed on the calendar on Blackboard. On Friday, using the
Qwizdom responders, students will INDIVIDUALLY submit their own answers to questions about
the text reading. Then, each team learning group will discuss the same questions and submit a
group answer to the questions.

Each in-class team learning assignment is worth 30 points. Your individual answers to these
questions count for 40% of your score (12 points) for the in-class team learning assignment. The
other 60% of the score (18 points) for each in-class team learning assignment will be based on your
group’s answers to the questions. You are not permitted to use the text or notes about the readings
for either portion of the assignment. After the group portion of the exam is completed, you may use
the text to better understand the answers to the questions or to appeal questions.

Students may not use cell phones at any time during Friday’s team learning assignment. If cell
phones are seen, they will be taken and placed up front where they can be picked up after class.

**Appeals:** Students may not use the text, notes, or other resources during either the individual or
group portions of in-class team learning assignments or team learning exams. However, once the
assignment or exam has been completed, students may use any resource they wish to appeal any
question for which the group feels the answer is incorrect or the question or answer choices are unclear. All appeals must be in writing, must fully explain why the group feels there is a problem with the question and must be agreed to by the entire group. All appeals must be to me before I leave the classroom. If the group’s appeal is granted, the scores of all group members will be adjusted.

Cell/smart phones and computers: Use of devices that can connect to the internet will not be allowed during the individual or group portion of team learning assignments or during group exams. If a student is found to be using a cell phone, smart phone, or computer the device will be taken and put on the desk up front so the student can pick up their device after class.

Absences: You MUST be present in class to receive points for the group portion of the team learning assignments. The only exceptions are medical appointments, religious obligations as described in the University catalog, and University sponsored events. In the case that you have a scheduled medical appointment, a religious obligation or University sponsored event that prevents you from attending lecture, please let me know in advance of lecture. Should you not be able to attend lecture due to a medical emergency, please let me know about the situation as soon as possible.

-Daily in-class assignments: For almost every lecture, there will be a question worth a small amount of points to start lecture. Also, during lecture there will be questions for points. Students are encouraged to discuss these questions with other members of their team learning group. In addition, there will be a few times when groups will work on questions related to course material. These questions are designed to help students understand how to answer questions on the exams.

-Qwizdom responders: You are required to bring your functioning Qwizdom responder to each class meeting. You MUST be present to receive credit for in-class assignments. The only exceptions are medical appointments, religious obligations as described in the University catalog, and University sponsored events. In the case that you have a scheduled medical appointment, religious obligation or University sponsored event that prevents you from attending lecture, please let me know in advance of lecture. Should you not be able to attend lecture due to a medical emergency, please let me know about the situation as soon as possible.

You are not permitted to use another student’s responder. Answering questions for another student not present in lecture is cheating and will not be tolerated. If you are seen using two responders, both will be confiscated and we will all sort it out later.

Answers to any type of Qwizdom question that are written on paper will NOT be accepted. There are no exceptions to this policy. I have a few responders that you can sign out should you forget your responder. I have extra batteries that you can sign out if your batteries go low. If you forget your responder and all my extra responders are signed out, you will not be able to answer the Qwizdom questions. To obtain a Qwizdom responder or batteries, we will require students to give us their ID or something of value to get a responder or batteries. Your ID or something of value will be returned after class when you return the responder or batteries.

I will NOT check the results of a Qwizdom assignment for ANY student. When you take an assignment using Qwizdom, the Qwizdom responder shows you the answer you selected. Be sure you see the answer you intended to select. Since I have been using the Qwizdom system, I have
checked answers at the request of students well over one hundred times. I have never found a problem with the Qwizdom system. Most of the time, a student mistakenly selected an incorrect answer or didn’t answer the question at all.

**INDIVIDUAL LECTURE EXAMS**
There are a total of five individual exams (three individual exams given during a lecture period and a two part final). The three individual exams given during a lecture period are 100 points each. The final is a two part exam for a total of 200 points. The first 100 points of the final covers the last block of material (it is the fourth individual exam). The second 100 points of the final covers material from the first three blocks of material. You may use calculators during all exams. However, use of cell phone calculators is **NOT** permitted. The use of i-pods or other electronic devices is **NOT** permitted.

I do not assign a curve to each exam.

Unless they make prior arrangements, ALL students MUST take the final exam at the assigned time. Please note that arrangements to take the exam at a different time require approval of the instructor.

- **Make-up exams**
I will follow University policy should you miss an exam due to a University-related event or religious obligations. For students missing exams for other reasons such as family events or illness, please contact me.

**RESOURCES REQUIRED FOR BIO 1407**
- **Lab coats.** All students are required to have a lab coat when entering the labs for any reason. In addition, to the lab coat, students must be wearing long pants and closed-toe, close-heel shoes to enter the labs at any time

- **All students must have a TAMU-CC e-mail account**
All students must have a TAMU-CC e-mail account (your islander account). I e-mail your grades to your islander e-mail account. Grades will **NOT** be posted anywhere! Please go to [http://www.tamucc.edu/ise.html](http://www.tamucc.edu/ise.html) to obtain a new islander account. Either check your islander e-mail account on a regular basis or forward your islander e-mail to your hotmail, yahoo, etc. e-mail account.


All or part of the following chapters in the text will be covered in this course: 22, 23, 24, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 44, 45,46,

**UNIVERSITY AND CLASS POLICIES**
**Class attendance**
My attendance policy is the same as the University's. Please read the University’s attendance policy in the catalog. I expect students to attend **every** scheduled class meeting **including labs**.
Attendance is not used to determine grades. If you come to class often, you should do well in my course. In addition, there will be in-class assignments during most lectures, so coming to lecture on a regular basis should result in a higher grade.

-Scores sent by e-mail
Please check your scores I send to your Islander e-mail account! It is your responsibility to be sure that I have correctly recorded your scores. From the time I e-mail grades for an assignment or exam, you have five class days to inform me there might be a problem with your score. After five class days, I will assume that scores for that assignment or exam are correctly recorded.

-Dropping the course
If you drop the class between 30 January and 12 April, you will be assigned a grade of W. Please be sure you read and understand the University’s drop policy in the catalog before you drop any class.

Academic Honesty
All students are expected to be familiar with TAMU-CC's Academic Honesty Statement

-Students with Disabilities and Veterans
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 or visit Disability Services at (361) 825-5816 in Driftwood 101.

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.

-Grade Appeal Process. As stated in University Rule 13.02.99.C2, Student Grade Appeals, 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 Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

-Academic Advising
The College of Science and Technology 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. The College’s Academic Advising Center is located in Faculty Center 178, and can be reached at 825-6094.
EVALUATION OF STUDENTS

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Assignment of course grades, all sections.
Grades for students in all sections of the course will be assigned as follows:

A= 89.5-100 % of the total points
B= 79.5-89.4 % of the total points
C= 69.5-79.4 % of the total points
D= 59.5-69.4 % of the total points

I use the above percentages to assign grades. After reading this section, you should know how I am going to assign grades. Please be sure you get enough points to get the grade you want. There will always be someone who just missed a D, or a C, or a B, or an A. I have to draw lines between grades. No matter where I draw the line, someone is on the wrong side of the line. Don't let that someone be you. You have plenty of help in my class. Take advantage of the resources I offer.

THERE IS NO EXTRA CREDIT!