

COURSE SYLLABUS

BIO 111: General Biology I

Instructor: E. Lunsford

Description: This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

Methods: Students will participate in interactive lecture, laboratory and discussion activities. Other methods of instruction will also be used.

Assumed Competencies: None

Topics and textbook chapter references *Note: These textbook chapters are reading assignments. Use your objectives as a reading guide.*

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|--------------------------------------|---------------------------|
| 1. Foundations of Biology, Diversity | 1 & Supplement [27 - 34] |
| 2. Chemistry | 2, 3, 6, 11 |
| 3. Cell Biology | 4, 5, 9, 11, 12 |
| 4. Metabolism | 6, 7, 8 |
| 5. Evolution | 12 & Supplement [22 - 26] |
| 6. Genetics | 10, 16 |

Evaluation: Grades for the class will be computed as follows.

Item	Weight	Note: A grade of Incomplete (I) will be assigned only in extreme cases and only with prior approval by the instructor.
Homework, quizzes	1	
Tests, projects, inquiry lab report	2	
Comprehensive final exam	3	

Grades will be assigned according to the following scale & your course average: 93-100 = A; 86-92 = B; 78-85 = C; 70-77 = D; below 70 = F.

Special Policies

1. Tests: If you are present on the day a test is given you will take the test with the class. Make up tests will be given in class during the last week of the semester. The instructor will alert you to the days scheduled for make up tests. When the class has officially ended, all missing test grades will be recorded as "zero."

2. Homework and Class work: Five points will be deducted from any late paper per class day late. To avoid this penalty for late work, turn in the assignment early, send it by someone or mail it to me at the school. It is essential that missed labs and other class activities be made up as soon as possible. If you are having trouble understanding an assignment, you may ask (in advance) for extra time to complete the assignment. Unless prior arrangements are asked for, arranged and approved, no homework or classwork will be accepted more than two (2) weeks after the due date. At this time, missing grades will be changed to "zero." When the

class has officially ended, all missing homework and class work grades will be recorded as "zero." If you are absent for a lab activity, you will need to make up the activity as quickly as possible. You will then have the same amount of time to complete and hand in the lab report as everyone else. After that point, late points will be deducted.

3. Attendance: Attendance is not counted as part of your course grade. However, regular attendance is usually critical in class success. If you need to arrive late or leave early, please enter or leave the room as quietly as possible. I would much prefer that you arrive late or leave early rather than be absent for an entire class. If you miss a class, in whole or in part, it is your responsibility to be prepared for the next class meetings. Do not assume that you simply need to copy one person's notes when you are absent. Please do not ask me to photocopy notes for you when you miss a class meeting. I will, however, be happy to meet with you about a class you missed. You should not simply stop attending class at any time during the semester. If you need to drop the course, do so by filling out a drop/add form. Failure to do so will result in a course grade of "F"

4. Scheduling Problems: I am more than willing to work with you when you have a personal emergency or a scheduling problem. Please notify me as far in advance as possible and I will decide what I can do about working around your conflict. I reserve the right to refuse any request.

5. Extra Credit Work: On some occasions, I may offer extra credit points to all students who are in class on any given day. Please do not ask me for individual extra credit assignments. This really would be unfair to the rest of the class.

6. Cheating: School policy dictates that students conduct themselves in accordance with generally accepted standards of scholarship and morality. Academic honesty is vital. Cheating will result in a grade of "zero" for the assignment in question. I will work hard to see that any episodes of cheating are brought to the attention of school officials. I consider the following things to be cheating:

- 1) Use of notes, text or any other source of stored information during any quiz, lab practical or test.
- 2) Copying anything from another student's paper. This includes homework, tests and quizzes inside or outside of class. This also includes students who have taken the class previously. Copying class notes is acceptable.
- 3) Giving or receiving any written or verbal communication about a test, quiz or homework assignment inside or outside of class.
- 4) Copying any information from any published source without giving proper citations. Ask me for help or go to the LAC if you do not understand how to cite published references.
- 5) Including false data in a lab report, journal or project. Do not even have a dream about turning in a lab report for a lab you have not actually done. I'll work with you to make it up. Then you can do the report.
- 6) Taking copies of tests from the classroom without approval.

Assignment Schedule

- Test 1 (topic 1) _____
- Test 2 (topic 2) _____
- Test 3 (topic 3) _____
- Test 4 (topic 4, 5) _____
- Project _____

Final Exam _____
Other _____

Laboratory Topics & Objectives: We will complete the following laboratory activities. This weekly schedule may change.

1. Measurement in the International System
2. Engage Activity & My Cousin's Animal
3. Use of the Scientific Literature
4. Designing a Scientific Investigation Through Inquiry & Research Report Writing
Note: This lab counts as a test grade.
5. The Use and Building of Taxonomic Keys
6. Dietary Biochemistry
7. The Microscope
8. Cellular Scavenger Hunt
9. Mitosis
10. Meiosis
11. DNA & Protein Synthesis
12. NO LAB: Do library research on taxonomy project
Note: The date is subject to change or may be eliminated if excess class time is missed due to extreme weather or other causes
13. Puzzling Pedigrees

Note: On occasion, unannounced quizzes may be given on lecture objectives or on laboratory activities.

Success in Class: I very much want each of my students to enjoy this class and to learn as much as possible. I spend a lot of time in an effort to keep up my part of a partnership in learning with my students. Your end of the partnership will also involve a lot of time. Most research on effective study techniques indicates that a student should spend at least 2 hours working outside of class for every hour that they spend in class. This means that the successful student should have a **minimum** of 12 hours of outside study time per week. Success is measured by understanding, learning and by grades. Twelve hours seems like a large amount of time. Here are some things that I would use my outside study time for:

1. **Read the assigned textbook chapters.** This is essential. Read your assignments before, during and after they are discussed in class. Be an active reader. Ask questions at the beginning of each section like Who? What? and How? Take notes as you read, use a highlighter and use your class objectives. Even if the reading seems to be making no sense, do it anyway. You will be surprised how much you actually remember. If your textbook is hard for you to read, look for another book in the library, go to Student Support Services or ask the instructor for suggestions.
2. **Review lecture notes daily.** No matter how busy you are, try to set aside 15-20 minutes

every day to review your notes. This is a very effective technique. Check for missing information and be ready to ask questions in class. Keep in mind that in-class lecture is only one small part of learning class material. I will assume that you have prepared for lecture beforehand. It is a very bad idea to neglect review and studying until just before a test.

3. Completing lab reports and other assignments. Although you might sometimes need to consult other references, your textbook and/or lab handouts are usually the best place to start. During lab, your goal should be to complete the lab procedures. Use remaining lab time to work on lab reports, or complete them for homework.

4. Come to Class Prepared: Know what will be going on in class before you even walk in the room. Be ready to get the most out of class time. Read your assignments. Be ready to ask questions. Lecture is only one tiny part of your class experience.

5. Make other study aids. Try making up your own flash cards, study questions, reading notes, etc. People tend to remember and understand information if they see it in a variety of ways.

6. Use other study references. Books can be found in the school library. Many web-based resources exist as well.

7. Participate in study groups. Study groups can be very effective in that students can share study ideas and hear other students' points of view. If your schedule allows for participation in a study group, this may be very useful to you.

8. Ask questions. Be prepared with any questions that you have each day. Ask questions in class or come to see me for individual help as necessary.

9. Review your class objectives. They are an effective guide for organizing your study. Tests are based directly on class objectives.

10. Tutoring: Ask for a tutor from the Learning Assistance Center in Oaks Hall. The service is free and can be highly useful.

11. Work Ahead on Major Projects: Break a project into small, manageable tasks. Work on these tasks throughout the course.

How to contact me: You are welcome to contact me any time you like. However, please note that you are not required to do so each time you are absent or late. I do encourage you to contact me regarding any extended absences. You may leave a message in my mailbox on the second floor of the Balsam center. You may leave a message on my voice mail (EXT. 351) or you may contact me by electronic mail: elunsford@southwesterncc.edu

If you have a DOCUMENTED disability and think you may need academic adjustments for this class, please see the Student Support Services office as soon as possible. An Educational Support Plan, outlining reasonable classroom adjustments, will be initiated as soon as you bring your documentation to the SSS office. **If you will not need academic adjustments, you do not have to disclose your disability.** Institutional responsibilities to provide academic adjustments, as governed by ADA and Section 504 of the Rehabilitation Act of 1973, begin after you disclose your disability to the SSS office.

Definitely study one week before tests; sooner if possible. Don't get behind because it is hard to catch up. Read the damn book. Show up for class.

Read, read, read. Do not miss class. Ask questions. Review notes daily. Read each chapter related to each unit. If you do not understand something ASK!!

If you like biology, it is fun. The taxonomy project that he gives at the beginning of the semester is hard. But, work on it all semester. Don't wait until the last day or minute. He is a fun guy but he means business.

Never miss a class. As for help if needed. Go by your syllabus. Never leave a blank on labs. Double check for hidden questions every time.

Use note cards to memorize definitions. Make sure you thoroughly answer objectives to use as a study guide. Be ready for time consuming work so make sure to manage your time before assignments are due.

Study for the tests in advance. Join a study group. Read the chapters!

There are a lot of extensive projects out of class so try to stay ahead and don't wait until the last minute because you'll find yourself struggling at the end of the semester.

If you don't study you will fail.

Don't be afraid to ask questions or for help from Eddie.

I asked my past semesters' students to give some "survival tips" or "advice" for new students. Here is what they had to say to you...

1. Take notes on everything, all the material is on objectives. Use your objectives for studying. 2. Ask questions when you don't understand. Eddie really wants to help, but you have to care and try hard. 3. Start early on taxonomy... it is worth it.

Take notes – always. Follow objectives for the tests. Do all the assignments and turn them in.

There is a lot of information to consume in this course, so definitely make time to study. Go strictly by the given objectives. Ask him if you need help. He will help. Do not be absent.

Do your work and study for tests. Mr. Lunsford is helpful and will answer questions. He is not unfair & if you do these two things you'll do great.

Read. Study at least 2 or 3 nights a week. Read notes occasionally. Ask questions. Read syllabus and follow it.

Approach the course with an open mind. Take good notes. Do not procrastinate on assignments. Try not to miss class. If you do not understand a concept ASK! He is very willing to help and he wants each student to learn.

DRAWING