

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. Note: Students may not apply both BIO 110 and BIO 111 toward completion of Arts & Sciences Natural Science requirement.

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 include reading assignments. Use your topic objectives as a reading guide.*

1. Foundations of Biology, Diversity	1, Appendices C, E, F
2. Chemistry	2, 3, 4, 5, Appendix B
3. Cell Biology	6, 7, 12, 13, 16, 17, Appendix D
4. Metabolism & Evolution	8, 9, 10, 15, 17, 22, 23, 24
5. Genetics	14, 15, 20

Evaluation: Grades for the class will be computed as follows. Grades are often posted on Moodle for students' convenience. Those postings ARE NOT to be considered final or official. All Grades are subject to the policies described in this syllabus.

Item	Weight	<i>Note: A grade of Incomplete (I) will be assigned only in extreme cases and only with prior approval by the instructor.</i>
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: Make up tests will be given by appointment during the last few weeks of the semester. When the course has officially ended, all missing test grades will be recorded as "zero." I do not offer "retesting" because one is unhappy with a grade nor do I generally drop low test grades.

2. Homework and Classwork: Assignments are due at the BEGINNING OF CLASS on the due date. A paper handed in after the beginning of class on the due date is considered one day late. If you are having trouble understanding an assignment, you may ask (in advance of the due date) for extra time to complete the assignment. Before handing in an assignment, take time to double check it for accuracy and completeness. I DO NOT accept "resubmissions" because one is unhappy with a grade. Also, I do not generally drop low homework grades. Five points will be deducted from any late paper per calendar day late including weekends, holidays and breaks. To avoid the late penalty, turn in the assignment early, send it by someone or fax/mail/e-mail it to me at the school. Do not hold the assignment until you return to school. This will cause a further late point deduction. Unless prior arrangements are made and approved, missing grades will be changed to zero according to the following policies.

** If you were present when the activity was assigned and/or completed in class you will have ONE WEEK after the due date to hand in the assignment. After this date, missing grades are changed to "zero."

** If you were absent when the activity was completed in class do not hand in lab reports for which you have not completed the procedure. You should see the instructor IMMEDIATELY UPON YOUR RETURN TO SCHOOL to schedule

a time to complete any lab work or other things you cannot do at home. You will then have one week to hand in the assignment according to late policies detailed above. After this date, missing grades are changed to “zero.”

** When the class has officially ended, all missing grades will be changed to “zero.”

3. Attendance: Attendance is not counted as part of your course grade. Regular attendance is usually critical to class success. Students are expected to adhere to the SCC Attendance Policy, which can be located here (https://www.southwesterncc.edu/sites/default/files/UpwardBoundSlides/6.02.01-Attendance.Requirements.and_.Student.Classifications%20FINAL.pdf). If you need to arrive late or leave early, enter or leave as quietly as possible. I would 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 someone’s notes when you are absent. Please do not ask me to photocopy notes for you when you miss a class meeting. I will be happy to meet with you about a class you missed. Any student who has been absent for two consecutive weeks will be administratively withdrawn from class until about Week 13. See the SCC calendar for the specific date.

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 have advanced plans to offer extra credit activities to students who are in class on any given day. Please do not ask me for individual extra credit assignments. That would be unfair to the rest of the class.

6. Electronic Mail & Moodle: There is an expectation that you will check your SCC e-mail account at least once per week but preferably two to three times per week. You should reply to e-mails as needed. Under some circumstances (and with notice) features on Moodle, such as Announcements or Discussion Board, may be activated and utilized for class activities. If that is the case you are expected to regularly check, read and reply as appropriate. If your SCC account is not in working order, get it fixed IMMEDIATELY.

7. Cell phones & Other Electronic Devices: Devices of this sort should be turned off and put away during class. That means stored in a book bag, purse, closed pocket, etc. On occasion, I may give advanced notice that devices are not allowed in the room at all during a particular class meeting. In other cases, I may allow use of laptops and/or Smartphones for web searches related to class or lab activities. You should take care of your calls and texting before class, after class or during breaks. Give interested parties (like employers, baby sitters, etc.) the school’s number so they may reach you during regular business hours. If you are expecting an urgent call or text you may ask for permission for the day to keep your phone on your desk with the ringer off. Quietly leave the room to take the call, read the text and/or respond. I think that talking on the phone and/or reading/sending text messages during class is distracting and therefore rude. **DO NOT DO THIS!** No electronic devices of any kind (lap top computers, cell phones, etc.) may be turned on during a test or while tests are being discussed in class.

8. Cheating: School policy dictates that students conduct themselves in accordance with generally accepted standards of scholarship and morality. Academic honesty is vital. In cases of cheating, a grade of “zero” will be recorded for the assignment in question. I will submit a report, with documentation, to Student Services as well. 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.
- 3) Giving or receiving any written or verbal communication about a test, quiz or homework assignment to or from any student.
- 4) Copying any information from any published source (print or internet) without giving proper citations. If you do not know or understand how to cite and document published references, please ask for help.
- 5) Including false data in a lab report, journal or project. Do not hand in a report for a lab you have not actually done. I will work with you to make up the lab, and then you can hand in the report.
- 6) Taking copies of tests from the classroom without approval

9. Accommodations for Students with Disabilities: Southwestern Community College is committed to providing equal access to educational opportunities for students with disabilities (physical or mental impairments that substantially limit one or more major life activity). Students requesting accommodations must identify themselves as having a disability and provide any necessary diagnostic documentation to the Disability Services Office. Contact Tonya Bassé, Student Disability Services Coordinator (Balsam Center, Room 115, 828.339.4326, t_basse@southwesterncc.edu).

Assignment Schedule

Test 1 (unit 1) _____ Test 2 (unit 2) _____ Test 3 (unit 3) _____ Test 4 (unit 4) _____
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. Other homework grades related to the lab may be recorded.

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 and try to locate answers to the questions. Use a highlighter and your unit 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 the Learning Assistance Center or ask the instructor for suggestions. Use the index & glossary

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 enter 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 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.

7. **Participate in study groups.** In study groups 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. Note that class objectives are separate and apart from skeletal outlines. They ARE NOT the same!

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 (339 4351 locally or 800 447 4091; ext 4351)

You may contact me by electronic mail: elunsford@southwesterncc.edu Use your SCC e-mail account or the communication may be delayed by several days or lost entirely due to our spam filter.

You may send postal mail to me at the following address: Eddie Lunsford Southwestern Community College 447 College Drive Sylva NC 28779

You may send a facsimile to me. If you do so, please note the following: (1) Be certain that you include a cover sheet stating that the fax should be sent to me so that the person supervising the fax machine will know to do so (2) include your name and page numbers on ALL pages of the fax (ex: Jim Smith, p. 4 of 6) (3) Be sure that you use dark, heavy ink so that the fax machine will pick it up on the copy. The school's fax number is as follows: 828 339 4613

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.