

**MARTIN COMMUNITY COLLEGE**  
**COURSE SYLLABUS**  
**Semester/Year: Spring 2011**

<b>COURSE NUMBER:</b>	BIO 112-5W1	<b>INSTRUCTOR:</b>	Barbara M. Daly
<b>COURSE TITLE:</b>	General Biology II	<b>OFFICE NO:</b>	Building 4, Room 9
<b>CREDIT HOURS:</b>	4	<b>OFFICE/VIRTUAL HOURS:</b>	<b>M 11:15-12:00 am, T 9:15-12:00 noon, W 9:15-10:00 am and 11:15-12:00 noon, Th 9-11:50 am.</b>
<b>CONTACT HRS/WK:</b>	6 (3 class, 3 lab)	<b>PHONE NO:</b>	252-789-0287
<b>PREREQUISITES:</b>	BIO 111	<b>FAX:</b>	252-792-0826
<b>COREQUISITES:</b>	None	<b>E-MAIL:</b>	bmdaly@martincc.edu

**COURSE DESCRIPTION:** This course provides a continuation BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology and other related topics. Upon completion students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**PROGRAM LEARNING OUTCOMES:**

1. Apply critical thinking-skills to problem solving.
2. Demonstrate the use of appropriate discipline-related technology.
3. Demonstrate effective oral and written communication skills.

**COURSE LEARNING OUTCOMES:**

1. Describe and discuss using the appropriate vocabulary the structure and function of plant and animal systems, including the human.
2. Compare and contrast plants and animals, describing survival strategies.
3. Recognize and describe relationships between members of major ecosystems.

Other Outcomes for use by the student in his or her daily study:

1. Compare various invertebrates with vertebrate animals, and discuss the progressive evolution to higher vertebrates.
2. Describe the organization from cells thru tissues, organs, systems and terminating in the organism of the human.
3. Identify the major systems of the human body and their parts relating structure to function.
4. Describe developmental processes, both before and after birth.
5. Define aging, and describe various hypotheses for the aging process.
6. Recognize and differentiate the genetic, learned, and adaptive components in behavior.
7. Define and describe the term ecosystem, and recognize the effects of populations on ecosystems.
8. Describe the organization of plants, their tissues and organs, with emphasis on the comparison of the major division of plants.
9. Describe energy flow and biochemical cycles as they pertain to the effects of humans on ecosystems.
10. Recognize the factors effecting global change on the biosphere and the aquatic and terrestrial communities that make it up.

11. Define biodiversity and describe the conservation techniques necessary to preserve the diverse nature of our planetary ecosystem, while recognizing the roles of the individual, and the government (national and global) in establishing eco-policies for the future.

**REQUIRED TEXTBOOKS:**

Mader, Sylvia, (2010) *Inquiry into life*, (13<sup>th</sup> Ed.) New York, New York: McGraw-Hill Higher Education. ISBN 9780073403441

Mader, Sylvia, (2010) *Inquiry into life laboratory manual*, (13<sup>th</sup> Ed.) New York, New York: McGraw-Hill Higher Education. ISBN 9780077297435

**SUPPLEMENTAL RESOURCES:** Various suggestions will be made over the course of the semester as sources of additional information as needed.

**LEARNING/TEACHING METHODS:**

- Lecture.
- Laboratory exercises designed to give hands on experience that illustrates concepts discussed in lecture.
- Internet search assignments designed to allow students to access and evaluate commonly available supplemental material.
- Outside Reading in the form of library and research assignments including the Nutrition Report, and the Survival Strategy Paper, which require the student to access, assess, and synthesize information from sources outside the assigned texts.
- Various handouts will be used where more depth is needed to clarify information.
- Audio/visual aids including PowerPoint presentations, movies, videos, and DVDs on selected topics illustrative of material covered in class.
- Students are responsible for all material presented.

**ASSESMENTS/METHODS OF EVALUATION:**

To demonstrate attainment of program and learning outcomes for BIO 112 General Biology I, you must achieve an overall average of 70% or better. To achieve these outcomes, you must successfully complete the following:

Lecture	6 Tests @ 100 pts. each	60 %
	Comprehensive Final Exam	10 %
Lab	Nutrition Report	15%
	Outside Reading Assignment(s)	<u>15 %</u>
		100 %

Extra Credit will be available during the semester in the form of write-ups, suggested assignments, and selected exercises from lab assignments. You must be present at the time it is assigned in order to take advantage of it, and it must be turned in on time in order for you to get credit for it.

**GRADING POLICY:**

This course uses a ten-point grading scale.

**GRADING SCALE:**

90-100%	A
80-89%	B
70-79%	C

60-69%                    D  
 59% and below         F

REMINDER: Students wishing to transfer to a 4-year institution must complete this class with a 70% or above in order to transfer credit to such an institution. Students earning grades of 69% or lower in this class may be required to re-take this class in order to transfer. For more information please see the Martin Community College Career Catalog online at [www.martincc.edu](http://www.martincc.edu).

**COURSE OUTLINE:**

**Outline of Instruction:**         THIS IS A GUIDE AND IS SUBJECT TO CHANGE! KEEPING UP WITH CHANGES IS YOUR RESPONSIBILITY

<b>Date *</b>	<b>Lecture Topic</b>	<b>Chapter(s)</b>
Week 1	Plants	9
	Plant Reproduction and Responses	10
Week 2	Plant Reproduction and Responses	10
	Human Organization	11
Week 3	<b>Test #1</b>	9-11
Week 4	Cardiovascular System	12
Week 4&5	Lymphatic and Immune Systems	13
Week 6	Digestive System and Nutrition	14
Week 6	<b>Test #2</b>	12 -14
Week 7	Respiratory System	15
Week 7	Urinary System and Excretion	16
Week 8	Nervous System and Senses	17 & 18
Week 8	<b>Test #3</b>	15-18
Week 8	Musculoskeletal System	19
Week 9	Endocrine System	20 & 21
	Reproductive System	
Week 9	Development and Aging	22
Week 9	<b>Test #4</b>	19-22
Week 10	Microbiology	28
Week 10	Plants	29
Week 11	Animals Part I	30
Week 12	Animals Part II	31
Week 13	<b>Test #5</b>	28-31
Week 13	Animal Behavior	32
Week 14	Population Growth and Regulation	33
Week 14	The Nature of Ecosystems	34
Week 15	The Biosphere	35
Week 15	Environmental Concerns	36
Week 15	<b>Test #6</b>	32-36
Week 16	<b>Final Exam</b>	Comprehensive

**STUDENT ATTENDANCE POLICY:** The Martin Community College Attendance Policy (Martin Community College Career Catalogue for 2009-11 page 44) is in effect, as well as the administrative withdrawal policy (Martin Community College Career Catalog for 2009-11 page 44). Students must attend at least once within the first 10% of the scheduled hours of the class in order to be enrolled, or their names will be removed from the attendance roster. Students missing more that 6 (six) contiguous contact hours without

contacting, and speaking to the instructor or more than 10% of the total contact hours may be administratively withdrawn from class, and in that case will receive a “WF” which counts as an “F” as their final grade. Students may only be readmitted to class with the written approval of the instructor, as the instructor must file a form with the registrar in order to readmit the student. Students who have been administratively withdrawn from a class will not be allowed in the lab or classroom for liability reasons. If a student is officially readmitted to a class the student is responsible for all material covered, including any announcements, such as test dates made while he/she was out. A student may remove the “WF” grade by submitting appropriate paperwork for an official withdrawal by the last day to officially withdraw without receiving an “F” during the semester to the Registrar’s office. The last day to officially withdraw from this class is 3/24/11.

In compliance with G. S. 115D-5. MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student’s faith. The policy limits the excused absences to a maximum of two days per academic year.

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) prior to the census date of each class. The Request for Excused Absences for Religious Observances form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus for the course, with the exception of a reasonable accommodation for the make-up of missed course work.

## **COURSE POLICIES:**

### **TESTING POLICY:**

Students must notify the instructor BY EMAIL (this allows verification of time), BEFORE the test in order to qualify for a makeup. If a student fails to take a **test** at the announced time, he or she must provide a written, verifiable, medical reason for the absence in order to qualify for a make-up. Students may make up ONE exam if the student has such a reason. A 5-point per day penalty will be assessed for each day the makeup test is not taken immediately upon returning to class, including weekends. After five days a grade of zero will be given to those students who have not made up the test. There will be no additional make-ups, regardless of the reason for the absence. Missing an arranged time for a makeup counts as an additional missed exam, resulting in a zero grade for that exam, and loss of make up privileges for all future missed exams.

Confirmed Test Dates are announced one class meeting in advance! If you are absent on the day a test is announced, you are still responsible for taking it on time! This is just one of the ways being absent can hurt you!

### **ACADEMIC INTEGRITY POLICY:**

Students admitted to or applying for admission to allied health field programs at Martin Community College are expected to exhibit the highest personal integrity in all academic work and behavior. Lying, cheating and plagiarism are forms of academic dishonesty that violate the integrity of any academic process and will not be tolerated. For purposes of this class:

Lying includes but is not limited to falsifying information provided as verification for the reason you were not able to complete work on time.

Cheating is:

1. Receiving, giving, or helping another student receive or give any information during a quiz, test, examination, or individual assignment without the express permission of the instructor.
2. Using unauthorized materials or equipment during a quiz, test, or examination, e.g. notes or books or electronic devices.
3. Communicating the subject matter, or contents of a quiz, test, or examination to another student unless specifically authorized by the instructor to share it.
4. Taking a quiz, test, or examination for another student.
5. Obtaining quiz, test, or examination questions beforehand, including viewing any quiz, test or examination presented on the internet before answering for submission.
6. Tampering with the grading of a quiz, test, or examination.
7. Working with others in completing take-home quizzes, tests, examinations, or individual assignments unless the instructor specifically authorizes collaborative work.

Any violation of academic integrity will result in disciplinary action. An instructor, department head or the Dean of Academic Affairs and Student Services may impose either of the following disciplinary actions for a violation of academic integrity:

Loss of Grade: an instructor may give a zero for the assignment, quiz, or test.

Loss of Credit: the student will receive an F for the course and will be dropped from the current semester roll.

For more information concerning the behavior expected of a student at Martin Community College please see the Student Governance and Conduct Code on pages 47-48 of the Martin Community College Career Catalogue for 2006-2008.

Keep in mind that as your instructors are often asked to provide your references, Academic Integrity Violations and/or violations of the Student Governance and Conduct Code may affect your ability to get a job in the future. As future professionals in fields that require high standards of personal integrity in their practitioners, you should cultivate a professional attitude and professional conduct and behavior now. Unprofessional habits are hard to break later on!

#### OTHER COURSE POLICIES:

1. Students are expected to read the topics to be discussed in class before coming to class that day. This will give you a leg up in understanding the discussion for the day, and allow you to participate in an active way. Extra credit points in the form of pop quizzes are always a possibility.
2. No food or drink is allowed in the classroom, or laboratory, as this is a violation of OSHA standards. Food or drink brought into the room will be confiscated, as will any makeup that is taken out of a purse or backpack. **Repeated violations will result in disciplinary action, which may include lowering of your final grade by one whole letter grade or failure of the class.** This is a professional work environment, not a lounge area; cultivate a professional attitude and professional conduct and behavior now. Unprofessional habits are hard to break later on!

3. Attendance is taken by signing the roll for each hour. Failure to sign the roll will result in an absence for that period. It is the student's responsibility to sign the roll, even if you come in late. If your name is not on the roll you will be marked absent.
4. It is your responsibility to keep track of your absences, the instructor will not warn you when you are close to or over the limit. If you cannot remember when you were absent, you did not have a memorable and therefore not particularly important reason for being absent. **A good way to keep track is to record your absences on a pocket calendar or in the notebook you keep for this class.** As future professionals, you are expected to cultivate professionalism as part of your education. Attending class regularly is a sign of maturity and commitment. You will not keep a job if you miss work often, nor will you receive a passing grade in this class.
5. Three tardies are counted as one hour of absence for attendance purposes. You are tardy when you come in after the roll has circulated. It is never acceptable to leave class early.
6. You are responsible for material covered in class whether you are present or not including announcements of class-work due or test date changes if it becomes necessary.
7. Confirmed Test Dates are announced one class meeting in advance! If you are absent on the day a test is announced, you are still responsible for taking the test on time. **There is a lot of material covered in this class, do not wait until the last minute to begin studying for the test. Also, as there is a comprehensive final exam, you cannot let the material go once the chapter test is over. It is a good idea to review your notes from beginning to end periodically during the semester**
8. There is to be no talking during an exam. Raise your hand and wait to be recognized by the instructor before speaking. Any student talking during an exam will receive a zero for that exam.
9. Exams will begin and end on time; students arriving late will not receive additional time. Do not arrive late for tests or exams!
10. Cell phone use is prohibited during class, both incoming and outgoing calls. This includes "bluetooth" and any other hands free devices. If your cell phone goes off during a test, you will receive a zero for the grade for that test.
11. If you leave the room for any reason during an exam, you will be required to turn in your test, and you will not get it back. Visit the restroom before beginning the exam.
12. Lab reports and any other assignments will not be accepted late.
13. Extra credit is a privilege not a right. It is assigned at the discretion of the instructor, and will not be accepted late.
14. For your protection, you will need a lab coat which buttons fully down the front, and eye protection that fits over your glasses if you use them. These items will be necessary for some of the labs with experiments that involve handling chemicals. Failure to produce the items when directed to bring them to lab will result in expulsion from the lab, with the time credited as absence, and a "0" for any assigned work during that time.
15. Long hair must be pulled back and tied at all times in the laboratory.
16. Close-toed shoes are a requirement in the laboratory. This is an OSHA requirement. Students arriving in open-toed shoes (sandals, or flip-flops, slings or anything without closed toes) on laboratory days will be

asked to leave and given a “0” for any work assigned that day. On lecture days the first violation will result in a oral warning, a second violation will result in a written warning, and a third violation will result in expulsion and a “0” for any work for that class day including tests.

17. Students must comply with all posted safety notices, and instructions from the instructor. They are there for your protection. Failure to comply with posted safety instructions or obey the instructor will result in disciplinary action.

18. There is no horseplay in the classroom/laboratory. This is a work environment, and horseplay generally puts someone at risk of injury, or even death. Students violating this rule in a minor (discretion of the instructor) way will be given an oral warning, a second violation will result in a written warning, and a third violation will result in expulsion and an “F” for the class. Students deliberately putting another student at risk of injury or death (any second violation will be interpreted as deliberate) will be expelled from class and will receive an “F” as a final grade.

19. Students vandalizing or deliberately misusing equipment may be required to pay for damage to or replacement of that equipment. Students violating this rule in a minor (discretion of the instructor) way will be given an oral warning, a second minor violation will result a written warning, and a third minor violation will result in expulsion and an “F” for the class. Students deliberately putting equipment at risk of damage that would make it not available to other students or dangerous to use or be around (any second violation will be interpreted as deliberate) will be expelled from class, will receive an “F” as a final grade, and be required to pay for the repair or replacement of the equipment.

20. Theft of college equipment or supplies will result in an “F” for the class, suspension or expulsion, and may result in criminal charges being filed.

**21. Assignments and tests may NOT be completed in text message format such as one you would use to send a text message on your cell phone. Any communication for this class should be considered a formal document and must be written in standard English, with complete sentences with the words written out. Text message formats are dialects, not formal language, and they would not be considered appropriate for the workplace. They are not appropriate for this class. Any work turned it written in such a dialect will not receive credit. This policy includes any work submitted online. Please remember, work is not accepted late.**

**22. Sleeping is not allowed in class. This is very disrespectful to the instructor, and an indication that you do not care about the class. You would be fired for sleeping on the job; you will be evicted from class, without makeup privileges if you sleep in class.**

TEACHING METHODS MAY INCLUDE BUT ARE NOT NECESSARILY LIMITED TO:

1. Lecture and discussion from the textbook.
3. Illustrations from charts & overhead transparencies.
4. Human articulated skeleton-showing origins and insertions of muscles.
5. Anatomical models for understanding of anatomical structures.
6. Use of autopsy and surgery videos to demonstrate human A&P.

Students will find this an intense course, with lots of material to learn. It is however, one of the most fascinating areas to study, as everything you learn applies personally. You should plan on at least two hours of study time outside of class for each hour you spend in class. For some students, more time will be required, for others, less will do. You must make the commitment to set aside the time that you will need. Find a quiet place where you can concentrate. Keep in mind that you may not find the best atmosphere at home, where you may be distracted, or interrupted. Each student will be somewhat different, with a technique that works for one student not doing much for another. You (and your grades) are the best judge of what will work for you. Some old standbys that worked for me are:

-Read the chapters to be discussed before coming to class. This way the material is not completely strange to you. The vocabulary for this class is likely to be new. It is not used everyday, and you will have to learn it before the concepts discussed in class will make sense to you.

-Take good notes in class, and recopy them the evening after class. That way you have a clean organized copy to study from.

-Read through the accumulated notes for each upcoming test each evening after class. Keep in mind that you may need to read the chapters in the textbook more than once to “get” it all. Each time you go over something you will pick up new bits, filling in the blanks of the whole picture.

-Keep a vocabulary list of new terms and definitions and try making flash cards with a buddy to test yourself. Some students find the old standby of writing each word 5 times will help.

-You will find the vocabulary of this class different from the classes you took before you entered this program. Remember the dictionary is your friend, look up words you don't know. This helps the whole thing make more sense.

-Use other resources and sources of information to help you. Each student is different, and you will need to try each of these techniques to see which works best for you.

**To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to [www.martincc.edu](http://www.martincc.edu).**

**If you cannot reach your instructor, you may contact Phyllis J. Broughton, Ed.D., Dean of Academic Affairs and Student Services at 252-789-0246 or 252-789-0247 by phone, [pbroughton@martincc.edu](mailto:pbroughton@martincc.edu) by e-mail, or in person at his/her office in Building 2, Room 33.**

***If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.***