

**MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS**

Semester/Year: Spring 2011

COURSE NUMBER: BIO 106 5W1

INSTRUCTOR: Barbara M. Daly

COURSE TITLE: Introduction to Anatomy/
Physiology/ and Microbiology

OFFICE NO: Building 4, Room 9

CREDIT HOURS: 3

OFFICE/VIRTUAL HOURS: 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.

CONTACT HRS/WK: 4 (2 Class, 2 Lab)

PHONE NO: 252-789-0287

PREREQUISITES: ENG 080, MAT 060, RED 080

FAX: 252-792-0826

COREQUISITES: None

E-MAIL: bmdaly@martincc.edu

COURSE DESCRIPTION: This course covers the fundamental and principle concepts of human anatomy and physiology and microbiology. Topics include an intro to the structure and function of cells, tissues, and human organ systems, and an overview of microbiology, epidemiology, and control of microorganisms. Upon completion, students should be able to identify structures and functions of the human body and describe microorganisms and their significance in health and disease. This is a diploma-level course.

PROGRAM LEARNING OUTCOMES:

1. Demonstrate appropriate mathematical skills required for academic and work-related tasks.
2. Apply principles of sound critical thinking to analyze and solve problems and make logical decisions.
3. Demonstrate effective speaking, writing, and reading skills.
4. Demonstrate appropriate technology skills required for academic and work-related tasks.

COURSE LEARNING OUTCOMES:

1. Describe and discuss the fundamental concepts of human anatomy, physiology, and microbiology such as cell, tissue, and organ system structure and function.
2. Correctly identify the structures of the human body, and describe their function, relating the structure and function to health and disease.
3. Discuss using appropriate vocabulary the significance of microorganisms and other pathogens in health and disease.

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

This means the student should be able to do the following:

1. List and describe, in order of increasing complexity, the levels of organization in the body.
2. Define homeostasis.
3. Develop a basic understanding of body chemistry.
4. Define cellular metabolism and describe its relationship to cell physiology.
5. Describe the relationship between cells, tissue, and organs in the organ system.

6. Name and describe the function of the various types of membranes described in the text.
7. Name and describe the functions of the organ systems of the body and list the organs associated with each.
8. Understand the chemical nature of heredity, how genetic information is passed from parents to offspring, and how this is reflected in human disease.
9. Name and describe various types of microbiological organisms.
10. Understand the pathogenicity of some types of microbes including the epidemic or pandemic threats from these organisms.
11. Discuss various techniques used to reduce the threat of pathogenic microorganisms in human health.

REQUIRED TEXTBOOKS: Cohen, Barbara J. (2009) *Memmler's the human body in health and disease*, 11th Edition. Baltimore, MD; Lippincott Williams & Wilkins. ISBN 9780781765770.

SUPPLEMENTAL RESOURCES: These are suggested, but not required. If you find you are having difficulty with the material, try one or all of these additional sources of information:

1. Your book comes with a CD and a code for a website. These are tools compiled by the publisher of your textbook, using them will give you another way to access the information presented in the class.
2. The Incredible Human Machine, National Geographic Society, Washington, DC.
4. The Body Atlas, PBS Home Video, Santa Monica, CA.

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.

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.

Outside Reading Assignments

Students are responsible for all material presented.

ASSESMENTS/METHODS OF EVALUATION:

- | | |
|---------------------------------|------|
| 1. 5 Chapter Tests | 50%. |
| 2. 1 Comprehensive Final Exam | 10%. |
| 3. Nutrition Project Lab Report | 20% |
| 4. Outside Reading Assignments | 20% |

GRADING POLICY:

This course uses a seven-point grading scale.

GRADING SCALE:

93-100%	A
85-92%	B
77-84%	C
70-76%	D
69% and below	F

REMINDER: Dental Assisting Students must complete this class with a 78% or above in order to remain in the program. Students seeking admission, readmission or reentry to the Dental Assisting Program with grades of 78% or lower in this class may be required to re-take this class in order to remain in or be reentered in or readmitted to the Dental Assisting Program. For more information please see pages 20-21 of the Martin Community College Career Catalogue for 2009-2011 and or the Dental Assisting Program Handbook.

COURSE OUTLINE:

OUTLINE OF INSTRUCTION: THIS IS A GUIDE AND IS SUBJECT TO CHANGE! KEEPING UP WITH CHANGES IS YOUR RESPONSIBILITY!

Lecture Topics Covered (Chapters) in Sequential Order:

Week	Topic
Week 1	Chapter 1- Organization of the Human Body Chapter 2- Chemistry, Matter, and Life
Week 2	Chapter 3- Cells and Their Functions Chapter 4-Tissues, Glands, and Membranes
Week 3	Test #1 Chapter 5-Disease and Disease-Producing Organisms Chapter 6- The Skin in Health and Disease
Week 4	Chapter 7-The Skeleton: Bones and Joints Chapter 8-The Muscular System
Week 5	Test #2 Chapter 9- The Nervous System: The Spinal Cord and Spinal Nerves
Week 6	Chapter 10-The Nervous System: The Brain and Cranial Nerves
Week 7	Chapter 11- The Sensory System Chapter 12- The Endocrine System: Glands and Hormones
Week 8	Test #3 Chapter 13- The Blood Chapter 14- The Heart and Heart Disease

Week 9	Chapter 15- Blood Vessels, and Blood Circulation Chapter 16- The Lymphatic System and Lymphoid Tissue Disease Portfolio Due
Week 10	Test #4 Chapter 17- Body Defenses, Immunity, and Vaccines Chapter 18- The Respiratory System
Week 11	Chapter 19- The Digestive System
Week 12	Chapter 20- Metabolism, Nutrition, and Body Temperature Nutrition Lab Project Due Chapter 21- Body Fluids
Week 13	Test #5 Chapter 22- The Urinary System Chapter 23- The Male and Female Reproductive Systems
Week 14	Chapter 23- The Male and Female Reproductive Systems Chapter 24- Development and Birth
Week 15	Chapter 25- Heredity and Hereditary Diseases
Week 16*	* Final Exam- Final Exam days and times are published in advance, by the Academic Dean's Office, and MAY NOT BE CHANGED! It is your responsibility to make arrangements to be present.

STUDENT ATTENDANCE POLICY: The Martin Community College Attendance Policy (Martin Community College Career Catalogue 2009-11 page 44) is in effect, as well as the administrative withdrawal policy (Martin Community College Career Catalogue 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 than 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 make-up. 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 10-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 work. 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 work.

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. *As this is an OSHA rule, and 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.
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, due 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. 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.

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.

How to calculate your grade:

Test Number	Grade	Average	Multiply by:	Add Together for Final Grade
1		Divide total by 5	0.5	
2				
3				
4				
5				
Bonus Points				
Total				
Nutrition Project			0.2	
Disease Portfolio			0.2	
Final Exam			0.1	
Final Grade				

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 by phone, pbroughton @martincc.edu by e-mail, or in person at his/her office in Building 2, Room 33.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to www.martincc.edu.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0 293.