CEDAR CREST COLLEGE

Welcome to BIO 112, Concepts in Human Biology & Health Issues Lecture Syllabus – Spring 2010

Instructor: Professor Judith Malitsch

Office: Miller 23; Office Hours: M 4-5, W 1-4, R 2-3, and by appointment.

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Meeting Times/Places/Important Dates:

Lecture: (SCI 136) MWF 10:00-10:50 Labs: (SCI 102) M 1:00-4:00 T 8-11

Spring Break: 3/8 - 3/12

Easter Break: 4/2-4/5; On 4/6 classes follow a Monday Schedule

Course Withdrawal Deadline: 4/13 @ 4 PM

Classes End: 5/5 Follow a Friday Schedule

Final Exams: TBA 5/6-5/12

<u>From The Provost's Office</u>: "Your obligations for this course include attendance at the final exam. Do not make travel arrangements until the final exam schedule is published; if you must make plans early, you should schedule your travel after the last final exam day."

BIO 112 Concepts in Human Biology & Health Issues

4 credits (Lecture and lab)

You are invited to an exploration in contemporary health concerns that will increase your scientific knowledge and literacy for your own health and wellness in the 21st century and the choices we make. In order to appreciate and understand the impact and importance of relevant health issues regarding our bodies, you will learn basic biological concepts and processes and apply that knowledge to health and medical topics, issues, and discussions. You will gain an appreciation of the human body and the interrelationships among the body systems.

Prerequisites: None Lecture: 3 hours/week; Laboratory: 3 hours/week

I. Course Objectives

Biology 112 serves to fulfill the *Natural Sciences* category in the Liberal Arts Curriculum at Cedar Crest College. To accomplish this, the course content will focus on the organization and functioning of the human body beginning at the cellular level, explore the interrelatedness of the body systems, human inheritance, sensory systems and an understanding of human biology in the context of daily living. This course will also build upon current national health issues and serve to familiarize you with terminology and technology that is a part of health care today. Selected "cutting edge" medical advancements and health trends will be included to improve consumerism in health care. Advances in medical science have given us great opportunities to live better and longer. However, it is our responsibility to make the right choices, the right decisions and develop responsible, healthy behavior. Knowledge is the path to opportunities, healthy choices and preventive medicine.

II. Learning Outcomes/Assessments:

1. Students will develop scientific reasoning skills by studying the human body, health issues, bioethical issues, and technological advancements through the application of the scientific method.

Assessment: Four exams with objective and essay questions; writing assignments; class discussion.

- 2. Students will demonstrate knowledge of the structure of the human body and how their bodies normally function in addition to an understanding of disease states.
 - **Assessment:** Four exams with objective and essay questions and labeling of the human body, diagrams and pathways.
- 3. Students will develop an understanding of homeostasis and the contributions of the body systems toward maintenance of the internal environment.
 - **Assessment:** Four exams with objective and essay questions; class discussion
- 4. Students will identify lifestyles and personal choices impacting their health.
 - **Assessment**: Class discussion, self-assessments, writing assignments, internet assignments.
- 5. Students will demonstrate an understanding of human genetics and biotechnological applications.
 - **Assessment**: Homework assignments, exam with objective and essay questions, class participation, bioethical issues discussions.
- 6. Students will demonstrate knowledge of all the body systems and their interrelationships. **Assessment**: Four exams with objective/essay questions
- 7. Students will demonstrate knowledge, understanding and appreciation of women's health issues and current clinical/treatment trends.
 - **Assessment**: Class discussion, four exams with objective and essay questions.
- 8. Students will address health issues consequential of environmental alterations.
 - **Assessment:** Exam(s) with objective and essay questions, class discussion.
- 9. Students will demonstrate technological competency and information literacy, including the ability to evaluate technological and informational resources.
 - **Assessment**: Internet assignments
- 10. Students will demonstrate the ability to communicate clearly, both orally and written. **Assessment**: Reading and written assignments, four exams.

III. Required Texts, Online Information and Materials:

Mader, Sylvia S., 2010. *Human Biology*, 11th Edition. The McGraw-Hill Companies, Inc., New York. New York.

Visit <u>www.cedarcrestonline.net</u> for the eCompanion component of this course. All power point presentations and other information can be found under *content* and *document sharing*. A brochure is provided to help you navigate the website.

Kayhart, Marion and Dolores Yaschur Sproule, (2010). *Contemporary Biology, Health and Disease*, 10th Ed. DOLMAR BIO, LLP.

Visit www.mhhe.com/maderhuman11e for online learning tools organized by chapters.

Notebook, folder and highlighter

IV POLICIES

Attendance:

Lecture- Expected; if an *unavoidable* absence occurs on a test date, you must notify me prior to the start of class for <u>any</u> make-up consideration. Additionally, documentation from the Dean of Student's Office is required. Extended illnesses must also be reported to the Dean of Student's Office. For other absences, ask a classmate to collect any handouts for you and review the notes with you. You are responsible for any missed information, assignments and due dates. Excessive tardiness may also be penalized at my discretion. It is disruptive and violates classroom protocol.

Lab – **Mandatory**; absences on non-test days without documentation from the Dean of Student's Office will result in a zero for missed the lab class(s). Zeroes will be averaged into your lab report grade for each absence. Extended illnesses must also be reported to the Dean of Student's Office. Lab absences on a test day will result in a zero without documentation or an incomplete grade for the course (as outlined in the laboratory syllabus) with proper documentation.

<u>Tests/Assignments</u>: You have a responsibility to be present for all tests. Tests are non-cumulative, thus covering information from the last test to the present information. In the event of an **unavoidable** absence, you <u>must</u> notify me prior to class time and have documentation as stated above. Tests must be completed within one week of an unavoidable absence; non-compliance of the above will result in a zero. If you are late for a test you will forfeit that time for completing the test. *Test Etiquette* will be enforced which means that unnecessary writing, diagrams or comments are not permitted and subject to penalty.

FINAL EXAM TIMES CANNOT BE REARRANGED (Departmental Policy) unless 3 or more exams occur within a 24 hour period. Any exception must be petitioned and reviewed by the Department of Biological Sciences. Please note the week scheduled for final exams. **Do not make vacation or travel plans until you know your final exam date. You cannot arrange to take the exam early. Failure to be present for the final exam results in an automatic ZERO for the exam.** As soon as the exam schedule is finalized, I will announce our exam day in class and post it on eCompanion.

Journal (Writing) assignments are assigned throughout the semester relevant to class topics. All assignments must be word-processed, 12 font-*Times New Roman*, SOLID BLACK ink and stapled in order unless otherwise indicated. A printer out of ink is not an acceptable excuse. If the assignment is late or prerequisites are not followed, penalties will be assessed or the assignment may not be graded = zero points for that assignment. Assignments handed in after class are considered late and will be assessed a 10% penalty per day including weekends. The criteria for credit are given with each assignment. Each assignment will be graded on a point system = # correct/# total possible points therefore, no assignment, no points. Emailed journal assignments will NOT be accepted unless authorized through eCompanion.

Grading: You will earn one grade for this course and your final grade is computed as

follows: Your final course grade = 2/3 lecture + 1/3 lab

Lecture Grade: An average of 5 grades: 4 tests + the **JA** Grade (the final exam = Test #4)

A minimum grade of 'C' is required for all new LAC courses.

Seminars/Extracurricular Opportunities will count as bonus points added directly to your final lecture grade. These opportunities may be self-designed, notifying me of your intent or attended through the CCC community or the Department of the Biological Sciences. I will announce opportunities in class. Points awarded will depend upon the opportunity, generally in the range of 1-3 points. A maximum of 3 bonus points will be allowed.

Lab Grade: 60% of the Average 3 Tests + Lab Exercise 10 Grade 40% of the Average of Lab Report Grades

Grading Scale: A	93-100	C+	77-79
A-	90-92	*C	73-76*
B+	87-89	C-	70-72
В	83-86	D+	67-69
B-	80-82	D	60-66
		F	Below 60

Attendance and participation always considered in borderline cases. *C is the minimal grade required to satisfy the LAC requirement.

<u>Cedar Crest</u>: The professors within the Department of Biological Sciences support the campus wide policies as described in the *Student Handbook*.

I fully support the Cedar Crest College Honor Code, Academic Standards of Integrity and the Classroom Protocol Code as stated in the *Student Handbook*. We must respect the rights of others in this learning environment. There will be zero tolerance for disruptive, disrespectful, out of control behavior. Security will be called in the event such behavior occurs. Cheating will result in a zero for the test/assignment. If necessary, violations should be brought to my attention. Depending upon the infractions regarding classroom protocol, violations may result in a forfeit of all bonus points, removal from class and be formally addressed by the appropriate individuals: Dr. Carol Pulham (Provost), Dr. John Cigliano(Chair), Dr. Denise O'Neill (Acting Dean of Students), Christine Nowik (Director of Academic services), and the Honor and Judicial Board. *Each student should read the codes and abide by them throughout the course*.

I fully support the College's policy on plagiarism as described in the *Student Handbook*. Based on the severity of the offense, students may be required to redo an assignment or get an F for the assignment. Cases will be reported to the Provost as necessary.

Students **with documented** disabilities who may need academic accommodations should discuss these needs with their professors during the first 2 weeks of class. Students who wish to request accommodations should contact the advising center.

Need to Know:

- 1. All students must have CCC email for communication and in the event of an emergency.
- 2. Promptness, courtesy and respect are expected in all aspects of the course.
- 3. Guests, cell phones and other technological devices are NOT allowed during tests.
- 4. Please turn off or silence your cell phones and other technological devices while in class, unless there is an impending situation or emergency.
- 5. It is highly recommended that students DO NOT sit close to each other during tests.
- 6. Food and drinks, including anything bottled, are not permitted in the laboratory.
- 7. Children are not permitted in the laboratory.
- 8. You must wear closed-toe shoes while in the laboratory.
- 9. SC Building Hours: Sun Fri. 7AM –10 PM; Sat. 7AM-6 PM.
- 10. Reference Books are located in SCI 102 (lab room). You may use them anytime but please, do not remove them.

V. SUCCESS IN CLASS (SURVIVAL NOTES)

- 1. Read, Read the **TEXT noting** assigned chapters/chapter summaries, tables, graphs, diagrams and the handouts. Make an effort to preview the chapter prior to class.
- 2. Highlight/note all **bold-faced** terms, the *Health Focus/Science Focus/Bioethical/Historical Focus* Articles, *Check Your Progress* boxes, *Summarizing the Concepts*, the matching sections associated with *Key Terms* and the end of the chapter *Testing Your Knowledge of the Concepts* section.
- 3. Take notes in class.
- 4. Study your power point notes; let your notes be your guide to studying.
- 5. Maintain organization with all the information.
- 6. Complete all journal assignments; remember they count as a test grade!
- 7. Be an active learner participate in class; each of you has a lot to offer!
- 8. Seek the help of a tutor (free) available through the Academic Services, Curtis 109, Ext. 3484 now or as soon as you are experiencing any difficulty.
- 9. Remember these 3 important C's: Communication, Courtesy & Common Sense.
- 10. With effort in this class, everyone should be successful! ☺

BIO 112: Concepts in Human Biology and Health Issues Content Outline/ Sequence: Spring 2010

Test Dates: Test #1: February 10

Test #2: March 17 Test #3: April 14

Test #4: Final Exam Week, TBA

Topics	Chapters	
Introduction 1 Importance of Scientific (Health) Literacy Exploring Life and Science		
Organization of Life Cell Structure and Function Organization & Regulation of Boo	3,4,18 3, 18 ly Systems (Homeostasis) 4	
Cancer	19, 'Selected Cancer Types' handout	
Our Nervous System and Senses	13, 14	
Reproduction in Humans Development STD's	16 17 16, AIDS Supplement	
Human Genetics DNA & Biotechnology	18, 20 21	
Our Cardiovascular System & Lymphatic System	5, 6, 7	
Our Respiratory System	9	
Nutrition & Our Digestive System	2, 8, 15	
Our Urinary System	10	
Our Immune System	7	
Our Endocrine System	15	
Healthy Bones and Muscles Osteoporosis	11, 12	

This outline is a guideline for the topics that we will be addressing. The test dates will occur as listed. Test material will only include what we have accomplished despite what the outline suggests. Since many health issues are also contemporary issues, sometimes our class will need to discuss a current event in lieu of the ongoing class topic. I encourage open discussion and a free exchange of ideas and by all means, if you have something to share from your own experience or an article you have read, please do so! My responsibility to you, my students, is to provide you with information from many different disciplines, and wherever possible, from differing viewpoints.