

**CEDAR CREST COLLEGE**  
**BIO 117, Human Anatomy and Physiology I**  
**Lecture Syllabus, Summer 2010**

**Instructor:** Professor Judith Malitsch  
**Office:** Miller 23; **Office Hours:** Before and after class and by appointment  
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**Meeting Times and Places:**

Lecture: MTWR 5:30 – 7:30, SC 136  
Lab: MTWR 7:45 – 9:45, SC 102

May 31 (Memorial Day): No Class  
Final Exam: June 24

***From The Provost's Office:** "Your obligations for this course include attendance at the final exam, on the day and time scheduled. You should not make travel arrangements that will interfere with the final exam schedule; if you must make plans early, you should schedule your travel after the last final exam day".*

**I. Description: BIO 117 Human Anatomy and Physiology, 4 credits (lecture and lab)**

This course is a comprehensive, medical study of the human body integrating structure and function with clinical applications and a problem-solving approach. It fulfills a *Natural Science requirement* for the Liberal Arts Curriculum and is a requirement or elective for majors in biology, neuroscience, nursing, nutrition, and dance in addition to pre-professional training and anyone else interested in an understanding of their own bodies. In addition to the assimilation of basic concepts and principles foundational to a study of the human body, the anatomy and physiology of the integumentary, skeletal, muscular, nervous and sensory systems will also be covered. Studies will include medical imaging, homeostasis, chemistry, cytology, histology, pathology, pathophysiology, and pharmacology.

*Prerequisites: None; Not accepted as credit toward a major in the Department of Biological Sciences.*

**II. Course Objectives:**

1. Learn, understand, and appreciate the anatomical and physiological design of the human body.
2. Learn, understand, and appreciate the intimate relationship between structure and function.
3. Learn, understand and appreciate the interrelationships of the body systems.
4. Learn, understand and appreciate the concept of homeostasis, how it is achieved and keeps us functioning as normally as possible. Without homeostasis, our bodies experience a pathological condition.
5. Learn, understand and appreciate that A&P is a 'cell idea'.

These objectives will be accomplished in the following chapters/lab exercises:

- \* **Textbook: Chapters 1-15**
- \* **Lab Book: Exercises 1-26**

### **III. Learning Outcomes/Assessment:**

1. Students will demonstrate knowledge of anatomical and medical terminology and engage in direct applications to their health careers.  
**Assessment:** Four exams with objective questions, diagrams and application essays.
2. Students will develop their critical thinking skills by relating function to structure for every aspect of the human body and asking the question, “*What is the purpose of the design?*”  
**Assessment:** Four exams with objective questions and application essays.
3. Students will use scientific reasoning to explore anatomical and physiological issues on the cellular level and the pathological and pharmaceutical applications arising from that cellular foundation.  
**Assessment:** Four exams with objective questions and application essays.
4. Students will develop the ability to communicate clearly the interrelationships among the body systems.  
**Assessment:** Exam essays and test diagrams
5. Students will learn and develop metabolic, physiological pathways.  
**Assessment:** Class participation, flowcharts, and application essays.
6. Students will demonstrate competency in recognizing and outlining homeostatic relationships in the integumentary, skeletal, muscular, and nervous systems.  
**Assessment:** Exam application essays
7. Students will enhance their clinical knowledge of anatomy and physiology and personal health and wellness, especially of women’s health issues.  
**Assessment:** Lecture and class discussions
8. Students will appreciate and compare the normal anatomical and physiological design of the human body with the corresponding disease states.  
**Assessment:** Four exams
9. Students will become familiar with the most recent technological advances and pharmaceutical therapies for managing pathophysiological states.  
**Assessment:** Handouts and four exams
10. Students will relate their course knowledge in direct application to their health, majors, lifestyle and personal choices.  
**Assessment:** Class discussion, exam essays

### **IV. General Course Outline:**

#### **1st Semester (BIO 117)**

**Terminology, Organization**  
**Medical Imaging, Homeostasis**  
**Chemistry & Metabolism**  
**The Cell**  
**Tissues**  
**The Integumentary System**  
**The Skeletal System**  
**The Muscular System**  
**The Nervous System**  
**Special Senses**

#### **2nd Semester (BIO 118)**

Endocrine System  
Cardiovascular System  
Lymphatic System  
Immune System  
Respiratory System  
Digestive System  
Nutrition & Metabolism  
Urinary System  
Fluids & Electrolyte Balance  
Reproduction  
Development

## V. Required Textbooks:

Marieb, E. and Hoehn, K. 2010. *Human Anatomy and Physiology*, 8th Ed.  
Pearson Benjamin Cummings, San Francisco, CA

Marieb, Elaine N., Mitchell, Susan J. 2011. *Human Anatomy and Physiology Laboratory Manual*, 9<sup>th</sup> Ed. Up (Main) Pearson Benjamin Cummings (Pearson Education, Inc.)

Rust, Thomas G., 1986. *A Guide to Anatomy and Physiology Lab*. 2nd Ed.  
Southwest Educational Enterprises.

Rohen J.W., Yokochi, C., Lutjen-Drecoll, E. (2006). *Photographic Anatomy of the Human Body*, 6<sup>th</sup> Ed. Lippincott, Williams & Wilkins, Philadelphia, PA

Medical Dictionary: *Optional*

## VI. POLICIES

**Attendance Policy:** You are expected to **attend lecture daily**; attendance will be recorded. Please be on time for class. Excessive, disturbing tardiness violates the classroom protocol code. Due to the condensed time frame of a summer course, course withdrawal will be recommended for absences. Lecture attendance produces better grades!

**Laboratory attendance is MANDATORY** by college/departmental policy (**10% current test grade reduction/absence; zero for missed practical tests**). Refer to the laboratory syllabus for specific policies and procedures.

### **Preparation for Class Policy:**

Preview the text material before class. Use the power point slides to follow the lecture along with the many diagrams. Suggested items to have for maintaining organization are: (1) notebook, (2) folder for handouts, (3) colored pens/pencils and (4) highlighter. *Keep lecture notes/handouts separate from lab notes/handouts.*

**Lecture will be more physiologically and clinically oriented. Labs will be more anatomically oriented.** You may be responsible for reading material not presented in its entirety in class; you will be informed of this information. **You are also responsible for the following:**

- All information covered in lecture
- Information brought out in discussions as noted
- Information in the text as indicated
- Information in assigned readings, articles and handouts
- Content of audiovisuals both in class and on assignment
- Anything missed during tardiness and absences.

### **Test/Assignment Policies:**

**You must be present for all tests.** Any adjustment/make-up must fulfill 3 requirements:

1. Notification is **on or before** the day of the exam.
2. You have contacted the Dean of Students office for an official, verified, documented absence.
3. The test must be completed within 3 days otherwise the grade = 0.

Failure to comply with the above 3 requirements will result in a 'O' for the missed test. Make-ups may not necessarily correspond to the regular test format and may be scheduled during the last week of classes. **However, for the last test which is considered the 'final exam' an absence is an earned automatic zero for the test.**

**If YOU ARRIVE LATE FOR A TEST, YOU FORFEIT THAT TIME FOR TAKING THE TEST.** Paper, food, cell phones, any other technological device, and guests are not allowed during tests. Any infraction will result in a zero for the test. *Test etiquette* applies on all tests. This means that you may not place any comments or requests on the tests. Any violation of *Test Etiquette* will be penalized.

**Grading Policy: You will receive a single grade for this course.**

**Your Grade\* = 50% of your lecture grade+ 50% of your laboratory grade**

**\*Nursing, Nutrition and the LAC require a minimum grade of ‘C’.**

- 1. Lecture Component: Your lecture grade is an average of the following:**  
4 major lecture tests (non-cumulative); Test #4 will occur during the “final exam period”. A test format study guide document will precede each test.  
*1 bonus point earned on the first three tests will be added to your final lecture grade as earned percentage points.*
- 2. Laboratory Component: Your lab grade is an average of the following:**  
3 non-cumulative lab practical exams per laboratory syllabus.
- 3. Grading Scale: A-F (with +,-)\***

A	93-100	C+	77-79
A-	90-92	C	<b>73-76**</b>
B+	87-89	C-	70-72
B	83-86	D+	67-69
B-	80-82	D	60-66
		F	Below 60

\* Attendance and participation *considered* in borderline cases

\*\* Minimum of 73% is required for nursing, nutrition and the LAC; only one course overall is allowed to be repeated in the nursing curriculum.

**CCC Policies: 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*. Cheating will result in a zero for tests. If necessary, violations should be brought to the attention of the instructor. Violations may result in the loss of bonus points, your removal from class and may be formally addressed by the appropriate individuals: Dr. John Cigliano (Chair), Dr. Carol Pulham (Provost), Dr. Denise O’Neill (Acting Dean of Students) and Christine Nowik (Director of the Advising Center). There will be zero tolerance for disrespectful, disruptive behavior at any time. Security will be called in the event such behavior occurs.

I fully support the College’s policy on plagiarism as described in the *Student Handbook*. Cases will be reported to the Provost as necessary.

Students with **documented** disabilities who may need academic accommodations should discuss these needs with me during the first week of class. Students with disabilities who wish to request

accommodations should contact the advising center.

### **Need To Know Policies:**

1. All students must have CCC email for course communication and it is your responsibility to check it regularly.
2. Promptness, respect and courtesy are expected in all aspects of the course.
3. Lab may precede lecture on test days and as needed.
4. Laboratory coats (no shirts or microbiology coats) and closed-toe shoes are required in A&P laboratories. Food and beverages (including anything bottled) are not permitted in the laboratory. Please report all breakage to me.

Due to the hazards in lab and abiding by the classroom protocol code establishing a learning environment for all registered students, children are not permitted to be in the lab.

5. Please silence all cell phones during class unless there is an impending situation. Guests, food, drinks, wrappers, cell phones, or any other technological devices are not allowed during tests. If possible, it is highly recommended that students DO NOT sit close to each other during tests.
6. To insure greater security and safety for students at night who study in the Science Center:
  - A. Always carry your college ID.
  - B. Make an effort to come with a study partner.
  - C. Notify Campus Security ('O') for any help or assistance.
  - D. Use the "escort service" (Campus Security) if needed.

The SC Building hours are:

Monday thru Friday	7:00 AM -10:00 PM
Saturday and Sunday	Closed unless requested open

### **7. Survival Notes:**

- DO NOT MISS CLASS. Assimilation of this material is a monumental task and requires structure, discipline, organization and attendance.
- Study/Review EVERY day. This course is a full-time job!  
Organize and integrate the concepts, summarize, write out pathways and study ideas. How do all the pieces of information create the 'big picture'?
- Make the most of your weekends for studying.
- If you don't understand, ASK. When in doubt, ASK.

*Best Wishes for a successful summer in A&P!  
- Professor Malitsch*