

MOUNT SAINT MARY COLLEGE
NEWBURGH, NEW YORK 12550

Biology 104
Human Anatomy and Physiology II

Dr. Sarro
Spring 2006

I-COURSE PURPOSE

This course is a continuation of Bio. 104, Human Anatomy and Physiology II. The major topics for discussion this semester will be the endocrine system, circulatory system, respiratory system, digestive system, metabolism, nutrition, and temperature regulation, urinary system, fluid and electrolyte balance, and the reproductive systems

II-OUTCOMES

By the end of the course, students will be able to:

- Explain the gross and microscopic anatomy of the organs and structures that make up the systems listed below:
 - Endocrine
 - Cardiovascular
 - Lymphatic/Immunological
 - Respiratory
 - Digestive
 - Urinary
 - Reproductive

- Explain the physiology of the systems listed below:
 - Endocrine
 - Cardiovascular
 - Lymphatic/Immunological
 - Respiratory
 - Digestive
 - Urinary
 - Reproductive

III-INSTRUCTIONAL METHODS

The course is made up of three (3) two (2) hour sessions. Depending upon the material being covered the time will be used for lecture, laboratory or a combination of both. There may be readings placed on reserve in the library. Information from these readings may appear on exams in the form of extra credit questions.

Students are strongly encouraged to use the CD-ROM's that come packaged with their textbook. I feel confident they will aid in preparing for exams.

In accordance with the charter granted to Mount Saint Mary College by the NYS Board of Regents all students are expected to spend two (2) hours outside of the classroom for each hour within the classroom. It is recommended that some of this time be spent in the laboratory during the extra study hours.

All students are invited to participate in an extra credit seminar. These seminars will meet between four (4) and six (6) times during the semester. Depending upon the number of points the student wishes to earn they will:

1. Attend all seminar meetings.
2. Complete all outside readings
3. Write a five (5) page paper with a minimum of three (3) references on a topic agreed upon by both the student and the instructor
4. Take two (2) exams on the material presented and discussed during these seminars.

Depending upon performance students will have the opportunity to raise their final average by five (5) points based on the distribution of points listed below.

1. 1 pt. For attending and participating in all seminars.
2. 2 pts. For preparing a quality paper
3. 2 pts. for achievement on the exams

IV-ATTENDANCE

Unless prior arrangements are made, students are expected to attend all lecture and laboratory sessions. A student is permitted to miss, cut, three (3) classes without penalty, however for each cut after those three the student will be penalized by having their final grade lowered, which may result in their receiving a failing grade for the course. An excuse of illness, for missing an exam, will only be honored upon the presentation of a doctor's note written upon office stationery.

Students are expected to arrive for class on time; excessive late arrivals will result in a lowering of your final average. Except for occasional emergencies students are expected to remain in class while lecture is in progress. Please take care of personal matters prior to arriving for class. Cell phones are to be turned off prior to the start of class.

V-EVALUATION

The following is a breakdown for the computation of the student's final average:

50% - 5 LECTURE EXAMS
20% - 2 LABORATORY EXAMS
10% - Quizzes
20% - FINAL EXAM (COMPREHENSIVE)

100% - FINAL AVERAGE

Your final grade will be based upon the following system:

90 - 100 = A	87 - 89 = A(-)	85 - 86 = B(+)
80 - 84 = B	77 - 79 = B(-)	75 - 76 = C+
70 - 74 = C	67 - 69 = C(-)	65 - 66 = D(+)
60 - 64 = D	Below 60 = F	

EXAMS – Exams will be given on the days listed in the course outline, unless changed by the instructor. The types of questions that may appear on the exams are true or false, multiple choice, fill in the blanks, fill in the chart, matching and short essay questions.

LABORATORY EXAMS – Each exam will be made up of 25 stations with four (4) questions per station. Identification questions will come directly from the study sheets provided. Physiological questions will be derived from exercises performed in class and the computer simulations covered in a give topic.

QUIZZES – Quizzes will be given during the first ten (10) minutes of each Friday's class. These will be collected promptly upon completion and late arrival for these quizzes will result in the student not being permitted to take the quiz and a grade of zero. Each quiz will consist of ten (10) questions covering material discussed during the previous week=s lecture. The grades on these quizzes will be used in the determination of your final grade and in fact count nearly as much as a lecture test grade.

VI – WAYS OF CONTACTING THE INSTRUCTOR

PHONE: 569-3132

EMAIL: sarro@msmc.edu

VII – OFFICE HOURS

The instructor will be available in Room 208 of Aquinas Hall for extra help, discussion or advice during the hours listed below.

Mon.	7:00 - 8:00 a.m. 9:30 – 10:00 a.m. 2:30 – 3:00 p.m.
Tues.	By Appointment Only
Wed.	7:00 - 8:00 a.m. 9:30 – 10:00 a.m. 2:30 – 3:00 p.m.
Thurs.	By Appointment Only
Fri.	9:30 – 10:00 a.m.

VIII -REQUIRED TEXTBOOKS AND MATERIALS

- A. Marieb 6th Ed., Human Anatomy and Physiology, Benjamin/Cummings Co., Inc.
- B. Marieb, 8th Ed., Human Anatomy and Physiology Laboratory Manual: Pig Version
Benjamin/Cummings Co., Inc.

LABORATORY SCHEDULE

DATE:

- | | |
|------|--|
| 1/25 | 1. Endocrine System Physiology: Computer Simulation;
(P-37 – 47) |
| 1/27 | Continuation of 1/25 |
| 2/1 | Blood |
| | 1. Formed Elements of Blood (pgs. 311 – 312)
2. Differential WBC Count (pgs. 313 - 314)
3. Blood Analysis: Computer Simulation (P-48 – P-59) |

Cardiovascular Dynamics: Computer Simulation and Frog; P-60 – 70

Cardiovascular Physiology: Computer Simulation; P-71 - 77

Students are to complete these assignments at home in preparation for the lecture and laboratory exams on this material. Answers to review study sheets will be posted on the course website.

2/3

Heart

1. Anatomy of the Heart (pgs. 322 – 331)

2/10

Heart

1. Electrocardiography (pgs. 332 – 342)

2/15

Blood Vessels (pgs. 343 – 358)

2/16

Human Cardiovascular Physiology (pgs. 359 – 371)

Respiratory System Dynamics: Computer Simulation; P-78 - 85

Students are to complete these assignments at home in preparation for the lecture and laboratory exams on this material. Answers to review study sheets will be posted on the course website.

2/24

Respiratory System Anatomy (pgs. 391 – 398)

3/1

Respiratory System Physiology (pgs. 399 – 417)

Chemical and Physical Processes of Digestion: Computer Simulation; P-86 – 96

Students are to complete these assignments at home in preparation for the lecture and laboratory exams on this material. Answers to review study sheets will be posted on the course website.

3/6

Lab Exam #1

3/20

Anatomy of the Digestive System (pgs. 417 – 434)

3/22

Digestive System - continued

**Renal Physiology-The Function of the Nephron:
Computer Simulation; P-97 – 104
Acid Base Balance: Computer Simulation; P-105 - 114**

Students are to complete these assignments at home in preparation for the lecture and laboratory exams on this material. Answers to review study sheets will be posted on the course website.

- 3/29 Anatomy of the Urinary System (pgs. 443 – 450)
- 4/3 Anatomy of the Urinary System - continued
- 4/5 Kidney Regulation of Fluid and Electrolytes – see handout
- 4/26 Anatomy of the Reproductive System (pgs. 458 – 466)
- 5/1 Physiology of Reproduction (pgs. 467 – 475)
- 5/5 Principles of Inheritance – (pgs. 483 – 490)
- 5/8 Lab Exam #2