Course Description: The second course in a two-semester sequence that covers the basic structure and function of the human body using a systems approach. Major topics covered include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems along with immunity, metabolism, and fluid, electrolyte, and acid-base homeostasis. Laboratory work includes dissection, microscopy, models, and experimental demonstration of concepts covered in class. Dissection of preserved animal specimens is required. This course is designed primarily for students majoring in nursing or allied health fields.

Prerequisite: Human Anatomy and Physiology I (BIO 150)

Instructor: Libero Antonio (Tony) Di Paolo
E-mail: ldipaolo@dccc.edu
Office Hours: before/after class, by appointment

Required Materials:


Lab Tools:
Dissecting Kit, Goggles, Gloves, Pneumotach

Course Competencies: Upon successful completion of this course, students should be able to:
1. Evaluate the role of hormones in regulating body functions.
2. Categorize the components of the blood and describe their functions.
3. Demonstrate an understanding of cardiac anatomy and physiology.
4. Relate the structure of the blood vessels to the hemodynamics of blood flow.
5. Examine the structure and function of the lymphatic system.
6. Analyze how the immune system functions to defend the body against disease.
7. Demonstrate an understanding of respiratory anatomy and physiology.
8. Demonstrate an understanding of digestive anatomy and physiology.
9. Analyze how major metabolic pathways are used by the body.
10. Examine the role of the urinary system in maintaining homeostasis.
11. Assess the body's ability to maintain fluid, electrolyte, and acid-base homeostasis.
12. Relate the structure of the male reproductive system to its function.
13. Relate the structure of the female reproductive system to its function.
14. Demonstrate an ability to perform modern laboratory skills, including dissection and microscopy.
15. Collect and analyze experimental data, formulate appropriate conclusions, and compile lab reports.
16. Apply concepts learned in this course to one's personal health.

**Attendance:**
Students are expected to attend all classes. If a class is missed due to illness or emergency; the student is responsible for all information that is covered in a missed class.

Lab attendance is mandatory. Students are expected to attend and participate in all labs. Often, labs involve working with partners or groups, so that absences are a hindrance to the students in your group. If you miss more than two labs, you may be dropped from the course. Students should contact me immediately if they have to miss a lab. In some cases, it is possible for students to make up a lab, if appropriate arrangements have been made in advance.

**Grading**

**Lecture Tests:**
Tests will be based on the learning objectives and reading assignments in the textbook. If a student misses a test, he/she should contact me no later than the same day the test is given in order to make arrangements to take the make-up test. Students should expect to take the make-up test the following day unless there are extenuating circumstances. No student will be allowed to take more than one make-up test.

**Laboratory Practicals:**
Two laboratory practicals will be given - one at mid-semester and the second at the end of the semester. These practicals will cover material that students have learned in lab. It is especially important that students take their lab practical on the scheduled date, since it is impossible to set up make-up lab practicals. If for some reason a student is not able to take the lab practical at the regularly scheduled time, the student should contact his/her instructor immediately, and it may be possible for the student to take the practical with another lab section, if appropriate arrangements have been made in advance.

**Lab Reports:**
Students will be asked to complete lab reports for certain labs. More detailed information about the due dates and format for these lab reports will be provided prior to completion of each lab.

**Final Grade:**
Your final grade will be based on your course average according to the following system:
- A = 90-100%
- B = 80 - 89 %
- C= 70-79 %
- D= 60-69 %
- F = "Below 60 %
Points:
Students will be able to earn up to 925 points. The point distribution is shown below. Any changes to point values will be announced in advance.

- Exam 1: 125 points
- Exam 2: 125 points
- Exam 3: 125 points
- Exam 4: 125 points
- Final Exam: 125 points
- Lab Practical 1: 100 points
- Lab Practical 2: 100 points
- Lab Reports and Attendance: 100 points

Special Needs Students:
Students needing accommodations in this class due to a learning, physical, or psychological disability, please see the instructor to discuss your accommodation letter. If you have not arranged accommodations, you should contact Ann Binder, Director of Special Needs Services, in the Career and Counseling Center (room 1320, phone 610-325-2748) at the Marple campus.
<table>
<thead>
<tr>
<th>Week of</th>
<th>Week no.</th>
<th>Topic</th>
<th>Chapter</th>
<th>Pages</th>
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<td>4-Jul</td>
<td>1</td>
<td>Cardiovascular system - Blood</td>
<td>19</td>
<td>689-711</td>
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<td>Cardiovascular system - Blood vessels</td>
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<td>760-781, 783-784, 818-822</td>
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<td>Lymphatic System and Immunity</td>
<td>22</td>
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<td>Respiratory System</td>
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<td>Digestive System</td>
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<td>Metabolism</td>
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<td>Urinary System</td>
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<td>1-Aug</td>
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<td>Fluid, Electrolyte, and Acid-Base Homeostasis</td>
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<td>1062-1076</td>
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<td>Endocrine System</td>
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<td>642-675</td>
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<td>8-Aug</td>
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<td>Reproductive System - Male/Female</td>
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<td>1081-1116</td>
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<td>Development and Inheritance</td>
<td>29</td>
<td>1133-1150, 1155-1156, 1163-1167</td>
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**Exam Schedule**

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<td>Monday, July 11, 2011</td>
<td>Exam 1</td>
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<tr>
<td>Monday, July 18, 2011</td>
<td>Exam 2</td>
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<td>Thursday, July 21, 2011</td>
<td>Lab Practical 1 (Labs 1-5)</td>
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<td>Monday, July 25, 2011</td>
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<td>Tuesday, August 09, 2011</td>
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