PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

PATHOPHYSIOLOGY
BIOL 2210

Class Hours: 2.0 Credit Hours: 2.0
Laboratory Hours: 0.0 Date Revised: Summer 01

Catalog Course Description:
An introduction to the disease processes and mechanisms of the human body and to the dysfunction of the body’s systems.

Entry Level Standards:
Eligible enrollment in ENGL 1010 and DSPM 0850.

Prerequisites:
None

Textbook(s) and Other Reference Materials Basic to the Course:
Pathophysiology: The Biologic Basis for Disease in Adults and Children. McCance and Huether.

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>The Cell; Cell Biology; Altered Cells &amp; Tissues; The Cellular Environment</td>
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<td>2</td>
<td>Genes and Gene Environment Interaction</td>
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<td>3</td>
<td>Mechanisms of Self Defense; Cellular Proliferation: Cancer</td>
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<td>4</td>
<td>Exam I</td>
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<tr>
<td>5</td>
<td>The Neurologic System</td>
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<td>6</td>
<td>The Endocrine System</td>
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<td>7</td>
<td>The Reproductive System</td>
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<td>8</td>
<td>Exam II</td>
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<td>9</td>
<td>The Hematologic System</td>
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<tr>
<td>10</td>
<td>The Cardiovascular and Lymphatic Systems</td>
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<tr>
<td>11</td>
<td>The Pulmonary System; Exam III—Take Home Exam</td>
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II. Course Objectives*:

A. Demonstrate a knowledge of the cell, its environment, and its genetic mechanism. I.5

B. Demonstrate a knowledge of the body’s basic defense mechanisms. I.5

C. Demonstrate a basic knowledge of cancer development and metastasis. I.5, III.2

D. Demonstrate a knowledge of pathological situations within the following systems: I.5, II.2
   Nervous    Respiratory
   Endocrine  Urinary
   Reproductive Digestive
   Circulatory  Muscular
   Lymphatic    Skeletal
   Integumentary

*Roman numerals after course objectives reference goals of the university parallel program.

III. Instructional Processes*:

Students will:

1. Use critical thinking to solve medical case histories and other related problems. Problem Solving and Decision Making Outcome, Communication Outcome

2. Locate and become more proficient at using medical resources in the library and on the World Wide Web. Information Literary Outcome, Technological Literacy Outcome

3. Participate in group activities to facilitate cooperative learning. Active Learning Strategies

4. Use related laboratory equipment and tools for making physiological measurements and observations. Technological Literary Outcome, Numerical Literary Outcome

5. Develop a body of knowledge that helps ensure success in upper-level health-related classes and careers. Transitional Strategy, Personal Development Outcome

*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Link basic cellular operation to immunity. A, B

2. Link errors in basic cellular operation to cancer development. A, B, C
3. Link operation and inoperation of the immune system to cancer. B, C
4. Recognize specific pathological states related to the nervous system. D
5. Recognize specific pathological states related to the reproductive system. D
6. Recognize specific pathological states related to the circulatory system. D
7. Recognize specific pathological states related to the lymphatic system. D
8. Recognize specific pathological states related to the integumentary system. D
9. Recognize specific pathological states related to the respiratory system. D
10. Recognize specific pathological states related to the urinary system. D
11. Recognize specific pathological states related to the digestive system. D
12. Recognize specific pathological states related to the muscular system. D
13. Recognize specific pathological states related to the skeletal system. D

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures: 80% of grade

   Exams I, II, III and IV are worth 80 points each

B. Laboratory Expectations:

   N/A

C. Field Work:

   N/A

D. Other Evaluation Methods: 20% of grade

   Outside assignments, 40 points

E. Grading Scale:

   90%--100% = A
   80%--89%  = B
   70%--79%  = C
   60%--69%  = D
   <60%     = F

VI. Policies:

A. Attendance Policy:

   Pellissippi State Technical Community expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.
B. Academic Dishonesty:

Plagiarism or cheating will not be tolerated. Students will receive a zero for the assignment. A second offense will result in automatic failure of the course.

C. Other Policies:

Visitors: No visitors are allowed in lecture unless given permission by the instructor.