JEFFERSON COLLEGE

COURSE SYLLABUS

BIO 245
PATHOPHYSIOLOGY

3 Credit Hours

Prepared by:
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Shirley Davenport, Dean of Arts & Science Education
BIO: 245 PATHOPHYSIOLOGY

I. CATALOG DESCRIPTION

A. Course pre-requisites/co-requisites:
   BIO 212 (Anatomy & Physiology II), or PTA 105 (Anatomy & Physiology II for the Physical Therapist Assistants), or equivalent, with a grade of “C” or better

B. 3 semester credit hours

C. Pathophysiology presents the fundamental mechanisms of human disease including the etiology, diagnosis, pathology, epidemiology, prevention, and treatment of significant human diseases. Required for the AAS degree in Health Information Technology and Physical Therapist Assistant. (F, Su)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

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<th>Expected Learning Outcomes</th>
<th>Assessment Measures</th>
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<tr>
<td>Demonstrate appropriate use of vocabulary to discuss and classify diseases in written and verbal communication</td>
<td>Hourly and final exams, oral presentation and written papers, case studies: written analysis, online discussion topics, online and in-class assignments, and quizzes</td>
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<tr>
<td>List and describe the most frequent and / or significant human diseases, including etiology, diagnosis, pathology, epidemiology, prevention, and treatment</td>
<td>Hourly and final exams, oral presentation, online discussion topics, online and in-class assignments, and quizzes</td>
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<td>Describe the fundamental mechanisms of disease and human response, and their effects on homeostasis at the level of the cell, the organ, the organ system, and the organism</td>
<td>Hourly and final exams, oral presentation and written papers, case studies: written analysis, online discussion topics, online and in-class assignments, and quizzes</td>
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<tr>
<td>Compare and contrast the anatomy and physiology of normal human body systems with the anatomy and physiology of systems affected by various diseases.</td>
<td>Hourly and final exams, oral presentation, case studies: written analysis, online discussion topics, online and in-class assignments, and quizzes</td>
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<tr>
<td>Predict the effects of disease in one system on the entire human body, describing how the body may maintain homeostasis</td>
<td>Hourly and final exams, online and in-class assignments, and quizzes</td>
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<tr>
<td>Classify various types of resources used in prevention, diagnosis, and treatment of disease</td>
<td>Hourly and final exams, online discussion topics, online and in-class assignments, and quizzes</td>
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III. OUTLINE OF TOPICS

A. Mechanisms of disease
   1. Definitions and overview
   2. Cellular pathology: injury, inflammation, and repair
   3. Disorders of the immune system
   4. Infectious disease
   5. Neoplasia
   6. Disorders of fluid, electrolyte and acid-base balance and blood flow

B. Disorders of organ stems
   1. Disorders of blood cells
   2. Disorders of blood vessels
   3. Disorders of the heart
   4. Disorders of the respiratory tract
   5. Disorders of the gastrointestinal tract
   6. Disorders of the liver and biliary tract
   7. Disorders of the pancreas
   8. Disorders of the endocrine glands
   9. Disorders of the urinary tract
  10. Disorders of the male genitalia
  11. Disorders of the female genitalia and breast
  12. Disorders of bones, joints, and skeletal muscle
  13. Disorders of the nervous system
  14. Disorders of the senses
  15. Disorders of the skin

C. Disorders of the stages and states of life
   1. Congenital and childhood disorders
   2. Disorders of daily life
   3. Aging, stress, exercise, and pain

IV. METHOD(S) OF INSTRUCTION:

A. Lecture to support text reading assignments

B. Student presentations in classroom and online

C. Case studies (individual and group)

D. Online assignments and quizzes

V. REQUIRED TEXTBOOK(S):

VI. REQUIRED MATERIALS:

A. Textbook

B. Case Study Manual

C. Online access to STARS and Blackboard.

VII. SUPPLEMENTAL REFERENCES

A. Library resources: present offerings and anticipated texts, journals, video/audio tapes, software, etc.

B. Internet references

VIII. METHOD(S) OF EVALUATION

A. Three hourly exams and a comprehensive final exam 60%

B. Case studies 20%

C. Oral presentations and/or written papers 10%

D. Online discussion topics and assignments 10%

E. Grading Scale:
   90-100% = A
   80-89% = B
   70-79% = C
   60-69% = D
   Below 60% = F

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library phone 636-481-3169)

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College Website, http://www.jeffco.edu/jeffco/index.php?option=com_weblinks&catid=26&Itemid=84)

XI. ATTENDANCE STATEMENT
Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.