Science, Allied Health, & Engineering

HIM*203

Pathophysiology

Department Course No. Course Title

3 hrs

Credit Hrs. # lecture hrs./week # lab hrs./week

Prepared by

Susan Deane

January 2, 2015

Faculty Member Date

Course prerequisites: BIO*110, or BIO*115

Course Location (bldg/room #):

Meeting time (days/hours):

Online

Course Description:

This course provides an introduction to the study of functional changes that accompany human diseases. The purpose of this course is to supply the student with basic understanding which will prepare them for the health care setting. The level of detail of topics covered will be such that the most common conditions along with new and emerging diseases will be included. Components of pharmacology will also be included for each category of diseases.

Prerequisite: BIO*110 or 115

Scope of Course:

The complexities of today’s health information have changed the configuration of the Health Information Management (HIM) department. Today’s HIM professional must be equipped with a broad range of knowledge including, as dictated by AHIMA, clinical foundations. In this course, the student will gain an understanding of the nature of disease processes; and the protocols of diagnosis and treatment of the major diseases to include common drugs and laboratory and other tests used for the diagnosis and treatment of disease.

Program/Discipline Learning Outcomes Contained in Course:

The goal of the Science Division is to incorporate the following learning outcomes into each course:

- Written and oral communication skills
- Critical thinking, problem solving, and analytical skills
- Interpersonal skills and awareness
- Teamwork, team-building, and project focus
- Knowledge of ethical and legal healthcare environment
- Awareness and respect for other perspectives
- Global awareness and diversity
- Flexibility and adaptive to change
- Personal productivity and organizational skills
- Ability to understand your customer
- Understand process management
Importance of Course in Program/Discipline:
The AHIMA Education Strategy Committee has created a list of entry-level competencies for associate degree students. This course, HIM203, familiarizes students with the concepts and subject matter in each of the 5 domains and 15 subdomains recommended by AHIMA. As students prepare to enter the field of Health Information Management, this course is of high importance. The following AHIMA domains are covered:

- Domain: Clinical Foundations

Learning Outcomes:
The goal of HIM203 is to provide each student with knowledge of common and some rare human diseases in each body system.

- Understand the general concepts of human disease: Types, mechanisms, neoplasms, inflammation, and infection.
- Analyze the common diseases and disorders associated with each body system
- Recall for the diseases and disorders explored the parts of the body affected, common signs and symptoms, and diagnostic tests.
- Know the latest treatment and drug options associated with common diseases, as well as some new and emerging diseases for each system.

Textbooks and other required readings/computer software/materials/library reserve room:
Human Diseases, 4th Edition
Cengage
Author(s): Marianne Neighbors & Ruth Tannehill-Jones

Office Location (building/room number): 
Office Hours: NA
Office Telephone: (203) 980-4680
Office e-mail: sdeane@nvcc.commnet.edu

Additional Syllabus Information:
For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather/emergency closings, and more, please go to the following website: www.mxcc.edu/catalog/syllabus-policies/
Attendance Policy:
Students are expected to attend all classes. Two absences are allowed without penalty. More than two absences will result in grade point deductions and could adversely impact your overall final grade. Only students who officially withdraw from class by the deadline of April 15, 2015 will receive a grade of W. Otherwise, students will be given the grade they earn.

Evaluation (exams, term papers, projects, etc., and percentages towards final grades):

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exams (4)</td>
<td>40%</td>
<td>400 points</td>
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<tr>
<td></td>
<td>Each worth 10%</td>
<td>100 points (exam 1)</td>
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<td>100 points (exam 4)</td>
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<tr>
<td>Online Discussions</td>
<td>20%</td>
<td>350 points</td>
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<tr>
<td>Term Paper</td>
<td>20%</td>
<td>100 points</td>
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<tr>
<td>Chapter Summaries</td>
<td>20%</td>
<td>150 points</td>
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<tr>
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<td>100% total</td>
<td>1000 points possible</td>
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Unit Outlines/Unit Objectives/Expected Outcomes/Assessment Measures:
Each unit will cover specific topics from the textbook and web-based readings. Each student is expected to read the assigned chapters, do all homework assignments, and complete all assignments. The discussions, homework assignments, term paper and test scores will be used to calculate the student’s overall grade as above.

**SCHEDULE**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic and/or Activity</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>January 21-25, 2015</td>
<td>Chapter 1 Introduction to Human Diseases</td>
<td>Discussion: Introductions and Discussion Question Read Chapter 1, Powerpoint, and Web-based assignments Chapter Summaries</td>
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<tr>
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<td></td>
<td>• Define basic terminology used in the study of diseases and the mechanisms of disease.</td>
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<td>• Discuss the pathogenesis of disease and causes of disease</td>
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<td>• Describe standard precautions.</td>
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<td>• Explain predisposing factors to human disease.</td>
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<td>• Compare and contrast “diagnosis” and “prognosis”</td>
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<td>• Describe common diagnostic tests</td>
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<td>Week 2</td>
<td>January 26 – February 1, 2015</td>
<td>Chapter 2 Mechanisms of Disease Chapter 3 Neoplasms</td>
<td>Discussion: Discussion Question Read Chapters 2 and 3, Powerpoint, and Web-based assignments Chapter Summaries</td>
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<td>• Describe the terminology associated with neoplasms, inflammation, defense mechanisms and infection.</td>
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<td>• Explain types of impaired immunity.</td>
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<td>• Describe the processes of cell and tissue injury, adaptation, and death.</td>
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<td>• Explain the classification of neoplasms.</td>
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<td>• Differentiate between hyperplasias and neoplasms.</td>
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<td>• Describe the signs and symptoms of cancer and carcinogenic substances and risk behaviors.</td>
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<td>• Describe the curative, palliative, and preventative methods used in cancer treatment.</td>
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<tr>
<td>Week</td>
<td>Dates</td>
<td>Chapters</td>
<td>Discussion</td>
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| 3    | February 2–8, 2015 | Chapter 4 Inflammation & Infection  
Chapter 5 Immune System  
- Explain the steps of the inflammatory process and the process of tissue repair and healing.  
- Identify the common infectious microorganisms and the resulting diseases.  
- Identify common laboratory tests conducted to identify pathogenic organisms.  
- Describe the terminology common to the immune system and the disorders of the system.  
- Define the terminology associated with inflammation, defense mechanisms and infection  
- Identify the signs and symptoms associated with common immune system disorders.  
- Describe diagnostic tests, the typical course and management of common immune system disorders.  
- Describe the effects of aging on the immune system and the common disorders of the system associated with aging. | Discussion: Discussion  
Read Chapters 4 and 5, Powerpoint, and Web-based assignments  
Chapter Summary | |
| 4    | February 9–15, 2015 | **Exam 1 (Chapters 1 – 5)**  
Chapter 6 Musculoskeletal System  
- Describe the terminology common to the musculoskeletal system and the disorders of the system.  
- Identify signs and symptoms, diagnostic testing, and management of common musculoskeletal system disorders.  
- Describe the effects of aging on the musculoskeletal system and common disorders associated with aging of the system. | Discussion: Discussion  
Read Chapter 6, Powerpoint, and Web-based assignments  
Chapter Summary  
Exam 1 | |
| 5    | February 16–22, 2015 | Chapter 7 Blood  
Chapter 8 Cardiovascular  
- Describe terminology common to blood, blood-forming and cardiovascular organs and the disorders of the blood, blood-forming and cardiovascular organs.  
- Describe the signs and symptoms, common diagnostics, and typical course and management of common disorders of blood, blood-forming and cardiovascular systems.  
- Describe the effects of aging on the blood, blood-forming, and cardiovascular organs and the common disorders associated with aging of the systems. | Discussion: Discussion  
Read Chapters 7 and 8, Powerpoint, and Web-based assignments  
Chapter Summaries | |
| 6    | February 23–March 1, 2015 | Chapter 9 Respiratory System  
Chapter 10 Lymphatic System  
- Describe terminology common to respiratory and lymphatic systems and the disorders of the systems.  
- Describe the signs and symptoms, common diagnostics, and typical course | Discussion: Discussion  
Read Chapters 9 and 10, Powerpoint, and Web-based assignments  
Chapter Summaries | |
and management of common disorders of the respiratory and lymphatic systems.

- Describe the effects of aging on the respiratory and lymphatic systems and the common disorders associated with aging of the systems.

| Week 7 | March 2 – 9, 2015 | Chapter 11 Digestive  
Chapter 12 Liver, Gall Bladder, Pancreatic Diseases |
|--------|-----------------|------------------------------------------------|
|        |                 | - Describe terminology common to the upper and lower digestive systems and the disorders of the systems.  
- Describe terminology common to the liver, gallbladder, and pancreas and the disorders of the organs.  
- Describe the effects of aging on the digestive system and the common disorders associated with aging of the system.  
- Describe the effects of aging on the liver, gallbladder, and pancreas and the common disorders associated with aging of the organs. |

| Week 8 | March 9–15, 2015 | Exam 2 (Chapters 6-10)  
Chapter 16 Eye and Ear Diseases |
|--------|-----------------|------------------------------------------------|
|        |                 | - Discuss the common terminology associated with the eye and ear.  
- Describe the signs and symptoms, common diagnostics, and typical course and management of common disorders of the eye and ear.  
- Identify the common disorders of the eye and ear.  
- Describe the effects of aging on the eye and ear and the common disorders associated with aging of the organs. |

| Discussion: Discussion Question  
Read Chapters 1 and 12  
Powerpoint, and Web-based assignments  
Chapter Summaries |

| Week 9 | March 23–29, 2015 | Chapter 13 Urinary System  
Chapter 18 Integumentary System |
|--------|-----------------|------------------------------------------------|
|        |                 | - Discuss the common terminology associated with the urinary and integumentary systems.  
- Describe the signs and symptoms, common diagnostics, and typical course and management of common disorders of the urinary and integumentary system.  
- Identify the common disorders of the urinary and integumentary systems.  
- Describe the effects of aging on the urinary and integumentary systems and the |

| Discussion: Discussion Question  
Read Chapters 13 and 18, Powerpoint, and Web-based assignments  
Chapter Summaries |
| Week 10 | March 30 – April 5, 2015 | **Exam 3 (Chapters 11, 12, 13, 16, 18)**  
Chapter 14 Endocrine System  
- Discuss the common terminology associated with the endocrine system and disorders of the endocrine system.  
- Describe the signs and symptoms, common diagnostics, and typical course and management of common disorders of the endocrine system.  
- Identify the common disorders of the endocrine system.  
- Describe the effects of aging on the endocrine system and the common disorders associated with aging of the endocrine system. | Discussion: Discussion Question  
Read Chapter 14, Powerpoint, and Web-based assignments  
Chapter Summaries  
Exam 3 |
| Week 11 | April 6 – 12, 2015 | Chapter 15 Nervous System  
- Define the common terminology associated with the nervous system and disorders of the nervous system.  
- Describe the signs and symptoms, common diagnostics, and typical course and management of common disorders of the nervous system.  
- Identify the common disorders of the nervous system.  
- Describe the effects of aging on the nervous system and the common disorders associated with aging of the nervous system. | Discussion: Discussion Question  
Read Chapter 15, Powerpoint, and Web-based assignments  
Chapter Summary |
| Week 12 | April 13 – 19, 2015 | Chapter 17 Reproductive System  
Chapter 19 Genetic and Developmental Diseases  
- Define the common terminology associated with the reproductive system and disorders of the reproductive system.  
- Describe the signs and symptoms, common diagnostics, and typical course and management of common disorders of the reproductive system.  
- Identify the common disorders of the reproductive system.  
- Describe the effects of aging on the reproductive system and the common disorders associated with aging of the reproductive system.  
- Define the terminology common to genetic and developmental disorders.  
- Describe the common signs and symptoms and diagnostics associated with genetic and developmental disorders.  
- Identify common genetic and developmental disorders. | Discussion: Discussion Question  
Read Chapters 17 and 19, Powerpoint, and Web-based assignments  
Chapter Summaries |
<table>
<thead>
<tr>
<th>Week 13</th>
<th>April 20-26, 2015</th>
<th>Chapter 20 Childhood Diseases</th>
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<tr>
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<td><strong>Term Paper Due (April 26, 2015)</strong></td>
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<td>- Define the common terminology associated with childhood diseases.</td>
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<td>- Describe the signs and symptoms, common diagnostics, and typical course and management of common childhood disorders.</td>
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<td>- Explain the common drugs abused by children, the effects of the drugs, and the potential health hazards of drug use.</td>
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<td>- List the immunizations available to prevent childhood diseases.</td>
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<td>- Discuss the safety precautions for preventing poisonings in children.</td>
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<thead>
<tr>
<th>Week 14</th>
<th>April 27-May 3, 2015</th>
<th>Chapter 21 Mental Health Diseases</th>
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<tbody>
<tr>
<td></td>
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<td>- Define the common terminology associated with mental health disorders.</td>
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<td>- Describe the signs and symptoms, common diagnostics, and typical course and management of common mental health disorders.</td>
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<td>- Identify common mental health disorders.</td>
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<td>- Describe the mental health disorders found in the older population and the effects of these disorders.</td>
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| Week 15 | May 4-10, 2015 | Review Session |

| Week 16 | May 12-18, 2015 | Exam 4 (Chapters 14, 15, 17, 19, 20, 21) | Exam 4 |