Health Science major
Spring 2014

HAN 424: Pathophysiology for Healthcare Professionals (3 credits)

Day & Time: Tuesdays, 1:00-4:00 PM
Classroom: HSC L2, seminar room 1B
Professor: Dr. Alice Greene
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Office: Hospital 13S room 104C
Office hours: TBA

Description: Provide the student an introduction to Pathophysiology, that builds off knowledge developed in HAN 312, as needed to meet the challenges of understanding common conditions treated in the inpatient and ambulatory setting. Emphasis on: Systems based approach to disease states, highlighting the pathophysiology, clinical presentation, diagnostic evaluation, and pharmacologic treatment and monitoring of the common diseases within each body system that coders will encounter in the medical record.

Goal: To provide students with a working knowledge of the pathophysiology of common disease states and enable them to enter the medical record with the foundations necessary to understand the disease states that are being addressed.

Course Objectives: Upon completion of this course, students will be able to:

1. Explain the importance of proper documentation of disease and disorders in medical records as it related to billing and coding.
2. Evaluate the role of pathophysiology in diagnosis of disease and its application to billing and coding.
3. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of skin disorders and musculoskeletal system diseases and disorders.
4. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of blood, circulatory, and lymphatic system diseases and disorders.
5. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of reproductive system diseases and disorders and have an understanding of the potential major complications of pregnancy.
6. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of cardiovascular system diseases and disorders.
7. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of endocrine system diseases and disorders.
8. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of respiratory system diseases and disorders.
9. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of nervous system diseases and disorders.

10. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of eye and ear diseases and disorders.

11. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of digestive system diseases and disorders.

12. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of urinary system diseases and disorders.

13. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for a variety of neoplastic diseases and disorders.

14. Compare and contrast the pathophysiology (the signs, symptoms, complications, and treatments) for substance abuse and associated problems.

**Required Text:**
Gould’s Pathophysiology for the Health Professions (FIFTH EDITION), December, 2013
ISBN 1455754110

**Teaching strategies:** Lecture
Small Group Work
Case Studies

**Evaluation:**
- Homework & class participation 30%
- Midterm #1 20%
- Midterm #2 20%
- Final Exam 30%

Course Grading and Expectations: For each class I will assign reading that you must do, along with several ‘Think About’ and ‘Applied Knowledge’ questions. These questions will help you synthesize the material. I will collect these questions and grade them on a 0-3 (0 not completed, 1 below expectations, 2 meets expectations, 3 excellent) system. In addition for each class I will assign several case studies that we will discuss in class. An assigned student will lead the discussion for each case study, but everyone is expected to be prepared to contribute to the case study discussion. 30% of your grade will be determined by the homework, your case study discussion leadership, and engagement in the class. There will also be two midterm exams (20% each), and a final exam (30%). The final will cover material since the last midterm, as well as some cumulative material. The exams will be a mix of short answers and case studies.

**Course Outline:**

Session 1 (Jan. 28)
Introduction to Pathophysiology

Session 2 (Feb. 4)
- Skin disorder (Chapter 8)
- Musculoskeletal System Disorders (Chapter 9)
Session 3 (Feb. 11)
Blood and Circulatory Systems Disorders (Chapter 10)
Lymphatic System Disorders (Chapter 11)

Session 4 (Feb. 18) Guest lecturer, Karen Chase RN
Reproductive System Disorders (chapter 19)
Complications of Pregnancy (Chapter 22)

Session 5 (Feb. 25)
Cardiovascular Systems Disorders (Chapter 12)

Session 6 (March 4)
Cardiovascular Systems Disorders continued (Chapter 12)

Session 7 (March 1)
**First midterm exam** (first half of class)
Endocrine System Disorders (Chapter 16)

March 18: no class, Spring Break

Session 8 (March 25)
Respiratory System Disorders (Chapter 13)

Session 9 (April 1)
Nervous System Disorders (Chapter 14)

Session 10 (April 8)
**Second midterm exam** (first half of class)
Disorders of the Eyes, Ears, and Other Sensory Organs (Chapter 15)

Session 11 (April 15)
Digestive System Disorders (Chapter 17)

Session 12 (April 22)
Urinary System Disorders (Chapter 18)

Session 13 (April 29)
Neoplasms and Cancer (Chapter 20)
Substance Abuse and Associated Problems (Chapter 27)

Session 14 (May 6) Case studies and review for final

Session 15 (May 13) **Final exam**

**Disability Support Services (DSS) Statement:**
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and
documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information, go to the following web site. 
http://www.stonybrook.edu/ehs/fire/disabilities

**Academic Integrity:**
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty, as per the SHTM Academic Policies and Procedures.

**Critical Incident Management:**
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn, as per the SHTM Academic Policies and Procedures.

**Blackboard:**
Students will find all course documents or announcements on Blackboard. You should check Blackboard each week. Please check student personal information to be sure that the email address is current. Blackboard is found at:  http://blackboard.sunysb.edu  For help or more information see:  
http://www.sinc.sunysb.edu/helpdesk/docs/blackboard/bbstudent.php  For problems with logging in, go to the helpdesk in the Main Library SINC Site or the Union SINC Site. You may also call: 631-632-9602 or email:  helpme@ic.sunysb.edu