



Department: PTHA
Course Title: Pathophysiology for the PTA
Section Name: 1011
Semester: Spring 2013

Time: Tuesdays & Thursdays, 12:30-2:00 pm

Classroom: CT 108

Instructor: Dr. Mikala Reznik
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Office Hours:

Monday	12:30-4:30pm
Tuesday	9:00-11:00am, 3:30-4:30pm
Wednesday	9:00-11:00am
Thursday	3:30-4:30pm
Friday	By Appointment Only

Course Description:

Study of the pathophysiology of diseases/conditions encountered in physical therapy. The ability to acquire information specific to diagnoses that affect the physical therapy treatment setting, diseases and injuries involving the musculoskeletal and neuromuscular systems, and the need for physical therapy intervention are stressed. (ICOs 1, 2, 4) Prerequisites: PTHA 1201, PTHA 1405, and PTHA 1413. Corequisites: PTHA 1325 and PTHA 1431.

Required Texts:

1. Professional Guide to Diseases, 9th Edition, Springhouse, 2008
2. Mosby's Medical Nursing, & Allied Health Dictionary, 8th Edition, Mosby, 2009
3. Pharmacology for Health Professionals, Lippincott Williams & Williams, 2005
4. PTHA 1321 Course Packet for Spring 2013

Description of Institutional Core Objectives (ICO's)

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Therefore, with

the assistance of the Undergraduate Education Advisory Committee, the Coordinating Board has approved guidelines for a core curriculum for all undergraduate students in Texas.

Through the application and assessment of objectives within the institution's core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning. Appropriate Odessa College faculty periodically evaluates all of the courses listed in the descriptions on the following pages of this catalog and keys them to Odessa College's Institutional Core Objectives (ICOs), as defined by the Texas Higher Education Coordinating Board (THECB). (Source: *Odessa College Catalog of Courses 2012-2013*, page 73)

Odessa College's Institutional Core Objectives (ICOs):

- 1) *Critical Thinking Skills* - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- 2) *Communication Skills* - to include effective development, interpretation and expression of ideas through written, oral and visual communication
- 3) *Empirical and Quantitative Skills* - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- 4) *Teamwork* - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
- 5) *Personal Responsibility* - to include the ability to connect choices, actions and consequences to ethical decision-making
- 6) *Social Responsibility* - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Learning Outcomes for Pathophysiology for the PTA

(Source: *Odessa College Catalog of Courses*)

Outcome	ICO
<ol style="list-style-type: none"> 1. Understand diseases and disorders sufficiently to safely and effectively apply physical therapy interventions within the plan of care established by the physical therapist. 2. Identify aspects of pathophysiology that affect physical therapy interventions 	<i>Critical Thinking Skills</i> - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
<ol style="list-style-type: none"> 3. Describe the correct response to acute physiological changes in the patient's condition 	<i>Communication Skills</i> - to include effective development, interpretation and expression of ideas through written, oral and visual communication
	<i>Empirical and Quantitative Skills</i> - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

<p>4. Obtain pertinent drug-related information and understand the impact of selected drugs on physical therapy intervention.</p> <p>5. Understand diseases and disorders sufficiently to safely and effectively apply physical therapy interventions within the plan of care established by the physical therapist.</p>	<p><i>Teamwork</i> - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal</p>
	<p><i>Personal Responsibility</i> - to include the ability to connect choices, actions and consequences to ethical decision-making</p>
	<p><i>Social Responsibility</i> - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities</p>

Competencies:

- 1.0 To demonstrate understanding diseases and disorders sufficiently to safely and effectively apply physical therapy interventions within the plan of care established by the physical therapist, the student should be able to:
 - 1.1 Define disease-related terminology.
 - 1.2 Identify selected mechanisms of injury, inflammation and repair.
 - 1.3 Identify the etiology and signs and symptoms of selected diseases and disorders.
 - 1.4 Identify medical treatment and prognoses of selected diseases and disorders.
- 2.0 To demonstrate identifying aspects of pathophysiology which affect physical therapy interventions, the student should be able to:
 - 2.1 Identify specific disease or disorder-related precautions and contraindications for physical therapy interventions.
 - 2.2 Identify the diagnostic procedures that affect physical therapy interventions and their precautions and contraindications.
 - 2.3 Identify medical treatment and/or medication-related precautions and contraindications for physical therapy intervention.
- 3.0 To demonstrate describing the correct response to acute physiological changes in the patient's condition, the student should be able to:

- 3.1 List normal ranges for vital signs.
 - 3.2 *Describe signs and symptoms of adverse responses to activity and conditions requiring treatment modification, treatment discontinuation, or immediate medical attention.
 - 3.3 *Describe appropriate responses to signs and symptoms of adverse responses to activity and conditions requiring treatment modification, treatment discontinuation, or immediate medical attention.
 - 4.0 To demonstrate obtaining pertinent drug-related information and understanding the impact of selected drugs on physical therapy treatment, the student should be able to:
 - 4.1 *Locate, examine and describe the effects, indications, contraindications, side effects and adverse reactions of various commonly used drugs on physical therapy interventions according to guidelines provided in class.
- *Indicates integrated, core curriculum skills (math, reading, writing, communication, technological literacy and/or critical thinking)*

Methods of Presentation:

Lectures, reading assignments, videos, discussion, and outside projects and assignments.

Course Requirements:

In order to receive credit for this course, all students must:

- 1. Complete all unit tests.
- 2. Participate in PowerPoint quizzes.
- 3. Complete the assigned project.
- 4. Complete the final exam.

Grade Compilation:	Tests	55%
	Project	10%
	Oral/Written Quizzes	10%
	Final Exam	25%

Odessa College Policies

Academic Policies

Note that the OC Student Handbook states (page 32) that “[i]n cases of academic dishonesty, the instructor has the authority to impose appropriate scholastic penalties. Complaints or appeals of disciplinary sanctions may be filed in accordance with the college due process procedure. Copies of the college due process procedure are available in the office of The Director of Student Life (CC104).”

For more information on your rights and responsibilities as a student at Odessa College, please refer to the following: *The 411 of OC: Student Handbook 2012-2013; Student Rights & Responsibilities* <http://www.odessa.edu/dept/studenthandbook/handbook.pdf>

Scholastic Dishonesty

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism and collusion.

"Cheating on a test" shall include:

- Copying from another student's test paper
- Using test materials not authorized by the person administering the test.
- Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- Knowingly using, buying, selling, stealing or soliciting, in whole or in part, the contents of an unadministered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
- Substituting for another student, or permitting another student to substitute for one's self, to take a test.
- Bribing another person to obtain an unadministered test or information about an unadministered test.
- "Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own written work.
- "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. (Source: *Odessa College Student Handbook 2012-2013, page 29-30*)

Special Populations/Disability Services/Learning Assistance

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the

Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Odessa College affirms that it will provide access to programs, services and activities to qualified individuals with known disabilities as required by **Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990 (ADA)**, unless doing so poses an undue hardship or fundamentally alters the nature of the program or activity. Disabilities may include hearing, mobility or visual impairments as well as hidden disabilities such as chronic medical conditions (arthritis, cancer, diabetes, heart disease, kidney disorders, lupus, seizure disorders, etc.), learning disabilities or psychiatric or emotional disabilities. A student who comes to Odessa College with diagnosed disabilities which may

interfere with learning may receive accommodations when the student requests them and submits proper documentation of the diagnosis. A Request for Accommodations form and guidelines for beginning the request process are available in the OC Help Center or on the Odessa College web site at www.odessa.edu/dept/counseling/disabilities.htm. The college strives to provide a complete and appropriate range of services for students with disabilities such as assistance with testing, registration, information on adaptive and assistive equipment, tutoring, assistance with access and accommodations for the classroom where appropriate. For information regarding services, students with disabilities should contact the Office of Disability Services in the OC Help Center located in Room 204 of the Student Union Building or call 432-335-6433. (Source: *Odessa College Catalog of Courses 2012-2013*, page 52)

Dropping a Course or Withdrawing from College

Students wishing to drop a non-developmental course may do so online using WebAdvisor, at the Wrangler Express, or Registrar's Office. A student wishing to drop a developmental course or withdraw from college should obtain a drop or withdrawal form from the Wrangler Express or the Registrar's Office. Students are encouraged to consult with instructors prior to dropping a class. Students may not completely withdraw from the college by use of the Web. Students must drop a class or withdraw from college before the official withdrawal date stated in the class schedule. Students who are part of the Armed Forces Reserves may withdraw with a full refund if the withdrawal is due to their being ordered into active duty. A copy of the student's orders must be presented to the Registrar's Office at the time of the withdrawal. For details, please contact the Office of the Registrar. **No longer attending class does not automatically constitute withdrawal from that class, nor does a student's notification to an instructor that the student wishes to be dropped. Failure of a student to complete the drop/withdrawal process will result in a grade of "F."** (Source: *Odessa College Catalog of Courses 2012-2013*, page 36)

Learning Resource Center (LRC; Library)

The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian" service provide additional help.

Student Success Center (SSC)

Located in the LRC, the Student Success Center (SSC) provides assistance to students in meeting their academic and career goals. We strive to provide new and updated resources and services at no charge to OC students. Academic support services include tutoring, study skills training, workshops, and the mentoring program. Tutoring is available for a variety of subjects including college mathematics, English, government, history, speech, chemistry, biology, and all developmental coursework. Appointments are preferred, but walk-ins will be served as soon as possible. Smarthinking online tutoring is also available. All computers in the center have Internet access, Microsoft Office, and software resources to assist OC students in improving their reading, writing and mathematical skills. The center also offers

special assistance to students preparing for the THEA/COMPASS test. Computer lab assistants are available to assist students with student email, Blackboard, OC portal, Course Compass and more. For more information or to make an appointment, please call 432-335-6673 or visit www.odessa.edu/dept/ssc/ (Source: *Odessa College Catalog of Courses 2012-2013, page 54*)

Student E-mail

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **Correspondence will be submitted using your Odessa College email as an alternative method to contact you with information regarding this course.**

Technical Support

For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at https://www.odessa.edu/dept/ssc/helpdesk_form.htm.

Expectations for Engagement – Face to Face Learning

To help make the learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the learning environment. Students and instructors are welcome to exceed these requirements.

Reasonable Expectations of Engagement for Instructors

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
 - provided my contact information at the beginning of the syllabus;
 - respond to all messages in a timely manner through telephone, email, or next classroom contact; and,
 - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
 - provide clear information about grading policies and assignment requirements in the course syllabus, and
 - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will

- return classroom activities and homework within one week of the due date and
- provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
 - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
 - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
 - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.
2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
 - missing class when a major test is planned or a major assignment is due;
 - having trouble submitting assignments;
 - dealing with a traumatic personal event; and,
 - having my work or childcare schedule changed so that my classroom attendance is affected.
3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
 - seek out help from my instructor and/or from tutors;
 - ask questions if I don't understand; and,
 - attend class regularly to keep up with assignments and announcements.

Institutional Calendar

Available online at <http://www.odessa.edu/college-calendar12-13.pdf>

Course Policies

Disclaimer

This syllabus is tentative and subject to change in any part at the discretion of the instructor. Any changes will be in accordance with Odessa College policies. Students will be notified of changes, if any, in timely manner.

Original Effort

The work submitted for this course must be original work prepared by the student enrolled in this course. Efforts will be recognized and graded in terms of individual participation and in terms of ability to collaborate with other students in this course.

Description of students

Students enrolled in this course are in the second semester of the PTA Program.

Course Alignment with Industry Standards

CAPTE accreditation of the PTA program can be found on the PTA Program website www.odessa.edu/dept/pta

Digital Protocol

Cell phones must be placed on either *vibrate* or *silent* mode and are to be accessed in emergency cases only. The use of laptops or any other digital device is permitted in order to facilitate note-taking relative to instruction. Any written assignments will be submitted electronically on Blackboard. **The electronic recording of the time on Blackboard will be considered the time of assignment submission. Take necessary steps to ensure that your assignments are submitted on "Blackboard" time.** Back-up and/or additional copies of all assignments submitted is encouraged. **Computers/printers are available to OC students in the LRC (301-303); therefore, not having access to a computer due to technical issues (crash; corrupted files) will not be considered as an acceptable reason for not completing assignments.** If there is a loss of server connection with Odessa College due to maintenance, then an email will be sent to student with pertinent information and status reports. Assignments submitted electronically need to be **WORD documents (doc or docx).**

Attendance Policy

Regular attendance at lecture and lab is essential and has a direct effect on the final grade that a student earns in class. Non-attendance on the part of a student may result in grade penalty or may lead to dismissal from the program.

A student should attend all lecture and laboratory sessions. Habitual or patterned absenteeism in lecture or lab will not be tolerated. As soon as such a problem is identified, the student will be required to meet with the faculty to determine a course of action and, if the problem is not corrected, the student will be subject to dismissal from the program. Absences in laboratory sessions are particularly problematic because of the lost opportunity to practice skills; therefore, students will be penalized for missing more than one lab session per semester. Should a student miss more than one lab session, one point for each missed session will be deducted from the final course grade.

All absences must be reported to the appropriate faculty member prior to the start of class. If the faculty member cannot be reached directly, a voice mail message may be left. Failure to notify the faculty prior to an absence will affect the student's Professional Behaviors Assessment.

AVID

This course has been identified as a course by Career, Technical, and Workforce Education as one in which teaching and learning strategies adopted by AVID will be implemented. As a student in the legal program, you will be expected to develop an understanding of the strategies, to model the strategies, to maintain fidelity of implementation, and to examine how these strategies may impact your effectiveness as a professional in your chosen area of occupation, either through coursework or practicum experience as outlined by the course instructor.

Grading Policy

Please understand that this is a required course for the PTA program in order to prepare you in taking the National Board Exam in July, after your graduation. Quality work and active participation is expected and not to be negotiated. As a general policy, grades will be taken in class. Any written assignments or tests will be graded outside of class. You can expect feedback on assignments within a week's time.

Grade Inquiry Policy

It is the responsibility of the individual taking this course to maintain accurate track of assignment submissions and grades. There will be opportunities during the semester to meet with the instructor to discuss your academic progress. Contact the instructor to schedule an appointment. Class time will not be used for grade inquiries. All grades are final.

Communication Plan

The best way to communicate with the course instructor is via email through Blackboard. Also, check in Blackboard regularly for announcements, including any changes in the course schedule due to instructor illness or conference attendance. Appointments with the instructor may also be scheduled.

General Course Requirements

1. Attend class and participate.
2. Contribute and cooperate with civility.
3. **Submit assignments on time. Medical and/or family circumstances that warrant an extension on assignments need to be presented to the instructor. Extensions will be allowed at the instructor's discretion.**

Grading Scale:

- "A" = 90-100
- "B" = 80-89
- "C" = 70-79
- "D" = 60-69
- "F" = 0-59

Incomplete Policy

An 'Incomplete' grade may be given only if:

1. The student has passed all completed work
2. If he/she has completed a minimum of 75% of the required coursework.

A grade of an "I" will only be assigned when the conditions for completions have been discussed and agreed upon by the instructor and the student.

Professional Behavior

Professional behavior is absolutely essential both while the individual is a student in this program as well as after graduation. The Professional Behaviors Assessment form provides a standard for behavior and a mechanism for self-assessment by the student as well as assessment by faculty during the academic component of the program. If a faculty member observes consistent failure to demonstrate acceptable professional behavior by a student, the faculty member will utilize the assessment form as a tool for counseling the student. **Failure to respond appropriately to counseling regarding professional behaviors will result in dismissal from the program.**

Project: Pharmacology Project

Students will complete a pharmacology project on drugs commonly used by physical therapy patients. Instructions and due dates will be provided in class. This project will be worth 10% of the overall grade.

Quizzes:

Due to the extensive content covered in this course, it is not possible to discuss each disease or disorder in class. For this reason there are diseases and disorders specific to each system of the body that are to be read and studied independently by the students. To encourage students to participate fully in this aspect of the course, quizzes will be given on these diseases or disorders. Quizzes will usually be in the format of questions presented on PowerPoint slides answered by students using individual response devices. Students may refer to notes prepared in advance but not to the textbook during the administration of the quizzes. Grading will be based on the cumulative percentage of correct responses for the entire semester and will be worth 10% of the overall grade.

COURSE OUTLINE

A. INTRODUCTION TO PATHOPHYSIOLOGY

1. Definitions
2. Classification of Disease
3. Causes of Disease
4. Principles of Diagnosis
5. Diagnostic Tests and Procedures
6. Mortality and Morbidity
7. Response to Changes in Physiological Condition

B. PHARMACOLOGY

1. Introduction
2. Principles of Drug Action
3. Over-the-Counter Drugs
4. Side Effects, Adverse Reactions, Allergic Reactions, and Overdose

C. AGING

1. Introduction
2. Pathology
3. Geriatric Pharmacology

D. GENETIC/CONGENITAL DISORDERS

1. Introduction
2. Review of Genetics
3. Genetic Disorders
 - a Simple
 - b Polygenic
 - c Defects
4. Specific Disorders
 - a Autosomal Dominant
 - Neurofibromatosis
 - Others
 - Osteogenesis Imperfecta
 - Marfan Syndrome
 - b Autosomal Recessive
 - Cystic Fibrosis
 - Others
 - Phenylketonuria
 - Sickle Cell Anemia
 - c X-linked
 - Hemophilia
 - Duchenne's Muscular Dystrophy
 - d Chromosomal Abnormalities
 - Down Syndrome
 - Others
 - Cleft Lip and Palate
5. Congenital Abnormalities due to Intrauterine Injury
 - a Causative Factors
 - Drugs
 - Radiation
 - Infections
 - Malnutrition

E. NEOPLASMS

1. Introduction
2. Definitions
3. Origin/Causes of Cancer
4. Frequency
5. Manifestations

- a Local
- b Systemic
- c Hormonal
- d Paraneoplastic syndrome
- 6. Diagnosis
- 7. Staging and Grading
- 8. Treatment
 - a Determination of Treatment
 - b Surgery
 - c Radiation
 - d Chemotherapy
 - e Immunotherapy
- 9. Pain Control
- 10. Physical Therapy

F. INFECTION

- 1. Introduction
- 2. Types of Infection
- 3. Types of Microorganisms
- 4. Modes of Transmission
- 5. Prevention of Transmission
- 6. Defense Against Microorganisms
- 7. Medical Management of Infections
- 8. Nosocomial Infections
- 9. Specific Infections
 - a Staphylococcal
 - b Streptococcal
 - c Gas Gangrene
 - d Pseudomonas
 - e Poliomyelitis
 - f Post Polio Syndrome
 - g Others
 - Vancomycin-resistant Enterococcus
 - Septic Shock
 - Lyme Disease
 - Respiratory Syncytial Virus Infection
 - Influenza
 - Herpes (Simplex)
 - Cytomegalovirus
 - Toxoplasmosis

G. TRAUMA

- 1. Introduction
- 2. Head Injuries
- 3. Neck and Spinal Injuries
- 4. Burns
- 5. Others
 - a Electric Shock
 - b Cold Injuries

- c Heat Syndrome
- d Asphyxia
- e Brown Recluse Spider
- f Open Trauma Wounds

H. IMMUNE SYSTEM

1. Introduction
2. Nonspecific Immune Response
3. Specific Immune REsponse
4. Immune Disorders
 - a Hypersensitivity
 - Allergy/Others
 - Asthma
 - Atopic Dermatitis
 - Latex Allergy
 - Anaphylaxis
 - Autoimmunity
 - Rheumatoid Arthritis
 - Juvenile Rheumatoid Arthritis
 - Ankylosing Spondylitis
 - Lupus Erythematosus
 - Fibromyalgia
 - Others
 - Scleroderma
 - Polymyositis and Dermatomyositis
 - Vasculitis
5. Immunodeficiency
 - a AIDS
 - b Others
 - Chronic Fatigue

I. MUSCULOSKELETAL SYSTEM

1. Introduction
 - a Skeletal System
 - b Articular System
 - c Muscles
2. Congenital Disorders
 - a Clubfoot
 - b Developmental Dysplasia of the Hip
3. Joint Disorders
 - a Septic Arthritis
 - b Neurogenic Arthropathy
 - c Osteoarthritis
 - d Others
 - Gout
4. Bone Disorders
 - a Osteomyelitis
 - b Osteoporosis
 - c Fractures

- d Dislocations and Subluxations
- e Others
 - Legg-Calve-Perthes Disease
 - Osgood-Schlatter Disease
 - Hallux Valgus
 - Kyphosis
 - Scoliosis
- 5. Tumors
- 6. Spine
- 7. Muscle and Connective Tissue Disorders
 - a Tendinitis and Bursitis
 - b Sprains and Strains
 - c Myositis Ossificans
 - d Others
 - Epicondylitis
 - Achilles Tendon Contracture
 - Carpal Tunnel Syndrome
 - Torticollis
- 8. Miscellaneous
 - a Herniated Disk
 - b Amputation
- 9. Age-Related Musculoskeletal System Changes
 - a Connective Tissue Changes
 - b Cartilage Changes
 - c Body Composition Changes
 - d Muscle Changes
 - e Skeletal Changes
- J. NEUROLOGIC DISORDERS
 - 1. Introduction
 - 2. Congenital Disorders
 - a Cerebral Palsy
 - b Spinal Cord Defects
 - c Others
 - Hydrocephalus
 - Cerebral Aneurysm
 - Arteriovenous Malformations
 - 3. Paroxysmal Disorders/Others
 - a Headache
 - b Seizure Disorder
 - 4. Brain and Spinal Cord Disorders
 - a CVA
 - b Parkinson's Disease
 - c Guillain-Barre Syndrome
 - d Alzheimer's Disease
 - e Others
 - Meningitis
 - Encephalitis

- Brain Abscess
- Huntington's Disease
- Reye's Syndrome
- 5. Neuromuscular Disorders
 - a Myasthenia Gravis
 - b Amyotrophic Lateral Sclerosis
 - c Multiple Sclerosis
- 6. Peripheral Nerve Disorders
 - a Bell's Palsy
 - b Others
 - Peripheral Neuritis
- 7. Age-Related Neurological Changes
 - a CNS Changes
 - b Homeostasis
 - c PNS Changes
 - d Sensory Changes

K. SKIN DISORDERS

1. Introduction
2. Principal Types of Lesions
3. Principles of Treatment
4. Stasis Dermatitis
5. Pressure Ulcers
6. Malignancies
7. Others
 - a Folliculitis, Furunculosis and Carbunculosi
 - b Dermatophytosis
 - c Seborrheic Dermatitis
 - d Nummular Dermatitis
 - e Contact Dermatitis
 - f Chronic Dermatitis
 - g Localized Neurodermatitis
 - h Exfoliative Dermatitis
 - i Psoriasis
 - j Hyperhidrosis
8. Age-Related Skin Changes

L. CARDIOVASCULAR DISORDERS

1. Introduction
2. Congenital Defects
 - a Epidemiology
 - b Etiology
 - c Diagnosis
 - d Specific Defects
 - Ventricular Septal Defect
 - Atrial Septal Defect
 - Coarctation of the Aorta
 - Patent Ductus Arteriosus

- Tetralogy of Fallot
- Transposition of Great Arteries
- 3. Valve Disorders
 - a Etiology
 - b Treatment
- 4. Acquired Inflammatory Heart Diseases/Others
 - a Myocarditis
 - b Endocarditis
 - c Pericarditis
 - d Rheumatic Fever and Rheumatic Heart Disease
- 5. Degenerative Cardiovascular Disorders
 - a Hypertension
 - b Coronary Artery Disease
 - c Myocardial Infarction
 - d Heart Failure
 - e Others
 - Dilated Cardiomyopathy
 - Hypertrophic Cardiomyopathy
 - Cor Pulmonale
- 6. Cardiac Arrhythmias
- 7. Aortic Aneurysms
- 8. Others
 - a Hypovolemic Shock
 - b Cardiogenic Shock
 - c Ventricular Aneurysm
 - d Cardiac Tamponade
- 9. Vascular Disorders
 - a Venous Disorders
 - Thrombophlebitis
 - Chronic Venous Insufficiency
 - b Arterial Disorders
 - Acute
 - Chronic Arteriosclerotic Vascular Disease
 - Thromboangitis obliterans
 - Raynaud's Disease and Phenomenon
- 10. Age-Related Cardiovascular Changes

M. HEMATOLOGIC DISORDERS

1. Introduction
2. Anemias
 - a Clinical Expression
 - b Pernicious Anemia
 - c Aplastic Anemias
 - d Others
 - Iron Deficiency Anemia
3. Polycythemias
 - a Polycythemia Vera
 - b Others

- Spurious Polycythemia
- 4. Hemorrhagic Disorders
 - a Thrombocytopenia
 - b Others
 - Granulocytopenia and Lymphocytopenia
- 5. Age-Related Hematologic Changes

N. RESPIRATORY DISORDERS

1. Introduction
2. Acute Disorders
 - a Pulmonary Edema
 - b Atelectasis
 - c Pulmonary Embolism
 - d Others
 - Acute Respiratory Failure in COPD
 - Respiratory Acidosis
 - Respiratory Alkalosis
 - Pneumothorax
 - Pneumonia
 - Hemothorax
 - Pleural Effusion and Empyema
3. Chronic Disorders
 - a Chronic Obstructive Pulmonary Disease
 - b Bronchiectasis
 - c Tuberculosis
4. Age-Related Pulmonary Changes

O. ENDOCRINE DISORDERS

1. Introduction
2. Hypothalamus
3. Pituitary Gland
 - a Disorders/Others
 - Hypopituitarism
 - Hyperpituitarism
 - Diabetes Insipidus
4. Thyroid Gland
 - a Disorders/Others
 - Hypothyroidism in Adults
 - Hypothyroidism in Children
 - Simple Goiter
 - Hyperthyroidism
5. Parathyroid Glands
 - a Disorders/Others
 - Hypoparathyroidism
 - Hyperparathyroidism
6. Adrenal Gland
 - a Disorders/Others
 - Adrenal Hypofunction or Addison's Disease

- Cushing's Syndrome
 - Hyperaldosteronism
 - Adrenogenital Syndrome
 - Pheochromocytoma
7. Pancreatic Gland
 - a Diabetes Mellitus
 8. Gonads
 9. Age-Related Endocrine Changes
- P. OB/GYN AND SEXUAL DISORDERS
1. Introduction
 2. Gynecological and Obstetric Disorders
 - a Menopause
 - b Diastasis Recti
 - c Others
 - Endometriosis
 3. Sexually Transmitted Diseases/Others
 - a Gonorrhea
 - b Chlamydial Infections
 - c Genital Herpes
 - d Genital Warts
 - e Syphilis
 - f Trichomoniasis
 - g Nonspecific Genitourinary Infections
- Q. RENAL AND UROLOGIC DISORDERS
1. Introduction
 2. Acute Renal Diseases
 - a Acute Renal Failure
 - b Renal Calculi
 3. Chronic Renal Disorders
 - a Nephrotic Syndrome
 - b Chronic Renal Failure
 4. Lower Urinary Tract Disorders
 - a Neurogenic Bladder
 5. Others
 - a Acute Pyelonephritis
 - b Lower Urinary Tract Infection
 - c Benign Prostatic Hyperplasia
 6. Age-Related Renal/Urological Changes
- R. METABOLIC AND NUTRITIONAL DISORDERS
1. Introduction
 2. Nutritional Imbalance
 - a Deficiencies
 - b Excesses
 3. Metabolic Disorders
 - a Hypoglycemia
 4. Homeostatic Imbalance

S. HEPATOBILIARY DISORDERS

1. Introduction
2. Liver Disease
 - a Viral Hepatitis
 - b Nonviral Hepatitis
3. Others
 - a Cirrhosis and Fibrosis
 - b Hepatic Encephalopathy
 - c Cholelithiasis
 - d Choledolithiasis
 - e Cholangitis
 - f Cholecystitis
 - g Cholesterosis
 - h Biliary Cirrhosis
 - i Gallstone Ileus
 - j Postcholecystectomy Syndrome
 - k Acalculous Cholecystitis
4. Age-Related Hepatobiliary Changes

T. GASTROINTESTINAL DISORDERS

1. Introduction
2. Mouth and Esophagus/Others
 - a Gastroesophageal Reflux
 - b Hiatal Hernia
3. Stomach, Intestine and Pancreas
 - a Peptic Ulcers
 - b Inguinal Hernia
 - c Others
 - Gastritis
 - Gastroenteritis
 - Ulcerative Colitis
 - Crohn's Disease
 - Irritable Bowel Syndrome
 - Diverticular Disease
 - Appendicitis
 - Peritonitis
 - Intestinal Obstruction
 - Inactive Colon
 - Pancreatitis
4. Anorectum
 - a Pilonidal Disease
 - b Others
 - Hemorrhoids
5. Age-Related Gastrointestinal Changes

U. PSYCHIATRIC DISORDERS

1. DSM-IV
2. Psychosocial Assessment

3. Infancy, Childhood and Adolescence
 - a Mental Retardation
 - b Tic Disorders
 - c Autistic Disorder
 - d Attention-Deficit Hyperactivity Disorder
 - e Conduct Disorder
4. Psychoactive Substance Abuse
 - a Alcohol-Related Disorder
 - b Substance Abuse and Induced Disorders
5. Schizophrenic Disorders
 - a Schizophrenia
 - b Delusional Disorders
6. Mood Disorders
 - a Bipolar Disorders
 - b Major Depression
7. Anxiety Disorders
 - a Phobias
 - b Generalized Anxiety Disorder
 - c Panic Disorder
 - d Obsessive-Compulsive Disorder
 - e Posttraumatic Stress Disorder
8. Somatoform Disorders
 - a Somatization Disorder
 - b Conversion Disorder
 - c Pain Disorder
 - d Hypochondriasis
 - e Body Dysmorphic Disorder
9. Dissociative and Personality Disorders
 - a Dissociative Identity Disorder
 - b Dissociative Fugue
 - c Dissociative Amnesia
 - d Depersonalization Disorder
 - e Personality Disorders
10. Eating Disorders
 - a Bulimia Nervosa
 - b Anorexia Nervosa
11. Sexual and Gender Identity Disorders
 - a Female Arousal and Orgasmic Disorders
 - b Dyspareunia
 - c Vaginismus
 - d Erectile Disorder
 - e Premature Ejaculation
 - f Gender Identity Disorders
 - g Paraphilias

Student Evaluation of Instruction will be the week of April 28-May 4, 2013.