

SYLLABUS

Name of Course:	Exam: Abdomen and Thorax – Lecture DIAG-236
Length of Course:	2 units, 33 hours (3 hours lecture)
Course Description:	This course develops the student's understanding and clinical skills needed in the evaluation of the heart, lungs, lymphatic and peripheral vascular systems, and abdomen. It explores the relevant historical data, physical examinations, and basic interpretations of significant clinical findings. Correlation of understanding with the development of these anatomical areas is emphasized.
Prerequisites:	PHPA-224 (CV PHPA), PHPA -225 (Renal-Pulm PHPA), PHPA -213 (GI PHPA), PATH-227 (Path Lab)
Corequisite:	DIAG-736 (Abdomen and Thorax – Lab), DIAG-226 (Case History)
Course Offered by:	Clinical Sciences Department
Required Text:	Bickley LS. Bate's Guide to Physical Examination and History. 10th ed. Philadelphia: Lippincott, Williams & Wilkins; 2009. (On reserve in library) Class notes are for sale in the bookstore
Recommended Text:	LaBlond RF, et al., editors. DeGowin's Diagnostic Examination. 9th ed. New York: McGraw-Hill; 2008. (On reserve in library).
Reference Texts:	Seidel HM, et al. Mosby's Guide to Physical Examination. 7th ed. St. Louis: Mosby; 2011. Swartz MH. Textbook of Physical Diagnosis: History and Examination. 5th ed. Philadelphia: Saunders Elsevier; 2006. Beers MH, et al., editors. Merck Manual of Diagnosis and Therapy. 18th ed. Whitehouse Station: Merck; 2006.
Materials:	Course note packet for lecture – see lab syllabus for required lab equipment.
Method of Instruction:	Lecture, Reading Assignments, Handouts, Discussions, Active listening

Evaluation/Grading Criteria:

2 Midterm exams	Week 4 & Week 7: each = 100pts	200pts
Comprehensive Final Exam		200pts
Quizzes (Canvas)		0 pts

The Canvas quizzes will be for review and practice purposes. They will not directly affect the course grade. Occasional quizzes may be given in class either for practice or for bonus points.

Grades and the Grading System Final Grades are available online through the CAMS student portal. If there are any questions on grading procedures, computation of grade point average, or the accuracy of the grade report, please contact the Registrar's Office or the Office of Academic Affairs. Grades will be reported and evaluation will be based on the Academic Policies, Procedures, & Services. Please refer to Evaluation Policy (**Policy ID: OAA.0007**)

In order to maintain **Satisfactory Academic Progress**, a student must maintain a 2.0 or better in each and every course. **Any grade less than a C must be remedied by repeating the class.** Please refer to Satisfactory Academic Progress (**Policy ID: OAA.0006**)

Attendance: Please refer to Attendance Policy (**Policy ID: OAA.0002**)

Conduct and Responsibilities: Please refer to the Personal Conduct, Responsibility and Academic Responsibility Policy (**Policy ID: OAA.0003**)

Make-up Exams: Please refer to Make-up Assessment Policy (**Policy ID: OAA.0001**)

Request for Special Testing: Please refer to Request for Special Testing (**Policy ID: OAA.0004**)

Accommodation for Students with Disabilities:

If you have approved accommodations, please make an appointment to meet with your instructor as soon as possible. If you believe you require an accommodation, but do not have an approved accommodation letter, please see the Academic Counselor Lori Pino in the Office of Academic Affairs. Contact info: Lpino@lifewest.edu or 510-780-4500 ext. 2061. Please refer to Service for Students with Disabilities Policy (**Policy ID: OAA.0005**)

Electronic Course Management:

Canvas is LCCW's Learning Management System (LMS). Canvas will be used throughout the quarter during this course. Lectures, reminders, and messages will be posted. In addition, documents such as the course syllabus and helpful information about the class project will be posted. Students are expected to check Canvas at least once a week in order to keep updated. The website address for Canvas is <https://lifewest.instructure.com/login/canvas> Please refer to the Educational Technologies Policy (**Policy ID: OAA.0009**)

Course Goals: The goal of this course is to prepare the student to be able to perform an examination of the abdomen, lungs, heart, peripheral vasculature and breasts, to understand proper instrumentation procedures, and to develop

an understanding of examination findings associated with common visceral disorders in order to enhance the student's differential diagnosis skills.

Course Objectives:

Week 1 Examination of the abdomen

Instructor will:

- Describe required equipment and dress code.
- Review sequence of abdominal examination.
- Review the basic anatomy of the abdomen and the 4 and 9 quadrant/region systems of division.
- Describe and demonstrate inspection of the abdomen including lighting requirements and gowning and draping procedures.
- Discuss significance of inspection findings including skin color changes, skin lesions, hernias, abdominal distention, diastasis recti, caput medusae, Sister Mary Joseph's nodule, and lipomas.
- Review the parts of the stethoscope.
- Describe and demonstrate auscultation of the abdomen including procedures and locations for auscultating bowel sounds and listening for arterial bruits.

Week 2 Examination of the abdomen

Instructor will:

- Describe the procedure for percussion of the abdomen and the 5 percussion tones.
- Describe and demonstrate percussion of the abdomen.
- Discuss the significance of dullness percussed in different regions of the abdomen.
- Describe and demonstrate the procedure for determining the liver span in the midclavicular and midsternal lines through percussion.
- Describe the normal liver spans and the significance of abnormal liver measurements.
- Describe and demonstrate stationary method of percussing for the spleen.
- Describe a positive splenic percussion sign.
- Discuss significance of splenic enlargement.
- Describe and demonstrate the test for shifting dullness and the puddle sign to assess for ascites.
- Describe and demonstrate superficial and deep palpation of the abdomen.
- Describe and demonstrate assessment for rebound tenderness.
- Discuss Blumberg's and Rovsing's signs.
- Discuss differentiation of superficial and deep abdominal masses. Discuss voluntary vs involuntary guarding and relaxation techniques. List the organs that may normally be palpable and tender.

Week 3 Examination of the abdomen continued.

Instructor will:

Describe and demonstrate palpation of the aorta including significance of aortic enlargement.

Describe and demonstrate direct and hooking methods of palpating the liver. Discuss the normal texture and size of the liver and the significance of liver enlargement, and of firmness and/or irregularity of the liver margin. Describe and demonstrate assessing for Murphy's sign and the significance of Murphy's sign.

Describe and demonstrate palpation for the spleen.

Describe and demonstrate the capture and entrapment methods of kidney palpation.

Discuss the causes of kidney enlargement.

Review vital signs and procedures for assessing height, weight, blood pressure, temperature, respiratory rate and heart rate.

Review normal and abnormal ranges for vital signs.

Week 4 **MIDTERM 1**

Examination of thorax

Instructor will:

Review superficial anatomy of the thorax.

Review anatomy of the lungs.

Describe significance of inspection findings of the thorax including normal thoracic dimension, barrel chest, pectus excavatum, pectus carinatum, rachitic rosary, flail chest, gibbus deformity, scoliosis, kyphoscoliosis.

Discuss palpation of the thorax for masses and tenderness.

Describe and demonstrate palpating for tactile fremitus.

Discuss significance of increased or decreased tactile fremitus.

Describe and demonstrate assessing respiratory expansion and significance of decreased and/or asymmetrical respiratory expansion.

Week 5 Examination of the thorax and lungs.

Instructor will:

Describe and demonstrate percussion over 14 areas of the lung fields.

Review the 5 percussion tones and discuss the normal tone over lung tissue.

Discuss the significance of dull, flat, and hyperresonant tones.

Correlate the percussion findings with expected findings on tactile fremitus.

Describe and demonstrate the procedure for evaluating diaphragmatic excursion.

Describe and demonstrate auscultation of the lungs including the locations where vesicular, bronchovesicular, bronchial and tracheal breath sounds are normally heard.

Play audio recordings of the normal breath sounds.

Week 6 Examination of the thorax and lungs (continued)

Instructor will:

Play audio recordings of abnormal breath sounds, transmitted voice sounds and adventitious sounds.

Discuss the significance of bronchovesicular or bronchial breath sounds heard over the lung fields.

Describe and demonstrate the procedure for assessing transmitted voice sounds: bronchophony, whispered pectoriloquy and egophony.

Discuss the significance of transmitted voice sounds and correlation with findings from tactile fremitus examination.

Discuss the nature and significance of adventitious sounds. Discuss tracheal displacement and associated pathologies.

Describe alterations in respiratory rate and rhythm and their significance.

Describe and assist students with charting the expected percussion, inspection, and auscultation findings associated with chronic bronchitis, consolidation, atelectasis with a bronchial plug, pleural effusion, pneumothorax, and emphysema.

Week 7 MIDTERM 2

Begin examination of the heart.

Instructor will:

Review anatomy of the heart and inspection findings that suggest cardiac dysfunction.

Describe and demonstrate palpation of the intercostal spaces for pulsations and thrills.

Describe and demonstrate assessing the point of maximal impulse through inspection and palpation.

Review dextra cordia and situs inversus.

Describe and demonstrate percussion of the heart.

Discuss causes of cardiac enlargement.

Week 8 Examination of the heart and heart sounds

Instructor will:

Introduce gowning procedures for heart auscultation.

List auscultation areas and describe their locations on the chest.

Describe and demonstrate auscultation of the heart with the diaphragm and the bell. Identify which sounds are heard best in each area.

Describe and demonstrate the mitral and aortic maneuvers.

Describe and demonstrate auscultation of the carotid arteries.

Describe the characteristics of the normal heart sounds.

Describe the characteristics and significance of extra heart sounds. Play audio recordings of normal and extra (S3, S4) heart sounds.

Describe murmurs, split heart sounds, early ejection sounds, systolic click, opening snap, pericardial friction rub and venous hum.

Week 9 Heart sounds, peripheral vasculature exam, pulses

Instructor will:

Review heart auscultation and normal and abnormal sounds.
Play audio recordings of murmurs and other abnormal heart sounds. Describe and demonstrate examination of peripheral vasculature including inspection and palpation findings.
Review auscultation of carotid arteries. Describe characteristics of thrombophlebitis.
Compare and contrast arterial and venous occlusion.
Describe the characteristics of pulse alterations and their significance.
Describe measurement of jugular venous pressure (JVP) and the significance of elevated JVP.

Week 10 Lymphatic and breast exam; Review
Instructor will:
Review the axillary and inguinal lymph nodes.
Describe lymphedema and lymphadenopathy.
Describe the characteristics of normal and abnormal lymph nodes.
Describe the breast exam and self-breast exam.
Describe the characteristics of and risk factors for breast cancer.
Describe common breast masses.
Review previous topics to prepare students for comprehensive final exam.

Week 11 **COMPREHENSIVE FINAL EXAM**

Student Learning Outcomes (SLO):

The student will be able to:

- Describe the procedures for a complete examination of the abdominal organs, lungs, heart, peripheral vasculature, axillary and inguinal lymph nodes and describe the procedures for a breast examination. [PLO: 1,3,8]
- Properly measure and interpret vital signs. [PLO: 1,3,8]
- Interpret the examination findings and describe which findings are normal and which are abnormal. [PLO: 1,3,8,10]
- Describe the significance of abnormal examination findings. [PLO: 1,2,3,8]

Program Learning Outcomes (PLO): Students graduating with a Doctor of Chiropractic degree will be proficient in the following:

1. **ASSESSMENT AND DIAGNOSIS:** An assessment and diagnosis requires developed clinical reasoning skills. Clinical reasoning consists of data gathering and interpretation, hypothesis generation and testing, and critical evaluation of diagnostic strategies. It is a dynamic process that occurs before, during, and after the collection of data through history, physical examination, imaging, laboratory tests and case-related clinical services.
2. **MANAGEMENT PLAN:** Management involves the development, implementation and documentation of a patient care plan for positively impacting a patient's health and well-being, including specific therapeutic goals and prognoses. It may include case follow-up, referral, and/or collaborative care.
3. **HEALTH PROMOTION AND DISEASE PREVENTION:** Health promotion and disease prevention requires an understanding and application of epidemiological principles regarding the nature and identification of health issues in diverse populations and recognizes the impact of biological, chemical, behavioral, structural, psychosocial and environmental factors on general health.
4. **COMMUNICATION AND RECORD KEEPING:** Effective communication includes oral, written and nonverbal skills with appropriate sensitivity, clarity and control for a wide range of healthcare related activities, to include patient care, professional communication, health education, and record keeping and reporting.
5. **PROFESSIONAL ETHICS AND JURISPRUDENCE:** Professionals comply with the law and exhibit ethical behavior.
6. **INFORMATION AND TECHNOLOGY LITERACY:** Information literacy is a set of abilities, including the use of technology, to locate, evaluate and integrate research and other types of evidence to manage patient care.
7. **CHIROPRACTIC ADJUSTMENT/MANIPULATION:** Doctors of chiropractic employ the adjustment/manipulation to address joint and neurophysiologic dysfunction. The adjustment/manipulation is a precise procedure requiring the discrimination and identification of dysfunction, interpretation and application of clinical knowledge; and, the use of cognitive and psychomotor skills.
8. **INTERPROFESSIONAL EDUCATION:** Students have the knowledge, skills and values necessary to function as part of an inter-professional team to provide patient-centered collaborative care. Inter-professional teamwork may be demonstrated in didactic, clinical or simulated learning environments.
9. **BUSINESS:** Assessing personal skills and attributes, developing leadership skills, leveraging talents and strengths that provide an achievable expectation for graduate success. Adopting a systems-based approach to business operations. Networking with practitioners in associated fields with chiropractic, alternative medicine and allopathic medicine. Experiencing and acquiring the hard business skills required to open and operate an on-going business concern. Participating in practical, real time events that promote business building and quantifiable marketing research outcomes
10. **PHILOSOPHY:** Demonstrates an ability to incorporate a philosophically based Chiropractic paradigm in approach to patient care. Demonstrates an understanding of both traditional and contemporary Chiropractic philosophic concepts and principles. Demonstrates an understanding of the concepts of philosophy, science, and art in chiropractic principles and their importance to chiropractic practice.