

SYLLABUS

Name of Course: Neurological Diagnosis – DIAG 340

Length of Course 3 Units, 33 hours (3 hours lecture / week)

Course Description: This course will teach the practical clinical relevance of a neuroanatomy examination. The focus is an understanding of why specific symptoms and signs are present as well as the identification of what neuroanatomical part(s) are involved. This course will focus on common neurologic conditions presenting in a chiropractic office. Interwoven into this class will be practice conundrums, ethical considerations and professional conduct.

Prerequisites: DIAG-237, DIAG-226, DIAG-317

Course Offered by: Clinical Sciences Department

Required Text: Clinical Neuroanatomy and Neuroscience by Fitzgerald 6th Edition
Neurological Differential Diagnosis Patten

Recommended Texts: Orthopedic Neurology Hoppenfeld
Principles of Neural Science Kandell
The Brain That Changes Itself Norman Doidge
Brain Rules John Medina
NMS DDX Management (note pack) Strutin

Method of Instruction: Lecture, discussion, reading assignments, written assignments.

It is highly advised that you plan on spending at least one hour per day of study.

The homework assignments are due at the beginning of class. They do not add to or detract from your grade, I use them as a tool to assess your level of understanding of the material (in essence do you need further instruction regarding the material). It is your opportunity to test yourself without negative consequence.

Students who participate have a significantly higher rate of passing this class the first time through.

Evaluation/Grading: A 100 – 90% B 89 – 80% C 79 – 70%
All grades below 70% MUST repeat the course.
Mid Term test is 34 questions
Final test is 80 questions

The bulk of test questions are case presentation format requiring your diagnostic skill to arrive at the correct multiple choice answer(s). “Certainty” of the material is essential, as you will not have enough time to complete the test if your “flipping through pages in your head” to answer the questions.

Extra Credit Assignment:

The assignment is the creation of a fictitious patient that has presented for your care. Based upon your assessment your diagnosis is multiple sclerosis. Due to insurance requirements you are unable to order the appropriate test(s) and need to refer her back to her primary MD.

Your letter of referral (on your letterhead) should include:

The presenting history, your clinically relevant examination findings, why you suspect the diagnosis given, what test(s) you feel are necessary, what you expect to see on those test(s) and what references you used to arrive at that conclusion.

This extra credit assignment will be credited 10 points for superlative work with references, 5 points for work that is missing any of the required components and 0 points for sloppy or incomplete effort.

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 ability to diagnose via history, examination and your acquired skill set, the location and pathologic process presented. The ability to develop an appropriate clinical management plan of how to manage common neurologic deficits.

Course Outline:

Week 1: Central nervous system anatomy and assessment procedures.

Reading assignment: Patten Chapter 8 Lobes of the Brain, and Fitzgerald Chapter 2 and 3

Week 2: Continuation of central nervous system examination procedures with emphasis on TIA, VBI and vascular management.

Reading Assignment: Patten Chapter 9, Chapter 11 pages 169-174. Fitzgerald Chapter 5

Week 3: Extrapyrarnidal disorders; tremor, dystonia, tics, torticollis, ataxia, Parkinsonism

Reading assignment: Patten Chapter 12, Fitzgerald Chapter 25, 33

Week 4: Continuation of Extrapyrarnidal disorders

Week 5: Spinal Cord, descending and ascending pathways.

Reading assignment: Patten Chapter 13, 14, 15 Fitzgerald, Chapter 14,15,16

Mid Term Test at the beginning hour of week 6

Week 6: Continuation of Spinal Cord/myelopathy

Week 7: Cervical root/peripheral nerve

Reading assignment: Patten Chapter 16 Fitzgerald Chapter 14

Week 8: Lumbosacral root/peripheral nerve

Reading assignment: Patten Chapter 17 Fitzgerald Chapter 14

Week 9: Peripheral Neuropathy/Lower motor neuron disease Fitzgerald Chapter 6

Week 10: Transmitters/Receptors, Autonomic Nervous system

Reading assignment: Fitzgerald Chapter 8, 13

Week 11: Review

Student Learning Outcomes:

The ability to recognize CNS pathology and effectively manage the presentation. (PLO:1,2)

The ability to recognize PNS pathology and effectively manage the presentation.(PLO:1,2)

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.