NAME OF COURSE: Spinal Anatomy II w/LAB (ANAT-128, 628)

LENGTH OF COURSE: 1 unit, 21 hours (1-hour lecture & 1 hour lab per week)

COURSE DESCRIPTION: This course emphasizes the study of the muscles, blood, and nerve supply of the back. The lecture part of the course will be of a presentation style format. The lab portion of the class involves examination of the structures in relation to the bony anatomy of the spine, by way of instruction using cadaver prosections.

PREREQUISITES: ANAT-110, ANAT-111, ANAT-118

COURSE OFFERED BY: Basic Science Department

REQUIRED TEXT: Spinal Anatomy II Class Notes, Stephen F. James, D.C., and MHSc. (Class notes available in bookstore) Moore K.L. Clinical Oriented Anatomy.

MATERIALS: Lab Handouts, Laboratory Specimens, Spinal Anatomy II lab dissection video available in library

METHOD OF INSTRUCTION:
Lecture/Discussion, Online Illustrations of anatomical structures, X-ray images CANVAS posting of structures covered in class, White Board Illustrations, Discussions, and Videos

GRADES: There will be a 100 pt mid-term exam and 100 pt final exam. Laboratory will consist of a 40 question midterm and a 40 question final. Lecture Questions will include primarily multiple choice format. Lab questions will be identification of structures on prossected materials.

Grades will be assigned according to the following scale: [out of 250 pts]

A = 4.0  90-100%
B = 3.0  80-89%
C = 2.0  70-79%
F = 0.0  0-69%

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 Deans Office. 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 LWCC’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)

**EXTRA CREDIT:** None

**COURSE OBJECTIVES:**

The student will be able to gain knowledge of the basic anatomy and function of the musculature, connective tissue structures, nerve innervation, and spinal cord. Their overall relationship to the body will be discussed. Diagnostic testing methods will be presented and their application to the clinical setting will be discussed.
SCHEDULE OF LECTURE AND EXAMS:

Week 1: Introduction to the class. To discuss anatomical/physiological terminology as it relates to the anatomy of the back.

WEEK 2: To discuss in lecture the superficial layers of the back and to also view these structures in the lab.

WEEK 3: To discuss in lecture the deeper layers of the back and to view these structures in the lab. In class quiz will be administered.

WEEK 4: To discuss the suboccipital muscles, meningeal layers, and spinal cord and view these structures in the lab.

WEEK 5: Lecture and lab midterms

WEEK 6: To discuss the cervical musculature and their relationship to the brachial plexus. Lecture will include beginning diagnosis of conditions affecting the brachial plexus.

WEEK 7: To discuss primary and secondary muscles of respiration and their relationship to the axial skeleton. Location of these structures and possible subluxation pathologies will be discussed in both the lecture and the lab.

WEEK 8: To discuss lumbar prevertebral muscles and their relationship to low back conditions of the spine. Structures will be viewed in the laboratory setting.

WEEK 9: To discuss the lumbar plexus as well as lumbosacral ligaments in both the lecture and laboratory setting.

WEEK 10: Lab final, and lecture final review will be given

WEEK 11: Lecture final

Learning Outcomes: Spinal Anatomy II Anat 128

Student Learning Outcomes (SLO): At the completion of the ANAT 128 course, a student should be able to:

This course aligns to PLOs: (1 and 3)
1. The student should be able to comprehend the basic terminology as it relates to the musculature skeletal, and nervous system of the back.

2. The student should be able to understand the origins, insertions, nerve innervation, and actions of the musculature discussed in class as it relates to basic anatomy and chiropractic care.

3. The student should be able comprehend the workings of anatomical differences, health conditions/pathologies that are discussed in the lecture.

4. The student should be able to identify normal, variant, and pathologic structures presented in the laboratory setting.

5. The student should begin to comprehend basic diagnosis, clinical reasoning, and care management as it relates to health care.

Program Learning Outcomes (PLO): Students graduating with a Doctor of Chiropractic degree will be able to:

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.