Name of Course: Scientific Basis of Chiropractic and the Subluxation Complex
CPP-234

Length of Course: 3 Units, 44 hours (4 hours lecture/week)

Course Description: This course reviews the literature concerning the scientific examination of the subluxation and its physiological and anatomical basis. The physiology, neurology, and biomechanics of subluxation and adjustment are surveyed. This course reviews the latest scientific publications concerning chiropractic clinical trials, articular neurology, tissue injury and repair. This course is an integration of innate lifestyles, the subluxation, evolutionary orthopedics, neurology, and the influence on systemic physiology and health.

Prerequisite: TECH-216

Course Offered By: Department of Philosophy/Principles
Ankur Tayal, DC
Department Chair

Course Instructor: Dan Murphy, DC
E-Mail address: dan@danmurphydc.com

Required Text: None

Recommended Text: None

Reference Text: None

Reference Materials: Weekly articles and materials that are sent to the class representative. All students must read and be familiar with this material each week.

Materials: White unlined paper or unlined notebook. Multicolored pencils or pens: black, brown, red, green, blue, orange, purple. Final Project blue book(s)

Methods of Instruction: Lecture; interactive drawing is an integral part of the class, and student participation is required and will be checked regularly.

Examinations: Weekly examinations will be given most weeks, at 7:30 AM sharp.

No examinations will be handed out after 7:35 AM.

Length of examination will be between 5-10 minutes, at the instructor’s discretion.

Individuals who desire additional time may pick-up and begin this examination at 7:20 AM.

These examinations will constitute 40% of class grade.
Homework: Weekly homework will be assigned most weeks. This homework must be separate from the drawings produced during class time. This homework is due every Monday morning prior to taking the quiz, no later than 7:30 AM.

This homework will constitute 10% of class grade.

Article Reviews: Four Article Reviews are required, and due on weeks 2, 4, 6, and 8.

These articles must be on the topic of joint dysfunction, and its influence on physiology/health. The student’s review should be 1 typed short paragraph explaining the importance of the article to the chiropractic profession. The review must be accompanied with a full PDF copy of the article. The article must be submitted electronically to dan@danmurphydc.com

These Article Reviews must be copyrighted in the current or prior year. They must be PubMed indexed.

These Article Reviews will constitute 10% of class grade.

Final Project: The student must hand in an original, self-generated, copy of all subluxation/orthopedic/neurology graphics, as designated by instructor, throughout the quarter. This project must be separate from what is generated during class.

These graphics/drawings must be in multicolor, and fully labeled (no abbreviations accepted).

Only 1 graphic/drawing per page, and single-sided only.

Each graphic must have the student’s name printed, signed, and dated.

This Final Project is due the 2nd to last class.

This Final Project will constitute 40% of class grade.

There is no final examination.

Evaluation:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>Superior Work (90-100%)</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>Above Average (80-89%)</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>Average Work (70-79%)</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>Poor – The student must repeat the entire course below 70%</td>
</tr>
</tbody>
</table>

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.

Attendance: College policy applies. (Policy ID: OAA.0002)

Department approved as of: November 12, 2015:
A student is responsible for keeping track of his or her own attendance and absences. Instructors may but are not required to provide courtesy notices indicating that a student is approaching or has reached over-cut status.

Make-up Exams: None

Conduct and Responsibilities: College policy applies. (Policy ID: OAA.0003)

Independent Student Work: All assignments and exams must be the product of the individual student’s original efforts for this class. Collaboration is prohibited.

Request for Special Testing:
College policy applies. (Policy ID: OAA.0004)

Any student can begin a weekly examination at 7:20 AM.

Accommodations for Students with Disabilities:
College policy applies. (Policy ID: OAA.0005)

Electronics Policy: During class no electronic devices will be allowed e.g. cell phones, computers, tablets, etc.

Course Objectives:

• To integrate innate intelligence, innate lifestyles, and evolutionary orthopedics with the subluxation.

• To detail the influence of the subluxation on neurology, physiology, and systemic health/wellness.

• To familiarize students with the literature concerning the scientific basis of chiropractic adjustments, subluxation, and their impact on the body.

• To understand the orthopedic, physiological and neurological principles upon which the science of chiropractic is based.

• To understand the biomechanical and neurological consequences of subluxation.

• To understand the biomechanical and neurological consequences of chiropractic adjustments.

• To provide students with information and data currently available so that they will be able to articulate and explain the methods, mechanisms and benefits of chiropractic care to patients, lay people, as well as other health professionals.

Proposed Weekly Calendar:

1) Review the 33 Principles of Chiropractic with an emphasis on innate intelligence and innate lifestyles. Integrate innate intelligence and innate lifestyles with the subluxation.

2) Review the scientific basis for the subluxation.
3) Review the scientific basis for the adjustment. Discuss the integrated physiology between inflammation, fibrosis, the Gate Theory, and chiropractic adjusting.

4) Distinguish between the clinical differences between compressive neuropathology v. supersensitivity nerve interference.

5) Learn the basic chiropractic neurological model, including mechanoreceptors, cord reflexes, and supra-segmental influences.

6) Learn how joint mechanoreceptor’s function influences chronic spinal pain.

7) Learn how chiropractic influences pain and sympathetic function. Emphasize how the mechanical/sympathetic nervous system influences immunology.

8) Learn the chiropractic vestibular nuclear relays and their importance to clinical assessment.

9) Learn the concepts of mechanotransduction, mechanobiology, streaming potentials, and piezoelectricity.

10) Detail an upper cervical - trigeminal cervical nucleus integrative model for chiropractic.

Student Learning Outcomes (SLO):

• To be able to understand and articulate the innate driven evolutionary orthopedic basis of the subluxation.

• To be able to understand and articulate the biomechanical orthopedic basis of the subluxation.

• To be able to understand and articulate the biomechanical orthopedic basis of the adjustment.

• To be able to understand and articulate the difference between compressive neuropathology v. supersensitivity nerve interference.

• To be able to understand and articulate and draw the basic neurology of the subluxation and the biologic plausibility for its influence on pain and health.

• To be able to use scientific studies to support the basis for chiropractic adjusting to influence pain and wellness.

• To have an awareness of potential future research projects that could further explain chiropractic and enhance the understanding of its influence on health.