SYLLABUS

NAME OF COURSE: RESEARCH METHODOLOGY - CPP 235

LENGTH OF COURSE: 1.5 Units 22 hours, 2 hours/week

COURSE DESCRIPTION:

This course complements the student clinical experience by providing the opportunity to research scientific literature relevant to currently managed cases. The course provides the opportunity of hands-on experience writing a case study report. Research design, research methods, statistical procedures relative to patient-centered outcomes and comparative effectiveness are addressed.

PREREQUISITES: CPP-127, HC-332


REFERENCE TEXT: None

MATERIALS: Selected course notes, assignment templates, and guidance for writing case reports are available on Canvas.

COURSE OFFERED BY: Chiropractic Philosophy and Principles Department

METHOD OF INSTRUCTION: Lectures, group work, peer review. Students will develop a clinical case they are managing into a formal case report. Peer review is provided as a critique from another classmate. Biweekly submissions of sections of the case report are marked with feedback provided by the instructor.

EVALUATION:

Students will be evaluated on the quality of the written assignments, the contribution of feedback in peer-review and the submission of a final complete case report. Note: each assignment is a section of the final case report.

There are four written assignments for the major sections of the case report, including reference citations from the published literature, peer reviews for
assignments 1, 2, 3, and 4. Assignments and the final case report must be submitted through Canvas on their posted due date.

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<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tr>
<td>Assignment 1</td>
<td>10 points</td>
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<tr>
<td>Assignment 2</td>
<td>10 points</td>
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<tr>
<td>Assignment 3</td>
<td>10 points</td>
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<tr>
<td>Assignment 4</td>
<td>10 points</td>
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<tr>
<td>Peer reviews (4x5pts)</td>
<td>20 points</td>
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<tr>
<td><strong>Final Case Report</strong></td>
<td><strong>20 points</strong></td>
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<td><strong>Total</strong></td>
<td><strong>80 points</strong></td>
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**GRADES:**

- A = 90%– 100%
- B = 80% – 89%
- C = 70% – 79%
- F = <70 (Student must repeat the entire course)

**LATE ASSIGNMENTS WILL NOT BE ACCEPTED WITHOUT PRIOR APPROVAL.**

**INDEPENDENT STUDENT WORK**

All assignments and exams must be the product of the individual student’s original efforts for this class. Collaboration is allowed in the peer-review process to read and critique a student partner’s assignment. Collaboration is allowed in the literature search process to locate and access relevant published literature sources.

**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 provide the skills, knowledge and attitude to write a publication quality case study. The regulatory requirements of review and approval by an Institutional Review Board are emphasized. Concepts of study design related to the stated, clean research question are emphasized. Collaborative research work with Health Center faculty advisors and college academic faculty is encouraged.

COURSE OBJECTIVES:

1. Review the basics of writing a publication quality case study.
2. Conduct a thorough literature search and properly cite referenced sources.
3. Write a case study.
**COURSE OUTLINE:**

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<tr>
<th>Week</th>
<th>Activity</th>
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<tr>
<td><strong>1st Week</strong></td>
<td>Course introduction, selection of peer-review partner, and selection of two managed cases from current clinic from which to choose one for writing case study. Presentation of writing guidance documents and files of a case study--available on Canvas.</td>
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<td><strong>2nd Week</strong></td>
<td><strong>Select</strong> a current patient file for case study. <strong>Discuss</strong> progress and case study selection with instructor. Write draft of “History and Intervention Sections”</td>
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<td><strong>3rd Week</strong></td>
<td>Perform in-class peer review of partner’s &quot;History and Intervention Sections&quot; <strong>Submit</strong> Assignment 1: History and Intervention Sections</td>
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<td><strong>4th Week</strong></td>
<td>Information Literacy presentation by Library staff. <strong>Create</strong> a My NCBI account for literature searches. <strong>Conduct</strong> a literature search for selected case study. Write draft of Assignment 2: “Introduction Section”</td>
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<td><strong>5th Week</strong></td>
<td>Perform in-class peer review of partner’s &quot;Introduction Section&quot; <strong>Submit</strong> Assignment 2: Introduction Section.</td>
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<td><strong>6th Week</strong></td>
<td>Write draft of Assignment 3: “Outcome Section”</td>
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<td><strong>7th Week</strong></td>
<td>Perform in-class peer review of partner’s &quot;Outcome Section&quot; <strong>Submit</strong> Assignment 3: “OutcomeSection”</td>
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<td><strong>8th Week</strong></td>
<td>Write draft of Assignment 4: “Results and Discussion Section” <strong>Edit and combine</strong> past assignments of all sections of case study. Review references and verify numbering sequence of citations. <strong>Write</strong> the Abstract.</td>
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<tr>
<td><strong>9th Week</strong></td>
<td>Perform in-class peer review of partner’s &quot;Results and Discussion Section&quot; <strong>Submit</strong> Assignment 4: “Results and Discussion Section” Presentation of IRB application for review of case study and clinical research.</td>
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<tr>
<td><strong>10th Week</strong></td>
<td><strong>Submit</strong> final, complete case study Assignment on the Canvas site. Late submissions will not be accepted without prior approval of instructor.</td>
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Student Learning Outcomes (SLOs)

At the completion of this course, students should be able to:

1. Write a publication quality case study. [PLO: 5, 6]
2. Incorporate published literature in evidence-informed management of chiropractic care of patients. [PLO: 5, 6, 10]

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.