

## SYLLABUS

- Name of Course:** Advanced Extremity Adjusting and Management of Sports Injuries TECH-187
- Length of Course:** 30 hours (3 hours lab/week) 1.5 Units
- Course Description:** This is an advanced and comprehensive elective. Students who wish to take this course should have a working knowledge of beginning extremity adjusting and have been practicing it in the Health Center. They will be required to review DVD and written assessment/adjusting information prior to laboratory participation.
- Prerequisites:** Minimum of HC-413, TECH-336 and TECH-339
- Course offered by:** Technique/Analysis, Department
- Department Objective:** To give to our students, freely and out of abundance, the best of our knowledge and skills. To develop the most talented of chiropractors that they may with skill, both find and correct the vertebral subluxation. To do this for the overall betterment, health, and well-being of their patients and the world.
- Required Text/DVD:** Walton/Hickey DVD

### Recommended Texts:

1. Bergman, T. F., & Peterson, D. H. (2011). *Chiropractic Technique: Principles and Procedures* (3rd ed.). St. Louis: Mosby.
2. Gatterman, M. I. (2004). *Chiropractic Management of Spine Related Disorders* (2nd ed.). Baltimore: Lippincott Williams & Wilkins.
3. Gatterman, M. I. (Ed.) (2005). *Foundations of Chiropractic: Subluxation* (2nd ed.). St. Louis: Mosby.
4. Warren Hammer – 3<sup>rd</sup> edition, *Functional Soft Tissue and Treatment Athletic Taping and Bracing*, Perrin, David H. 1995, [www.humankinetics.com](http://www.humankinetics.com)

### Reference Texts:

1. Haldeman, S. (Ed.) (2005). *Principles and Practice of Chiropractic* (3rd ed.). New York: McGraw-Hill Medical.
2. Leach, R. A. (2003). *The Chiropractic Theories: A Textbook of Scientific Research* (4th ed.). Baltimore: Lippincott Williams & Wilkins.
3. Panjabi, M. M., & White, A. A. (2001). *Biomechanics in the Musculoskeletal System*. New York: Churchill Livingstone.
4. Redwood, D., & Cleveland, C., III (2003). *Fundamentals of Chiropractic*. St. Louis: Mosby.
5. White, A. A., III, & Panjabi, M. M. (1990). *Clinical Biomechanics of the Spine* (2nd ed.). Philadelphia: J. P. Lippincott Company.

**Materials:** Box of tape from the Bookstore, Cost \$35.00

**Method of Instruction:** Lecture, slides, video and hands on.

**Evaluation:** Quizzes: 100 points/ 10 quizzes  
100 points class participation/10 points/week  
Take home quizzes and 10 in class quizzes.

- A 4.0 Superior Work (93-100%)
- B 3.0 Above Average (84-92%)
- C 2.0 Average Work (75-83%)
- F 0.0 Student must repeat the course.

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.

**Independent Student Work:**

All assignments and exams must be the product of the individual student's original efforts for this class. Collaboration is prohibited.

**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](mailto: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 Goal:**

The goal of this class is to provide the student with advanced knowledge of extremity adjusting and sport injury management.

**Course Objectives:**

**Week 1**

Dr. Mark Thompson

Module One (Three Hours)

**Basic Overview**

Soft Tissue Approaches as Adjunct to the Chiropractic Adjustment

- Describe the relationship to the spine, biomechanics, neurovascular considerations
- Demonstrate Mobilization vs. Adjusting
- Describe and demonstrate: Somatic Techniques, Post-facilitation Stretching, Strain/Counterstrain
- Describe and demonstrate: Friction Massage, Myofascial Release
- Describe and demonstrate: Progressive rehabilitation approaches

## **Week 2**

Dr. Mark Thompson

Module Two

### **Upper Extremity**

Describe and demonstrate: Soft Tissue Approaches as Adjunct to the Chiropractic Adjustment for:

- Shoulder
- Upper arm
- Elbow
- Forearm
- Wrist
- Hand
- Fingers/thumb

## **Week 3**

Dr. Mark Thompson

Module Three

### **Lower Extremity**

Describe and demonstrate: Soft Tissue Approaches as Adjunct to the Chiropractic Adjustment for:

- Hip
- Thigh
- Knee
- Lower Leg
- Ankle
- Foot
- Toes

## **Week 4**

Dr. Paul Walton

Describe and demonstrate: Spinal Engine Kinetic Chain- Thoracic spine and rib cage rotation and side bending connecting the upper extremity to the pelvis and lower extremity. Review of regional functional anatomy.

Describe and demonstrate: Common subluxation patterns and therapy goals: Thoracic Spine, Rib cage and scapula/Clavicle. Examine how loss of thoracic region rotation and side bending can lead to extremity overuse and pre-disposed to injury. Relate concepts to sports (e.g.: golf, tennis, swimming) Describe and demonstrate:: Adjusting: Thoracic rotation and side bending, Rib cage review, Clavicle & Scapulae. Muscle testing of the Trunk and shoulder girdle

## **Week 5**

Dr. Paul Walton

Describe and demonstrate: Kinetic chain of the shoulder and elbow complex. Show how the scapula stabilization Mm anchor to the trunk

## **Week 6**

Dr. Paul Walton

Describe and demonstrate: Hand

## **Week 7**

Dr. Michael Hickey

Describe and demonstrate: Lower Extremity Kinetic Chain

Describe and demonstrate: foot and leg functional anatomy

Describe and demonstrate: Foot: Common subluxation patterns and therapy goals (i.e.: shock absorption-foot and fibula, triple pivot foot recovery to rigidity, anterior compartment syndrome, shin splints, etc...)

Describe and demonstrate: Adjusting: Ankle mortise, Subtalar joint, Mid-foot: Navicular, Cuboid, Cuneiform group, Lisfranc articulation, Phalanges, Muscle testing of ankle

## **Week 8**

Dr. Michael Hickey

Describe and demonstrate: Lower Extremity Kinetic Chain.

Describe and demonstrate: Review of knee, hip and thigh functional anatomy

Describe and demonstrate: Common subluxation patterns and therapy goals:

Knee and Hip- Describe and demonstrate: (regional etiology of laterally rotated tibia, Ligament instability, Meniscus entrapment, PatelloFemoral Arthralgia (PFA), IlioTibial Band Syndrome (ITB), Hip myofascial patterns, etc...)

Describe and demonstrate: Adjusting: Fibulae, Tibia, Patella, Meniscus, Hip, Muscle testing of the knee and hip.

## **Week 9**

Dr. Bruce Chester

### **Athletic Taping Basics**

Lecture/Lab

- Introduce injury assessment on the field.
- Explain protocol for returning to competition
- Explain the preparation for taping of patient/athlete
- Demonstrate taping techniques
- Demonstrate the of tearing of tape
- Differentiate types of tape
- Demonstrate the removal of tape

Ankle, foot and leg

Lab - demonstrate taping of:

- Inversion ankle sprains
- Eversion ankle sprains
- Achilles tendon strains
- Arch and plantar fasciitis
- Shin splints

## **Week 10**

Dr. Bruce Chester

Lab: Demonstrate taping of:

Knee

- Medial and collateral bracing
- Hyperextension

Demonstrate taping of:

Shoulder and elbow

- AC injury taping
- Elbow hyperextension

Demonstrate taping of:

Hand and wrist

- Extension and flexion wrist taping
- Fingers and thumb taping

### **Student Learning Outcomes (SLO):**

1. The student will demonstrate a thorough understanding of extremity adjusting. [PLO:1,2,7]
2. The student will demonstrate knowledge of the kinetic chain of the extremities. [PLO: 1,2]
3. The student will demonstrate proficiency of specific extremity adjusting, soft tissue work, athletic taping and related muscle testing. [PLO: 1,2,7,8]
4. The student will demonstrate proficiency in understanding common subluxation patterns associated with specific sports injuries. [PLO: 1]
5. The student will demonstrate proficiency in adjunctive approaches such as soft tissue and athletic taping in support of the patient/athlete. [PLO: 1,2,3,7,8]
6. The student will demonstrate a thorough knowledge of the patient care associated with common sports injuries. [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.