Syllabus Elective Sports Medicine

<table>
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<tr>
<th>Course No.</th>
<th>OM 7550A-G</th>
<th>Course Title:</th>
<th>Elective Sports Medicine</th>
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<tbody>
<tr>
<td>Credit Hours</td>
<td>4 weeks, 4 credit hours for each rotation</td>
<td>Chair: Clerkship director:</td>
<td>Marcel Fraix, DO</td>
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<tr>
<td>Term - Dates</td>
<td>Variable in OMS IV academic year</td>
<td>Level:</td>
<td>OMS III (if approved), IV</td>
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Department of Clinical Education Contact Information

**FOR POMONA CAMPUS**
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Preceptors can email: comsite@westernu.edu

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Educational Goal

This elective rotation is a two-four (2-4) week introductory, structured clinical experience under direct supervision designed to provide the student experience diagnosing, treating and caring for patients in Sports Medicine. Most students electing to take this rotation will be in the fourth year of osteopathic medical school.

Purpose:
Clinical experiences are intended to assist the student’s transition from didactic to integrated clinical evaluation and patient management. The goals of this rotation is to gain experience in sports pre-
participation and wellness, treatment of acute and chronic musculoskeletal injuries, sideline and mass participation coverage, and treatment of chronic disease in athletes.

### Elective Sports Medicine Clerkship Learning Objectives

**Goal** - To gain the basic knowledge to evaluate, diagnose and manage common disorders seen in sports medicine and orthopedics.

**Objectives** - The student will gain basic understanding of:

- The pathology, pathophysiology, diagnosis and treatment of acute and chronic sports medicine and orthopedic injuries, including soft tissue, bone and nerve injury.
- The pathology and pathophysiology of acute and chronic medical illness in the active population.
- The psychological aspects of exercise, performance and injury.
- Preventive medicine and the athletic pre-participation exam, including the ethical and medico-legal aspects.
- Physiology and pathophysiology of hydration, nutrition and the use of pharmacologic agents, including performance enhancing and mood-altering substances of athletes.
- How to diagnose and treat common acute and chronic sports medicine and orthopedic injuries.
- Normal anatomy, physiology and biomechanics of the musculoskeletal and neurologic system.

**Goal** - To develop the skills to manage common orthopedic and sports medicine disorders seen in primary care.

**Objectives** - The student will gain experience in:

- Obtaining accurate histories regarding orthopedic and sports medicine diseases.
- Performing appropriate physical examinations on patients.
- Care for athletes with acute and chronic medical illnesses.
- Performing pre-participation examinations, including counseling and rehabilitation for return to play and sports exclusion.
- Performing a wellness assessment and counsel patients regarding hydration, nutrition, performance enhancing substances and rehabilitation.
- Work with the team physician and gain experience in various sports teams and mass participation events, including managing acute and life-threatening injuries and illnesses.
- Perform procedures appropriate for the diagnosis and management of musculoskeletal disorders.
Goal - To communicate effectively with physicians, staff, and patients concerning the evaluation and management of orthopedic and sports medicine conditions.

Objectives - The student will gain experience in:
- Describing the diagnosis and treatment plans for diagnosed conditions to patients and their families.
- Counseling patients regarding their injury and incorporate return to play and prevention strategies.
- Accurately convey medical information to colleagues, specialists, athletic trainers and coaches, verbally and written.
- Accurately document patient encounters

Goal - To appraise and utilize the best evidence in caring for patients with or at risk for various orthopedic and sports medicine conditions.

Objectives - The student will gain knowledge in:
- Integrating evidence-based medicine and new diagnostic or therapeutic strategies into patient care within the sports medicine clinic.
- Analyzing and present current literature in the field of sports medicine and orthopedics on a local and national level.
- Attend any Journal Club, noon conference and sports medicine seminars as directed by the attending.

Goal - To work well within the Health System to provide optimum care for patients with orthopedic or sports medicine conditions.

Objectives - The student will gain knowledge in:
- Appropriately utilize consultation with specialists for the co-management of sports medicine and orthopedic disorders.
- Appropriately utilize imaging techniques at local imaging offices.
- Appropriately utilize special services such as physical and occupational therapy.
- Care for patients in a cost effective manner.
- Streamline the care of athletes between school and the Health System and identify accessible resources for their care.
- Understand coding for sports medicine and orthopedic office visits, procedures and supplies.
• Understand insurance requirements and reimbursement for sports medicine and orthopedic conditions and supplies, including worker's compensation

**Goal** - To demonstrate commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity when dealing with orthopedic and sports medicine problems.

**Objectives** - The student will be able to:

• Demonstrate respect and sensitivity in dealing with patients, regardless of race, cultural background or sexual orientation.

• Demonstrate good work habits, including maturity, punctuality, availability and efficiency.

• Reliably perform duties, including clinic, training room and athletic event coverage.

**Goal** - To understand the integration of Osteopathic Philosophy and Osteopathic Manipulative Medicine with orthopedic or sports medicine conditions.

• Demonstrates understanding and application of osteopathic manipulative treatment (OMT) by application of multiple methods of treatment as appropriate, such as but not limited to: high-velocity, low-amplitude (HVLA), strain-counterstrain and muscle energy techniques.

• Demonstrates, as documented in the medical record, integration of osteopathic concepts and OMT in patient care as it relates to musculoskeletal disorders.

• Understand the philosophy behind osteopathic concepts and demonstrates this through integration into all patient care activities.

• Describe the role of the musculoskeletal system in disease including somatovisceral reflexes, alterations in body framework, and trauma.

• Understands the indications and contraindications to osteopathic manipulative treatment.

At the end of this rotation, the student should:

1. Demonstrate understanding of the diagnosis and management of common orthopedic or sports medicine conditions. **(COMP/AOA core competencies 2, 3; Institutional outcomes 1, 2)**

2. Demonstrate understanding of when operative versus nonoperative therapy is indicated. **(COMP/AOA core competencies 1, 2, 3, 6; Institutional outcomes 1, 2, 7, 8)**

3. Demonstrate understanding of the risks and benefits of various interventional procedures. **(COMP/AOA core competencies 2, 3, 6; Institutional outcomes 1, 2, 7)**

4. Obtain an accurate history and perform an accurate physical examination of the orthopedic or sports medicine patient. **(COMP/AOA core competencies 2, 3; Institutional outcomes 1, 2)**

5. Demonstrate the preoperative and postoperative evaluation of the orthopedic or sports medicine patient. **(COMP/AOA core competencies 2, 3; Institutional outcomes 1, 2)**

6. Demonstrate the evaluation of the acute patient. **(COMP/AOA core competencies 2, 3; Institutional outcomes 1, 2)**
7. Demonstrate the ability to prepare a focused SOAP note. (COMP/AOA core competencies 2, 3, 4, 5; Institutional outcomes 1, 2)
8. Demonstrate the ability to prepare and deliver an oral focused presentation. (COMP/AOA core competencies 2, 3, 4, 5; Institutional outcomes 1, 2, 3, 4)
9. Demonstrate the development of differential diagnoses for orthopedic or sports medicine conditions. (COMP/AOA core competencies 2, 3; Institutional outcomes 1, 2)
10. Demonstrate understanding of the clinical, laboratory, and radiological resources used for diagnosing general orthopedic or sports medicine conditions. (COMP/AOA core competencies 2, 3, 6, 7; Institutional outcomes 1, 2, 7)
11. Demonstrate effective communication with the team, attendings, residents, physician assistants, nurse practitioners, nurses, ancillary personnel, etc. (COMP/AOA core competencies 1, 2, 3, 4, 5, 6, 7; Institutional outcomes 1, 2, 3, 4, 8)

Core Topics of Study

SPORTS MEDICINE - Students should be able to define, describe and discuss:
(More Common Injuries)
1. Stress Fractures
2. Lateral Epicondylitis (Tennis Elbow)
3. Rotator Cuff Tendinitis (Shoulder Bursitis)
4. Plantar Fasciitis (Heel Spur)
5. Patellar Overload Syndrome (Chondromalacia Patella)
6. Exercise Compartment Syndrome (Shin Splints)
7. Sprains
8. Ankle Sprains
9. Knee Ligament Sprains
10. Meniscal Injury
11. Acromioclavicular (Shoulder) Separation
12. Gamekeeper’s Thumb
13. Mallet (Baseball) Finger
14. Boxer’s Fracture
15. Achilles Tendon Rupture
16. Turf Toe
17. Myositis Ossificans
18. Describe the pathophysiology of attritional sports-related injuries as they affect bone, muscle, and tendon.
19. Define the term sprain and its three gradations. Discuss the methods of diagnosing the common sprains at the knee and ankle.
20. Compartment Syndrome “4 Ps”
21. Fracture Management- Discuss indications and complications
22. Growth Plate Fractures- Salter-Harris type I-V
23. radiological/US techniques used in making the diagnosis of orthopedic injuries
Rotation Faculty

OAA Administrative Support:

Pomona:
Marisa Orser, M.Ed, Manager of Clinical Education and Rotations Department (909) 469-5253
Desiree Inglis, Lead Rotations Coordinator

Lebanon:
Linda Martin, M.Ed, Manager of Clinical Education and Rotations Office (541) 259-0212

Texts and Media

It is strongly recommended that students spend approximately 10 hours per week reading independently. Students should not rely solely on the review books to be adequately prepared for the rotation as they do not provide the knowledge base needed to successfully pass the rotation.

Recommended Textbooks

Netter’s Sports Medicine
By Madden et al. – Elsevier Health Sciences. Hardback 800 pages ISBN 9780323296151

Basic Orthopedic Exams
by Zachary Child · Lippincott Williams & Wilkins · Paperback · 276 pages · ISBN 0781763339

Current Diagnosis and Treatment Orthopedics,
by Harry Skinner, Michael Fitzpatrick · McGraw-Hill Education · Paperback · 272 pages

Other Suggested Textbooks
- Chapter 43: Orthopedic Surgery


Rotation Format, Evaluation, Grading, and Student Feedback

Refer to the Clinical Education Manual for policies and procedures.
Additional information is located in the Clinical Education Manual at:
http://www.westernu.edu/bin/ime/cem-2014.pdf

Rotation Schedule
Each site will provide students with a schedule on their first day of the rotation. These schedules are rarely available prior to the start the rotation.
Evaluations:
The evaluation of the student is based upon, but not limited to the following:

1. Knowledge of the orthopedic and sports medicine disorders, pathology, and management for assigned patients.
2. Knowledge of the diagnosis and treatment of common orthopedic and sports medicine disorders.
3. Knowledge of procedural skills related to assigned patients.
4. Presentation of assigned patients on daily rounds.
5. Completion of paperwork (history and physicals, progress notes, orders, etc) on assigned patients.
6. Performance of an independent presentation as assigned by the resident or attending physician.
7. Professionalism and rapport with patients, residents, attendings, and ancillary staff.
8. Attendance at lectures, conferences, and meetings.
9. Submission of completed case logs and procedure logs to COMP via New Innovations. Failure to submit the logs will count as failure to complete the clerkship.

General Policies

Policy on Disability Accommodations: To obtain academic accommodations for this rotation, students with disabilities should contact the Center for Disability Issues and the Health Professions and the system coordinator within ten days of the beginning of the system. Disability Services can be reached at 909.469.5380.


Academic Dishonesty: Complete confidence in the honor and integrity of the health professions student and health care professional is essential. Such confidence depends entirely on the exemplary behavior of the individual health care provider in his or her relations with patients, faculty and colleagues. Strict honesty as a personal way of life should be nurtured during the period of education for professional service. The student shall conduct all aspects of his or her life with honor and integrity. This includes accountability to oneself and to relationships with fellow students, future colleagues, faculty, and patients who come under the student’s care or contribute to his or her training and growth, and members of the general public. This applies to personal conduct that reflects on the student’s honesty and integrity in both academic and non-academic settings, whether or not involving a University sponsored activity. Upon accepting admission to the University, each student subscribes to and pledges complete observance to the Standards of Academic and Professional Conduct as outlined in the University Catalog for each academic program. A violation of these standards is an abuse of the trust placed in every student and could lead to suspension or dismissal.
### WU INSTITUTIONAL OUTCOMES

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<tr>
<td><strong>1. Critical Thinking</strong></td>
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<tr>
<td><strong>2. Breadth and Depth of Knowledge in the Discipline/Clinical Competence</strong></td>
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<td><strong>3. Interpersonal Communication Skills</strong></td>
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<tr>
<td><strong>4. Collaboration Skills</strong></td>
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<td><strong>5. Ethical and Moral Decision Making Skills</strong></td>
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<td><strong>6. Life Long Learning</strong></td>
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<td><strong>7. Evidence-Based Practice</strong></td>
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<td><strong>8. Humanistic Practice</strong></td>
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### COMP/AOA CORE COMPETENCIES

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<td><strong>2. Medical Knowledge</strong></td>
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<td><strong>3. Patient Care</strong></td>
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<td><strong>4. Interpersonal and Communication Skills</strong></td>
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<td><strong>5. Professionalism</strong></td>
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<td><strong>6. Practice-Based Learning and Improvement</strong></td>
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<td><strong>7. Systems-based Practice</strong></td>
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### COMPARISON OF OUTCOMES STANDARDS: WU AND COMP

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<tr>
<td>Critical Thinking</td>
<td>1</td>
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<tr>
<td>Breadth and Depth of Knowledge in the Discipline/Clinical Competence</td>
<td>2</td>
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<td>Interpersonal Communication Skills</td>
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