Syllabus Elective Sports Medicine

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<tr>
<th>Course No.:</th>
<th>OM 7550A-G</th>
<th>Course Title:</th>
<th>Elective PM&amp;R</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

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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 Physical Medicine and Rehabilitation. 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 are to gain experience in the diagnosis,
evaluation, and management of persons of all ages with acute and chronic, physical and/or cognitive impairment and disability.

Elective Physical Medicine and Rehabilitation Clerkship Learning Objectives

Goal - To gain the basic knowledge to evaluate, diagnose and manage common disorders seen in Physical Medicine and Rehabilitation.

On the inpatient Physical Medicine and Rehabilitation service, the student will work as a member of the multidisciplinary team and learn to manage patients with spinal cord injury (SCI), traumatic brain injury, and stroke. In the outpatient Physical Medicine and Rehabilitation clinic, the student will work with faculty in evaluating and managing patients with a variety of musculoskeletal disorders, including joint and connective tissue disorders, sports related injuries, neuromuscular disorders, pain issues, and amputations.

Inpatient Service

Goal - To learn inpatient PM&R management of patients with disabilities and functional impairments due to disorders such as acquired brain injury, CNS disorders, SCI, and complex medical conditions. Students will have a structured clinical experience on the rehabilitation medicine wards or consultation service. Students will learn the differences between acute and chronic medical issues, identification of disability problems, and therapeutic techniques for removing disability.

Objectives - The student will be gain basic understanding of:

1. Medical Knowledge
   i. Generate a differential diagnosis for medical and PM&R problems
   ii. Integrate and apply knowledge to manage inpatient PM&R problems
      • Spinal Cord Injury
      • Traumatic Brain Injury
      • Stroke
      • Orthopedic (i.e. trauma, joint replacement)
   iii. Review laboratory data and imaging data and identify normal and abnormal findings

2. Patient Care
   i. Perform a general and specific physiatric examination, including (as appropriate):
      mental status evaluation, gait evaluation, manual muscle testing, ASIA exam
   ii. Diagnose physical, cognitive, and psychosocial impairments and disabilities
   iii. Formulate a problem list, prioritizing rehabilitation issues
   iv. Integrate facts and data to make clinical decisions
   v. Integrate osteopathic principles and practice into patient care

3. Interpersonal and Communication Skills
   i. Present material clearly and accurately to patients using effective verbal and non-verbal skills
   ii. Utilize effective listening skills
   iii. Communicate with the staff/team in respectful, responsive manner
Outpatient Clinic

Goal - To provide an opportunity for medical students to assist in the diagnosis and management of common sports and musculoskeletal problems. Students will develop skills in the prevention, evaluation, and rehabilitation of sports and musculoskeletal injuries, as well as understand the role of diagnostic tests and peripheral joint injections.

Objectives - The student will gain basic understanding of:

1) Medical Knowledge
   a) Generate a differential diagnosis for common sports and musculoskeletal problems
   b) Integrate and apply knowledge to manage outpatient PM&R problems
      - Upper and lower extremity joint problems
      - Spinal disorders
      - Sports related injuries
      - Neuromuscular disorders
      - Pain and spasticity management issues
      - Amputation
   c) Review laboratory data and imaging data and identify normal and abnormal findings
   d) Understand role of diagnostic tests, including EMG/NCS and diagnostic imaging, and interventional procedures, including joint and spinal injections
   e) Understand the role of therapeutic modalities and exercise and prosthetics and orthotics
   f) Analyze and present current literature
   g) Attend any Journal Club, noon conference and seminars as directed by the attending.

2) Patient Care
   a) Perform a focused musculoskeletal and neurological exam
   b) Formulate a problem list, prioritizing musculoskeletal issues
   c) Integrate facts and data to make clinical decisions
   d) Appropriately utilize special services such as speech, physical and occupational therapy.
   e) Integrate osteopathic principles and practice into patient care
i) 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.

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

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

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

v) Understands the indications and contraindications to osteopathic manipulative treatment.

3) Interpersonal and Communication Skills
   a) Present material clearly and accurately to patients using effective verbal and non-verbal skills
   b) Utilize effective listening skills
   c) Communicate with physicians and staff/team in a respectful, responsive manner. Accurately convey medical information to colleagues, specialists
   d) Complete dictations and chart notes in a timely manner
   e) Document clinical findings in accordance with clinic requirements

4) Professionalism
   a) Exemplify respect, compassion, reliability, punctuality, integrity and honesty
   b) Demonstrate responsiveness to patient needs that supersedes self-interest
   c) Accept responsibility for one’s own actions and decisions
   d) Maintain patient confidentiality and respect patient autonomy
   e) Demonstrate sensitivity and responsiveness to age, culture, disability, race, religion, sexual orientation, and gender of patients and colleagues
   f) Demonstrate good work habits, including maturity, punctuality, availability and efficiency.

At the end of this rotation, the student should:

1. Demonstrate understanding of the diagnosis and management of common Physical Medicine and Rehabilitation 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 Physical Medicine and Rehabilitation patient. (COMP/AOA core competencies 2, 3; Institutional outcomes 1, 2)
5. Demonstrate the preoperative and postoperative evaluation of the Physical Medicine and Rehabilitation 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 Physical Medicine and Rehabilitation 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 Physical Medicine and Rehabilitation 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

Students should be able to define, describe and discuss:

1) Spinal Cord Injury & ASIA classification
2) Autonomic dysreflexia
3) Spasticity
4) Neurogenic bowel & bladder
5) Heterotrophic ossification
6) Deep venous thromboembolism
7) Traumatic brain injury
8) Stroke
9) Sexuality/sexual dysfunction secondary to spinal cord injury, stroke and traumatic brain injury
10) Pressure ulcers & wound management
11) Amputation
12) Principles of prosthetic and orthotic management
13) Principles of disability & impairment
14) Cervical & lumbar spine pain, degenerative disease, radiculopathy, stenosis and myelopathy
15) Rotator cuff tendinitis & shoulder impingement syndromes
16) Adhesive capsulitis
17) Acromioclavicular joint injury & shoulder dislocation
18) Lateral epicondylitis
19) Carpal tunnel & cubital tunnel syndromes
20) Knee ligament (ACL, PCL, etc.) & meniscal injuries
21) Chondromalacia patellae
22) Ankle sprains
23) Stress fractures
24) Sports concussion
25) Inflammatory arthritis

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**


### 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 of 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.
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<tr>
<th>WU INSTITUTIONAL OUTCOMES</th>
<th>Health Professional Education</th>
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<tr>
<td>1. Critical Thinking</td>
<td>The graduate should be able to identify and solve problems that require the integration of multiple contexts when performing patient care.</td>
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<tr>
<td>2. Breadth and Depth of Knowledge in the Discipline/Clinical Competence</td>
<td>The graduate should be able to perform appropriate diagnostic and therapeutic skills, to apply relevant information to patient care and practice, and to educate patients regarding prevention of common health problems.</td>
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<td>3. Interpersonal Communication Skills</td>
<td>The graduate should be able to effectively use interpersonal skills that enable them to establish and maintain therapeutic relationships with patients and other members of the health care team.</td>
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<td>4. Collaboration Skills</td>
<td>The graduate should be able to collaborate with clients and with other health professionals to develop a plan of care to achieve positive health outcomes for their patients.</td>
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<td>5. Ethical and Moral Decision Making Skills</td>
<td>The graduate should be able to perform the highest quality of care, governed by ethical principles, integrity, honesty and compassion.</td>
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<td>6. Life Long Learning</td>
<td>The graduate should be able to engage in life-long, self-directed learning to validate continued competence in practice.</td>
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<td>7. Evidence-Based Practice</td>
<td>The graduate should be able to utilize research and evidence-based practice and apply relevant findings to the care of patients.</td>
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<td>8. Humanistic Practice</td>
<td>The graduate should be able to carry out compassionate and humanistic approaches to health care delivery when interacting with patients, clients, and their families. They should unfailingly advocate for patient needs.</td>
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### COMP/AOA CORE COMPETENCIES

**Competency: Osteopathic Medical Students are part of an educational continuum that leads to residency and the curriculum provides the foundation for the following outcomes:**

| COMP/AOA CORE COMPETENCIES | **1. Osteopathic Philosophy and Osteopathic Manipulative Medicine** | Residents are expected to demonstrate and apply knowledge of accepted standards in Osteopathic Manipulative Treatment (OMT) appropriate to their specialty. The educational goal is to train a skilled and competent osteopathic practitioner who remains dedicated to life-long learning and to practice habits in osteopathic philosophy and manipulative medicine. |
|-----------------------------|---------------------------------------------------------------|
|                             | **2. Medical Knowledge**                                   | Residents are expected to demonstrate and apply knowledge of accepted standards of clinical medicine in their respective specialty area, remain current with new developments in medicine, and participate in life-long learning activities, including research. |
|                             | **3. Patient Care**                                        | Residents must demonstrate the ability to effectively treat patients, provide medical care that incorporates the osteopathic philosophy, patient empathy, awareness of behavioral issues, the incorporation of preventative medicine, and health promotion. |
|                             | **4. Interpersonal and Communication Skills**               | residents are expected to demonstrate interpersonal/communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams. |
|                             | **5. Professionalism**                                     | residents are expected to uphold the Osteopathic Oath in the conduct of their professional activities that promote advocacy of patient welfare, adherence to ethical principles, collaboration with health professionals, life-long learning, and sensitivity to a diverse patient population. Residents should be cognizant of their own physical and mental health in order to effective care for patients. |
|                             | **6. Practice-Based Learning and Improvement**              | residents must demonstrate the ability to critically evaluate their methods of clinical practice, integrate evidence-based medicine into patient care, show an understanding of research methods, and improve patient care practices. |
|                             | **7. Systems-based Practice**                               | residents are expected to demonstrate an understanding of health care delivery systems, provide effective and qualitative patient care within the system, and practice cost-effective medicine. |

### COMPARISON OF OUTCOMES STANDARDS: WU AND COMP

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<th>1, 2, 3, 6, 7</th>
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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>
<td>1, 2, 3, 4, 5, 6, 7</td>
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<tr>
<td>Interpersonal Communication Skills</td>
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<td>4</td>
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<td>Collaboration Skills</td>
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<td>Ethical and Moral Decision Making Skills</td>
<td>5</td>
<td>1, 3, 5, 6</td>
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