

COHORT 3

The MSK Essentials: Orthopedic & Sports Medicine Certificate Program

September 1, 2026 – May 25, 2027

- ❖ Term 1 - Musculoskeletal Essentials I (WEEKS 1 – 14)
- ❖ Term 2 - Musculoskeletal Essentials II (WEEKS 15 – 30)
- ❖ Term 3 - Musculoskeletal Essentials III (WEEKS 31 – 37)

REQUIRED TEXTBOOKS:

AAOS Essentials of Musculoskeletal Care: 6th Edition (Textbook)

Authors: AAOS, April Armstrong, Mark C. Hubbard

ISBN:9781284223347

Cost \$183.95

Date	Topics	Outcomes	Outline	Assignments/Readings
WEEK 1 9/14/2026	General Orthopedics	Understand the components of the MSK Specialty Certificate Program. Discuss the elements of a comprehensive orthopedic examination.	Welcome! Principles of Musculoskeletal Evaluation Overview Anatomy Pain Diagram Physical Exam	Section 1 Pages: 4-14 Case Study Assignment Discussion Board Participation
WEEK 2 9/21/2026	General Orthopedics	Describe the assessment, management and treatment of patients with amputations Discuss chronic inflammatory conditions	Amputations Chronic Inflammatory Conditions Complementary and Alternative	Section 1 Pages: 15-58 Case Study Assignment Discussion Board Participation

		Identify complementary and alternative options for the treatment of osteoarthritis.	Treatment of Osteoarthritis	
WEEK 3 9/22/2026	General Orthopedics	Identify drugs used in orthopedics. Describe the treatment for the older population of orthopedic patients	Other Conditions Medications	Section 1 Pages: 80-108 Case Study Assignment Discussion Board Participation
WEEK 4 9/28/2026	General Orthopedics	Discuss the principles of evaluation of orthopedic injuries and conditions with imaging Describe the principles of MSK infection diagnosis and treatment	Imaging Principles and Techniques Infection	Section 1 Pages: 109-125 Case Study Assignment Discussion Board Participation
WEEK 5 10/5/2026	General Orthopedics	Describe principles of MSK conditioning and rehabilitation. Identify tumors in the MSK system.	Musculoskeletal Conditioning and Rehabilitation Tumors Pain Issues Preoperative Evaluation Regenerative Medicine	Section 1 Pages: 127-199; 214-263 (skim) Case Study Assignment Discussion Board Participation
WEEK 6 10/12/2026	General Orthopedics	Identify treatment techniques and options for concussion Describe identification and treatment of overuse injuries	Sports Medicine Concussion Overuse injuries.	Section 1 Pages: 69-79 200-213, 279-317 Case Study Assignment

			Traumatic Orthopedic Injuries Fracture Evaluation and Management	Discussion Board Participation
WEEK 7 10/19/2026	Midterm Exam			
WEEK 8 10/26/2026	Shoulder	<p>Explain the relationship between MSK anatomy of the shoulder and common conditions</p> <p>Describe the physical examination maneuvers of the shoulder necessary to diagnose specific pathology</p> <p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common shoulder conditions</p> <p>Identify red flags in the case of pathologies</p>	<p>Overview of the Shoulder Anatomy Pain Diagram</p> <p>Physical Examination of the Shoulder</p>	<p>Section 2 Pages: 324-346</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
WEEK 9 11/2/2026	Shoulder	<p>Explain the relationship between MSK anatomy of the shoulder and common conditions</p> <p>Describe the physical examination maneuvers of the shoulder necessary to</p>	<p>Conditions of the Shoulder I</p> <p>Injections, Aspirations and Procedures of the Shoulder I</p>	<p>Section 2 Pages: 347-382</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>

		<p>diagnose specific pathology</p> <p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common shoulder conditions</p> <p>Identify red flags in the case of pathologies</p>		
<p>WEEK 10 11/9/2026</p>	Shoulder	<p>Explain the relationship between MSK anatomy of the shoulder and common conditions</p> <p>Describe the physical examination maneuvers of the shoulder necessary to diagnose specific pathology</p> <p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common shoulder conditions</p> <p>Identify red flags in the case of pathologies</p>	<p>Conditions of the Shoulder II</p> <p>Injections, Aspirations and Procedures of the Shoulder II</p>	<p>Section 2 Pages: 383-427</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
<p>WEEK 11 11/16/2026</p>	Elbow and Forearm	<p>Explain the relationship between MSK anatomy of the</p>	<p>Overview of the Elbow and Forearm Anatomy</p>	<p>Section 3 Pages: 434-445</p>

		<p>elbow and forearm and common conditions</p> <p>Describe the physical examination maneuvers of the elbow and forearm necessary to diagnose specific pathology</p>	<p>Pain diagram</p> <p>Physical Examination of the Elbow and Forearm</p>	<p>Case Study Assignment</p> <p>Discussion Board Participation</p>
<p>WEEK 12 11/23/2026</p>	<p>Elbow and Forearm</p>	<p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common elbow and forearm conditions</p> <p>Identify red flags in the case of pathologies</p>	<p>Conditions of the Elbow and Forearm I</p> <p>Injections, Aspirations and Procedures of the Elbow and Forearm I</p>	<p>Section 3 Pages: 446-463</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
<p>WEEK 13 11/30/2026</p>	<p>Elbow and Forearm</p>	<p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common elbow and forearm conditions</p> <p>Identify red flags in the case of pathologies</p>	<p>Conditions of the Elbow and Forearm II</p> <p>Injections, Aspirations and Procedures of the Elbow and Forearm II</p>	<p>Section 3 Pages: 463-490</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>

WEEK 14 12/7/2026	Final Exam			
WEEK 15 12/14/2026	Wrist and Hand	<p>Explain the relationship between MSK anatomy of the wrist and hand and common conditions</p> <p>Describe the physical examination maneuvers of the wrist and hand necessary to diagnose specific pathology</p>	<p>of the Wrist and Hand Anatomy Pain diagram</p> <p>Physical Examination Wrist and Hand</p>	<p>Section 4 Pages: 498-516</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
HOLIDAY BREAK				
WEEK 16 1/4/2027	Wrist and Hand	<p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common wrist and elbow conditions</p> <p>Identify red flags in the case of pathologies</p>	<p>Conditions of the Wrist and Hand I</p> <p>Injections, Aspirations and Procedures I</p>	<p>Section 4 Pages: 517-570</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
WEEK 17 1/11/2027	Wrist and Hand	<p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common wrist and elbow conditions</p>	<p>Conditions of the Wrist and Hand II</p> <p>Injections, Aspirations and Procedures of the Wrist and Hand II</p>	<p>Section 4 Pages: 571-624</p> <p>Case Study Assignment</p>

		Identify red flags in the case of pathologies		Discussion Board Participation
WEEK 18 1/18/2027	Hip and Thigh	<p>Explain the relationship between MSK anatomy of the hip and thigh and common conditions</p> <p>Describe the physical examination maneuvers of the hip and thigh necessary to diagnose specific pathology</p>	<p>Overview of the Hip and Thigh</p> <p>Physical Examination of the Hip and Thigh Anatomy Pain diagram</p> <p>Injections, Aspirations and Procedures of the Hip and Thigh</p>	<p>Section 5 Pages: 630-650</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
WEEK 19 1/25/2027	Hip and Thigh	<p>Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.</p> <p>Discuss common treatment strategies for common hip and thigh conditions</p> <p>Identify red flags in the case of pathologies</p>	Conditions of the Hip and Thigh	<p>Section 5 Pages: 651-716</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
WEEK 20 2/1/2027	Midterm Exam			
WEEK 21 2/8/2027	Knee and Lower Leg	<p>Explain the relationship between MSK anatomy of the knee and lower leg and common conditions</p> <p>Describe the physical examination maneuvers of the knee</p>	<p>Overview of the Knee and Lower Leg Anatomy Pain diagram</p> <p>Physical Exam of the Knee and Lower Leg</p>	<p>Section 6 Pages: 722-748</p> <p>Case Study Assignment</p>

		and lower leg necessary to diagnose specific pathology		Discussion Board Participation
WEEK 22 2/15/2027	Knee and Lower Leg	Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results. Discuss common treatment strategies for common knee and lower leg conditions Identify red flags in the case of pathologies	Conditions I of the Knee and Lower Leg Injections, Aspirations and Procedures I of the Knee and Lower Leg	Section 6 Pages: 748-798 Case Study Assignment Discussion Board Participation
WEEK 23 2/22/2027	Knee and Lower Leg	Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results. Discuss common treatment strategies for common knee and lower leg conditions Identify red flags in the case of pathologies	Conditions II of the Knee and Lower Leg Injections, Aspirations and Procedures II of the Knee and Lower Leg	Section 6 Pages: 799-851 Case Study Assignment Discussion Board Participation
WEEK 24 3/1/2027	Foot and Ankle	Explain the relationship between MSK anatomy of the foot and ankle and common conditions Describe the physical examination maneuvers of the foot and ankle necessary to diagnose specific pathology	Overview of the Foot and Ankle Anatomy Pain diagram Physical Examination of the Foot and Ankle	Section 7 Pages: 860-887 Case Study Assignment Discussion Board Participation

WEEK 25 3/8/2027	Foot and Ankle	Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results. Discuss common treatment strategies for foot and ankle condition Identify red flags in the case of pathologies	Conditions I of the Foot and Ankle Injections, Aspirations and Procedures I of the Foot and Ankle	Section 7 Pages: 892-952 Case Study Assignment Discussion Board Participation
WEEK 26 3/15/2027	Foot and Ankle	Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results. Discuss common treatment strategies for foot and ankle condition Identify red flags in the case of pathologies	Conditions II of the Foot and Ankle Injections, Aspirations and Procedures II of the Foot and Ankle	Section 7 Pages: 953-1014 Case Study Assignment Discussion Board Participation
WEEK 27 3/19/2027	On-Campus Workshop Day			
WEEK 28 3/22/2027	Spine	Explain the relationship between MSK anatomy of the spine and common conditions Describe the physical examination maneuvers of the spine necessary to diagnose specific pathology	Overview of the Spine Anatomy Pain diagram Physical Exam of the Spine	Section 8 Pages: 1020-1054 Case Study Assignment Discussion Board Participation
WEEK 29 3/29/2027	Spine	Formulate differential diagnoses based on clinical history, specific physical examination findings and diagnostic test results.	Conditions of the Spine Injections of the Spine	Section 8 Pages: 1055-1111 Case Study Assignment

		<p>Discuss common treatment strategies for spine condition</p> <p>Identify red flags in the case of pathologies</p>		Discussion Board Participation
WEEK 30 4/5/2027	Final Exam			
WEEK 31 4/12/2027	Pediatric	<p>List the differences in the care of adult and pediatric orthopedic patients.</p> <p>Identify common physical examination techniques for pediatric orthopedic patients.</p>	<p>Overview</p> <p>Physical Examination</p>	<p>Section 9 Pages:1120-1133</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
WEEK 32 4/19/2027	Pediatric	<p>Differentiate common congenital and acquired orthopedic injuries and conditions.</p> <p>Acquire foundational knowledge and skills in pediatric orthopedics, enabling the effective assessment, diagnosis, and management of musculoskeletal conditions in children, with an emphasis on promoting optimal growth and development.</p>	Pediatric Conditions I	<p>Section 9 Pages: 1134-1167</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>
WEEK 33 4/26/2027	Pediatric	<p>Differentiate common congenital and acquired orthopedic injuries and conditions</p> <p>Develop a comprehensive understanding of pediatric orthopedics,</p>	Pediatric Conditions II	<p>Section 9 Pages: 1172-1200</p> <p>Case Study Assignment</p> <p>Discussion Board Participation</p>

		focusing on the unique aspects of musculoskeletal health in children, and the ability to implement appropriate interventions for common orthopedic conditions.		
WEEK 34 5/3/2027	Pediatric	Recognize most common fractures in the pediatric population and describe the diagnosis and management of each.	Pediatric Conditions III	Section 9 Pages: 1201-1223 Case Study Assignment Discussion Board Participation
WEEK 35 5/10/2027	Pediatric	Gain essential knowledge and competencies in pediatric orthopedics to effectively evaluate, diagnose, and treat musculoskeletal issues in children, ensuring their healthy development and function. Recognize the components of the preparticipation physical examination in sports.	Pediatric Conditions IV	Section 9 Pages: 1224-1274 Case Study Assignment Discussion Board Participation
WEEK 36 5/17/2027	Pediatric	Differentiate common congenital and acquired orthopedic injuries and conditions	Pediatric Conditions V	Section 9 Pages: 1275-1322 Case Study Assignment Discussion Board Participation

WEEK 37 5/24/2027	Final Exam	Take 3 times, the highest of the 3 scores will be recorded.		

Note: Continuous Improvement:

The contents of this syllabus may be added to, deleted from, or altered if the faculty believes it is necessary to achieve the course objectives. New material appropriate to contemporary practice may be added by the instructor during the course.