# Sports Medicine II Course No. 14073 Credit: 1.0

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| **Student name:** |  | **Graduation Date:** |  |

Pathways and CIP Codes:Health Science (51.3901)

Course Description: **Application Level:** This course provides advanced sports medicine students with instruction in advanced techniques and orthopedic medicine. This course will give students hands-on experience evaluating injuries commonly sustained by the competitive athlete. It includes all areas of sports medicine such as sports medicine terminology, musculoskeletal anatomy, evaluation, assessment, rehabilitation, and prevention of athletic injuries. Emphasis will be placed on evaluating and assessing athletic injuries with the correction or prevention of deformities, disorders, or injuries of the skeleton and associated structures (such as tendons and ligaments). The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills with Basic Life Support Certification for employment and be prepared for postsecondary education.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Explain effective communication strategies of a therapist with patients and all members of the therapy team.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Demonstrate appropriate verbal communication skills in a healthcare setting. |  |
| 1.2 | Demonstrate appropriate non-verbal communication skills in a healthcare setting. |  |

## Benchmark 2: Demonstrate theory and principles of prophylactic taping. Discuss the differences between functional and prophylactic bracing.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Analyze the basic principles of prophylactic taping. |  |
| 2.2 | Identify the necessary supplies and their purpose for prophylactic taping including: Athletic tape (various size), Under wrap, Heel and lace pad, Adhesive spray, Shark/Scissors. |  |
| 2.3 | Analyze the basic principles of proper tape removal. |  |
| 2.4 | Explain the terminology associated with prophylactic taping procedures including: Anchor, Stirrup, Horseshoe, Spica, Heel-lock, Checkrein/fan. |  |
| 2.5 | Demonstrate how to tape an ankle using the standard prophylactic taping method. |  |
| 2.6 | Demonstrate how to tape an arch using the standard prophylactic taping method. |  |
| 2.7 | Demonstrate how to tape and thumb using the standard prophylactic taping method. |  |
| 2.8 | Demonstrate how to tape and wrist using the standard prophylactic taping method. |  |
| 2.9 | Identify the function of joint sleeves (compression). |  |

## Benchmark 3: Explain an injury assessment (SOAP).

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Identify proper PPE/BSI precautions. |  |
| 3.2 | Identify the components included in obtaining an accurate history. |  |
| 3.3 | Identify the components of an observation. |  |
| 3.4 | Describe the process of palpation. |  |
| 3.5 | Describe the purposes of special tests such as: Range of Motion, Stress Tests (structural integrity), Neurological, Functional. |  |
| 3.6 | Discuss the decisions that can be made from a SOAP evaluation. |  |
| 3.7 | Explain a SOAP assessment. |  |

## Benchmark 4: Discuss immobilization techniques.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 4.1 | Identify fracture signs and symptoms. |  |
| 4.2 | Explain the steps to immobilization: |  |
|  | * Splint in the position found |  |
|  | * Immobilize the joint above and the joint below |  |
|  | * Check circulation distal to the injury |  |
| 4.3 | Explain head/neck immobilization: |  |
|  | * Maintain in-line stabilization |  |
|  | * Monitor ABC’s and vitals |  |
| 4.4 | Demonstrate crutch fitting to any size individual. |  |

## Benchmark 5: Certify students in American Heart Association Basic Life Support.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 5.1 | Obtain Certification in BLS. |  |

## Benchmark 6: Recognize common injuries to the head.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 6.1 | Understand the anatomy of the head including: |  |
|  | * Bones (Frontal, Occipital, Parietal, Temporal, Mandible, Maxilla, Zygomatic, Nasal), |  |
|  | * Muscles (Sternocleidomastoid, Trapezius) |  |
|  | * Structures (Brain, Intervertebral disks) |  |
| 6.2 | Identify the mechanism of injury. |  |
| 6.3 | Identify the signs and symptoms of the injury (Concussion, Post concussion Syndrome, Second Impact Syndrome, Mandible Fracture, Temporomandibular Joint Dysfunction/TMJ, Cauliflower ear, Swimmers Ear, Nasal Fractures, Nose Bleed). |  |
| 6.4 | Perform History, Observation, Palpation and Special Tests according to upper extremity injuries. |  |
| 6.5 | Demonstrate: Balance Tests/Romberg, Balance Error Scoring System, Perform Concussion Assessment/SCAT 5, VOMS. |  |
| 6.6 | Indicate appropriate treatment for the injury. |  |
| 6.7 | Describe injury prevention strategies. |  |

## Benchmark 7: Recognize Common Injuries to the spine.

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 7.1 | Identify Anatomy of the Spine including: Cervical Vertebrae, Thoracic Vertebrae, Lumbar Vertebrae, Sacrum, Coccyx, Spinous process, Iliac Crest, Iliac Tubercle, Greater Trochanter, Sciatic Nerve. |  |
| 7.2 | Identify surface anatomy/muscles for the entire spine including: Cervical Vertebrae, Thoracic Vertebrae, Lumbar Vertebrae, Latissimus dorsi, Erector spinae, Iliac crest, Sacrum, Coccyx. |  |
| 7.3 | Describe the peripheral and autonomic nervous system. |  |
| 7.4 | Identify the 12 cranial nerves. |  |
| 7.5 | Identify the Spinal Nerves and functions including Cervical Plexus, Brachial Plexus, Lumbar Plexus, Sacral Plexus. |  |
| 7.6 | Identify the mechanism of injury. |  |
| 7.7 | Identify the signs and symptoms of the injury (Whiplash, Burner, Cervical Disk, Lumbar Sprains, Low back Muscle Strain, Sciatica, Herniated Lumbar Disk, Back Contusions). |  |
| 7.8 | Perform History, Observation, Palpation and Special Tests according to spinal injuries. |  |
| 7.9 | Perform: Brachial Plexus test, Cervical Compression test, Spurling’s Tests, Vertebral Artery Test, Shoulder Abduction Test, Foraminal/Cervical Distraction Test, Trendelenburg’s Test, Slump Test, Sitting Root Test, Tension Test, Bowstring Test, Straight Leg Raises, Kernig’s/Brudzinski’s Test, Well Straight Leg Raising Test, Hoover Test, Valsalva Maneuver. |  |
| 7.10 | Indicate appropriate treatment and rehabilitation for the injury. |  |
| 7.11 | Describe injury prevention strategies. |  |

## Benchmark 8: Recognize common injuries to the shoulder complex.

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 8.1 | Identify the anatomy of the upper extremity including: Bones (Scapula, Humeral Head, Greater Tuberosity of the humerus, Lesser Tuberosity of the humerus, Bicipital groove, Acromion process, Coracoid process, Clavicle). |  |
| 8.2 | Identify the Joints of the shoulder complex including: Sternoclavicular, Acromioclavicular, Glenohumeral, Scapulothoracic. |  |
| 8.3 | Identify the Soft tissues associated with the shoulder complex including: Subacromial bursa, Acromioclavicular ligament, Sternoclavicular ligament, Coracoclavicular ligament, Anterior and middle Deltoid, Rotator cuff tendons, Pectoralis Major Muscle, Sternocleidomastoid muscle, Biceps muscle and tendon, Coracoacromial ligament, Glenohumeral joint Capsule. |  |
| 8.4 | Identify the Muscles of the shoulder complex including: Posterior Deltoid, Rhomboids, Serratus Anterior, Levator scapulae, Trapezius, Latissimus Dorsi, SITS. |  |
| 8.5 | Identify the mechanism of injury. |  |
| 8.6 | Identify the signs and symptoms of the injury including: Frozen Shoulder, Clavicular Fracture, Acromioclavicular sprain, Glenohumeral dislocation, Shoulder Impingement, Rotator Cuff Tear, Dislocation, Bursitis, AC joint separation, Bicipital Tenosynovitis. |  |
| 8.7 | Perform History, Observation, Palpation and Special Tests according to shoulder injuries. |  |
| 8.8 | Perform: Anterior & Posterior Drawer Tests, Clunk Test, Apprehension, O'Brien's Test, Piano Key, Drop Arm, Hawkins/Kennedy, Empty Can, Ener's Test, Speeds Test, Passive ROM, Active ROM, Resistive ROM. |  |
| 8.9 | Indicate appropriate treatment for the injury (i.e. Modalities, Wraps, Braces) and rehabilitation for the injury. |  |
| 8.10 | Describe injury prevention strategies. |  |

## Benchmark 9: Recognize common injuries to the Elbow.

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 9.1 | Identify the anatomy of the Elbow including: Bones (Medial epicondyle, Lateral epicondyle, Olecranon process, Radial Head, Radius, Ulna), Soft-Tissue (Biceps Brachii, Brachialis, Brachioradialis, Pronator Teres, Triceps, Supinator, Ulnar collateral ligament, Wrist Flexors, Radial collateral ligament, Annular ligament, Wrist extensor muscles). |  |
| 9.2 | Identify the mechanism of injury. |  |
| 9.3 | Identify the signs and symptoms of the injury for each: Golfers Elbow, Olecranon Bursitis, Medial Epicondylitis, Lateral Epicondylitis (Tennis Elbow), Ulnar collateral ligament injuries, Bicep/Tricep Strain, Fractures, Pronator Teres Syndrome, Dislocation. |  |
| 9.4 | Perform History, Observation, Palpation and Special Tests according to elbow injuries. |  |
| 9.5 | Perform: Valgus stress test, Varus stress test, Lateral and Medial Epicondylitis, Pinch Grip test, Tinel’s Sign. |  |
| 9.6 | Indicate appropriate treatment for the injury (Modalities, Wraps, Bracing) and rehabilitation for the injury. |  |
| 9.7 | Describe injury prevention strategies. |  |

## Benchmark 10: Recognize common injuries to the wrist and hand.

### Competencies

| **#** | **Description** | **rating** |
| --- | --- | --- |
| 10.1 | Identify the anatomy of the wrist and hand including: Bones (Ulna, Radius, Scaphoid (anatomical snuffbox), Trapezium, Lunate, Hamate (hook of the hamate), Pisiform, Metacarpals1-5, Proximal, middle, and distal phalanges of the fingers and thumb); Soft tissues (Extensor digitorum Tendon, Ulnar Collateral Ligament, Anterior & Posterior Collateral ligaments, Volar plate, Extensor carpi radialis longus, Extensor carpi brevis, extensor digitorum extensor carpi ulnaris, flexor carpi radialis, palmaris longus, Flexor carpi ulnaris. |  |
| 10.2 | Identify the mechanism of injury. |  |
| 10.3 | Identify the signs and symptoms of the injury including Wrist injuries (Scaphoid Fracture, Hamate Fracture, Wrist Sprains); Finger injuries (Mallet Finger, Jersey Finger, Gamekeepers Thumb/Sprain, Sprains of the interphalangeal joints of the finger, PIP Dorsal and palmer Dislocation, MCP Dislocation, Metacarpal Fracture, Distal, Middle and Proximal Phalangeal Fracture, Subluxation/Dislocations, Nerve Impingement). |  |
| 10.4 | Perform History, Observation, Palpation and Special Tests according to elbow injuries. |  |
| 10.5 | Perform: Valgus/Varus & glide stress tests, ROM/Functional Evaluation, Allen’s Test. |  |
| 10.6 | Indicate appropriate treatment for the injury (Modalities, Taping, Bracing) and rehabilitation for the injury. |  |
| 10.7 | Describe injury prevention strategies. |  |

## Benchmark 11: Recognize common injuries to the foot, ankle and lower leg.

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 11.1 | Identify the anatomy of the foot, ankle and lower leg including Bones (Hallux, Phalanges, 1st metatarsal phalangeal joint, Sesamoid bones, Metatarsal heads, Tarsals, Styloid process (5th metatarsal) Tibia, Medial and lateral Condyle, Tibial Tuberosity, Shaft, Medial Malleolus, Fibula, Head, Neck, Shaft, Lateral Malleolus). |  |
| 11.2 | Identify Ligaments and Arteries (Deltoid, Anterior Talofibular (ATF), Calcaneofibular (CF), Posterior Talofibular (PTF), Anterior Tibiofibular (ATIF), Spring Ligament, Calcaneonavicular, Deltoid ligaments (4), Dorsal Pedal Artery, Posterior Tibial Artery). |  |
| 11.3 | Identify Soft Tissue/Muscles (Plantar fascia, Tibialis Anterior and posterior, Extensor Digitorum longus, Extensor Hallucis longus, Soleus, Gastrocnemius, Achilles Tendon, Flexor Digitorum brevis, Peroneus Brevis, Peroneus Longus). |  |
| 11.4 | Identify the mechanism of injury. |  |
| 11.5 | Identify the signs and symptoms of the injury (Achilles rupture, Sprains, Deltoid/Malleolus Fracture, Pes Planus, Pes Cavus, Strains, plantar fasciitis, Hammertoe/mallet toe/claw toe, turf toe, medial tibial stress syndrome (shin splints). |  |
| 11.6 | Perform History, Observation, Palpation and Special Tests according to the foot, ankle, and lower leg injuries. |  |
| 11.7 | Perform: Anterior Drawer, Talar Tilt, Thompson Squeeze, Tap test, Percussion & Compression tests, Tinel’s sign, Morton’s test. |  |
| 11.8 | Indicate appropriate treatment for the injury (Modalities, Bracing, Taping Techniques) and rehabilitation for the injury. |  |
| 11.9 | Describe injury prevention strategies. |  |

## Benchmark 12: Recognize common injuries to the knee

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 12.1 | Identify the anatomy of the Knee including: Bones (Femur, Tibia, Patella, Fibula, Tibial plateau, Tibial tuberosity, Epicondyle). |  |
| 12.2 | Identify Ligaments (Anterior cruciate ligament (ACL), Posterior cruciate ligament (PCL), Medial collateral ligament (MCL), Lateral collateral ligament (LCL). |  |
| 12.3 | Identify Soft tissue/muscles (Meniscus/Lateral and Medial, Iliotibial band, Biceps femoris, Semitendinosus, Semimembranosus, Gracilis, Sartorius, Gastrocnemius, Popliteal, Plantaris, Vastus medialis, lateralis and intermedius (quadriceps), Rectus femoris, Patellar tendon, Biceps tendon). |  |
| 12.4 | Identify the mechanism of injury. |  |
| 12.5 | Identify the signs and symptoms of the injury (1st degree medial collateral ligament sprain, 2nd degree medial collateral ligament sprain, 3rd degree medial collateral ligament sprain, Lateral Collateral ligament sprain, Anterior cruciate ligament sprain, Posterior cruciate ligament sprain, Meniscal Tears, Knee Plica). |  |
| 12.6 | Perform History, Observation, Palpation and Special Tests according to knee injuries. |  |
| 12.7 | Perform: Valgus and Varus Stress Tests, Anterior cruciate ligament tests, Lachman Drawer Test, Posterior Cruciate Ligament tests, Meniscal Tests, Girth Measurements, Q-Angle. |  |
| 12.8 | Indicate appropriate treatment for the injury (Modalities, Taping Techniques, Bracing) and rehabilitation for the injury. |  |
| 12.9 | Describe injury prevention strategies. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

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