

# Minnesota State University Moorhead

## AT 321: Orthopedic Clinical Assessment

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires either of these prerequisites

EXS 320 - Anatomical Kinesiology

PE 320 - Anatomical Kinesiology

Corequisites: None

MnTC Goals: None

This course is an in-depth study of orthopedic clinical assessment techniques involving the musculoskeletal and neurovascular structures. Content includes the application of theoretical concepts with practical experience in assessment.

**B. COURSE EFFECTIVE DATES:** 02/02/2020 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

**D. LEARNING OUTCOMES (General)**

1. Students will define cerebral concussion, list the signs and symptoms of concussions, identify the methods for determining the neurocognitive status of a patient who sustains a concussion and describe contemporary concepts for the management and return to participation of a patient who sustains a concussion.
2. Students will describe and know when to refer common congenital or acquired abnormalities, physical disabilities, and diseases affecting people who engage in physical activity throughout their life span.
3. Students will describe and know when to refer common ear pathologies from trauma.
4. Students will describe and know when to refer common injuries of the teeth.
5. Students will describe common techniques and procedures for evaluating common injuries.
6. Students will describe common techniques and procedures for evaluating common medical conditions and disabilities.
7. Students will describe components of medical documentation.
8. Students will describe the etiology, pathogenesis, pathomechanics, signs, symptoms, and epidemiology of common orthopedic injuries, illnesses and diseases to the body's systems.
9. Students will describe the nature of diagnostic tests of the neurological function of nerves.
10. Students will describe the principles and concepts of body movement.
11. Students will describe the use of diagnostic tests and imaging techniques based on their applicability in the assessment of an injury when prescribed by a physician.
12. Students will describe pathological signs of acute/traumatic injury and illness.
13. Students will explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals.
14. Students will explain the relationship of injury assessment to the systematic observation of the person as a whole.
15. Students will explain the roles of special tests and postural exam in injury assessment.
16. Students will identify the signs and symptoms of trauma to the cervical, thoracic and lumbar spines, spinal cord, spinal nerve roots, including neurological signs, referred symptoms, and other symptoms that indicate underlying trauma and pathology.
17. Students will understand the effects of common illnesses and diseases in physical activity.
18. Students will select, apply, evaluate, and modify appropriate standard protective equipment and other custom devices for the patient in order to prevent and/or minimize the risk of injury to the head, torso, spine, and extremities for safe participation on sport and/or physical activity. Effective lines of communication shall be established to elicit and convey information about the patients situation and the importance of protective devices to prevent and/or minimize injury.
19. Students will demonstrate the ability to develop, implement, and communicate effective policies and procedures to allow safe and efficient physical activity in a variety of environmental conditions.
20. Students will demonstrate the ability to manage acute injuries and illnesses.
21. Students will demonstrate a musculoskeletal assessment of upper extremity, lower extremity, head/face, and spine (including the ribs) for the purpose of identifying (a) common acquired or congenital risk factor that would predispose the patient to injury and (b) a musculoskeletal injury.
22. Students will describe the signs, symptoms, and pathology of acute inflammation.
23. Students will explain the importance of monitoring a patient following a head injury.
24. Students will identify the normal ranges for vital signs.
25. Students will identify the signs and symptoms of head trauma.
26. Students will know and be able to use appropriately standard nomenclature of injuries and illnesses.
27. Students will assess neurological status.
28. Students will describe and identify postural deformities.

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted