

Clinical Rotation in Athletic Training

Spring KIN 227b

Monday 7:00 – 8:50 pm

Jenison Field House Room 209

Instructor: Mike Schroeder, ATC
Email: Schro177@msu.edu
Phone: 353-6379

Brian Bratta, MS, ATC, CSCS
Email: brattabr@ath.msu.edu
Phone: 355-1627

Text: *General Medical Conditions in the Athlete*. Micki Cuppett and Katie M. Walsh. Elsevier Mosby, 2005

Course Description

Entry knowledge and skills used to manage and rehabilitate orthopedic injuries at the collegiate level

Course Overview:

A student will gain the knowledge and skills used to manage, evaluate orthopedic injuries and general medical conditions in various clinical settings including colleges, high schools and/or rehabilitation clinics.

A student will meet during the scheduled class time for instruction and guided practice of the new skills and knowledge. Students will also be required to meet during specified clinical hours where the introduced clinical proficiencies can be applied. The clinical time is in conjunction with the open athletic training services so students can begin to apply skills and knowledge with direct supervision and guidance from the Approved Clinical Instructors (ACI). The course is essential as the second KIN 227 Clinical Rotation course for those students accepted in the Athletic Training Education Program.

Course Objectives:

- A. To develop knowledge regarding special topics related to athletic training through research and practice
- B. To develop and reinforce positive attitudes in the NATA Domains and Competencies and the Clinical Proficiencies
- C. To prepare students for the NATABOC examination.

Attendance:

Students are required to attend classes. A student must make the instructors aware of any excused absence a minimum of one week prior to the absence. Any unexcused absence will result in an automatic 5 point deduction.

Grading:

Clinical Component: You are assigned to an ACI and clinical rotation each semester. It is a student's responsibility to communicate with their ACI and understand what is expected. A student must fulfill the expectations at a satisfactory level to remain in good standing in the Athletic Training Education Program (ATEP.) You will be evaluated at mid semester and end of semester to allow you time to modify behavior/skills if necessary. A student that does not meet expectations will be placed on probation until the next evaluation period then removed from probation if behavior/skills improved or suspended if behavior/skills were not corrected.

Research Papers: You will choose two general medical conditions and research their etiology. Each condition will be a separate paper taking a look at every aspect of the condition. This can include, but is not limited to, signs, symptoms, treatments and any future side effects. The first paper is due February 4, 2008 by midnight. The second paper is due March 10, 2008 by midnight.

Each paper will be no less than 3 pages in length (double spaced, 12 font) and will need a minimum of 3 scientific sources cited properly. The works cited page is not included in the 3 page requirement.

Athletic Training Journal: You will be responsible for recording a log of his or her experiences in the athletic training room. This includes hours worked, injuries, without athlete names, and any thoughts, feelings, or ideas the student may want to express without consequence of being reprimanded.

Special Consideration:

Since this is the last class prior to becoming accepted into the Athletic Training Major, applications and interviews will be conducted during the month of February and final acceptance will be the first of March. That being said, there is a special consideration for those that are not accepted into the program. If you enter into the program, you will proceed as the syllabus states. However if you are not accepted into the program, you will not be required to attend the remaining classes of KIN 227. This will not affect your grade as you will receive your total points earned for the first part of the class and your total will be half of the final points available.

Point Breakdown:

Participation (including responsibility of completing evaluations with ACI): 60

Research Papers: 50 (two 25 point assignments)

Athletic Training Journal: 140 (14 entries X 10 points an entry)

Clinical Evaluation: 350 (score from the end of semester evaluation X 10)

Total Points Available: 600

Grading Scale:

92-100	4.0	(600-552)
85-91	3.5	(551-510)
78-84	3.0	(509-468)
71-77	2.5	(467-426)
64-70	2.0	(425-384)
57-63	1.5	(383-342)
50-56	1.0	(341-300)
Below 50	0.00	(<300)

Weekly Schedule:

DATE	TOPIC	Assignment Due
1-7-08	Syllabi Review/Emergency Procedures	Ch. 1 & 2
1-14-08	Dermatological conditions	Ch. 3
1-21-08	Martin Luther King Holiday (No Class)	
1-28-08	Basic Principles of Drugs (Suzanne Bonjour)	
2-4-08 Paper 1 due	Eye (Dr. Ken Martin)	Ch. 9
2-11-08	Endocrine and Metabolic Systems (Nosh Amaria ATC)	Ch. 13
2-18-08	Gastrointestinal and Hepatic Biliary Systems (Dr. Bob Norris)	Ch. 6
2-25-08	Neurological System (Dr. Brewer)	
3-3-08	Spring Break (No Class)	
3-10-08 Paper 2 due	Renal and Urogenital System (Dr. Lyon)	Ch. 7
3-17-08	Cardiovascular and Hematological Systems (Dr. Biggs)	Ch. 5
3-24-08	Open date	Ch. 8
3-31-08	Psychological Conditions (Dr. Lonnie Rosen)	Ch. 15
4-7-08	Pulmonary System / Lab	Ch. 4
4-14-08	Ear	Ch. 10
4-21-08	No class (athletic training journals due)	

(Schedule may change slightly due to speaker availability)

CAATE Competencies covered in this class:

AC-C2 Describe the availability, content, purpose, and maintenance of contemporary first aid and emergency care equipment.

AC-C3 Determine what emergency care supplies and equipment are necessary for circumstances in which the athletic trainer is the responsible first responder.

AC-C14 Identify the signs and symptoms associated with internal hemorrhaging.

AC-C25 Describe the effective management, positioning, and immobilization of a patient with a suspected spinal cord injury.

AC-P4g Thoracic, respiratory, and internal abdominal injury or illness

- PH-C1 Explain the laws, regulations, and procedures that govern storing, transporting, dispensing, and recording prescription and nonprescription medications (Controlled Substance Act, scheduled drug classification, and state statutes).
- PH-C2 Identify appropriate pharmaceutical terminology and abbreviations used in the prescription, administration, and dispensing of medications.
- PH-C3 Identify information about the indications, contraindications, precautions, and adverse reactions for common prescription and nonprescription medications (including herbal medications) using current pharmacy resources.
- PH-C4 Explain the concepts of pharmacokinetics (absorption, distribution, metabolism, and elimination) and the suspected influence that exercise might have on these processes.
- PH-C5 Explain the concepts related to bioavailability, half-life, and bioequivalence.
- PH-C6 Explain the general pharmaco-dynamic principles as they relate to the mechanism of drug action and therapeutic effectiveness (e.g. receptor theory, dose-response relationship, potency, and drug interactions).
- PH-C7 Describe the common routes used to administer medications (e.g., oral, inhalation, and injection) and their advantages and disadvantages.
- PH-C8 Explain the relationship between generic or brand name pharmaceuticals.
- PH-C9 Identify medications that might cause possible poisoning, and describe how to activate and follow the locally established poison control protocols.
- PH-C10 Explain the known usage patterns, general effects, and short- and long-term adverse effects for the commonly used performance-enhancing substances.
- PH-C11 Identify which therapeutic drugs and nontherapeutic substances are banned by sport and/or workplace organizations in order to properly advise patients about possible disqualification and other consequences.
- PH-P1 Obtain and communicate patient education materials regarding physician-prescribed medications, over-the-counter drugs, and performance-enhancing substances using appropriate references.
- PH-P2 Abide by federal, state, and local regulations for the proper storage, transportation, dispensing (administering where appropriate), and documentation of commonly used medications.
- PS-CP1 Demonstrate the ability to conduct an intervention and make the appropriate referral of an individual with a suspected substance abuse or other mental health problem. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the intervention and referral should be documented using standardized record-keeping methods.
- PS-CP2 Demonstrate the ability to select and integrate appropriate motivational techniques into a patient's treatment or rehabilitation program. This includes, but is not limited to, verbal motivation, visualization, imagery, and/or desensitization. Effective lines of communication should be established to elicit and convey information about the techniques. While maintaining patient confidentiality, all aspects of the program should be documented using standardized record-keeping techniques.

NU-C14 Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).

NU-CP1 Demonstrate the ability to counsel a patient in proper nutrition. This may include providing basic nutritional information and/or an exercise and nutrition program for weight gain or weight loss. The student will demonstrate the ability to take measurements and figure calculations for a weight control plan (e.g., measurement of body composition and BMI, calculation of energy expenditure, caloric intake, and BMR). Armed with basic nutritional data, the student will demonstrate the ability to develop and implement a preparticipation meal and an appropriate exercise and nutritional plan for an active individual. The student will develop an active listening relationship to effectively communicate with the patient and, as appropriate, refer the patient to other medical professionals (physician, nutritionist, counselor or psychologist) as needed.

NU-CP2 Demonstrate the ability to recognize disordered eating and eating disorders, establish a professional helping relationship with the patient, interact through support and education, and encourage vocal discussion and other support through referral to the appropriate medical professionals.

RM-C2 Identify and explain the risk factors associated with common congenital and acquired abnormalities, disabilities, and diseases.

RM-C15 Describe the components for self-identification of the warning signs of cancer.

MC-C3 Describe common techniques and procedures for evaluating common medical conditions and disabilities including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques (e.g., assessing heart, lung and bowel sounds), and neurological and circulatory tests.

MC-C4 Describe and know when to refer common eye pathologies from trauma and/or localized infection (e.g., conjunctivitis, hyphema, corneal injury, sty, scleral trauma).

MC-C5 Describe and know when refer common ear pathologies from trauma and/or localized infection (e.g., otitis, ruptured tympanic membrane, impacted cerumen).

MC-C6 Describe and know when to refer common pathologies of the mouth, sinus, oropharynx, and nasopharynx from trauma and/or localized infection (e.g., gingivitis, sinusitis, laryngitis, tonsillitis, pharyngitis).

MC-C7 Describe and know when to refer common and significant respiratory infections, thoracic trauma, and lung disorders. (e.g., influenza, pneumonia, bronchitis, rhinitis, sinusitis, upper-respiratory infection (URI), pneumothorax, hemothorax, pneumomediastinum, exercise-induced bronchospasm, exercise-induced anaphylaxis, asthma).

MC-C9 Describe strategies for reducing the frequency and severity of asthma attacks.

MC-C11 Describe and know when to refer common cardiovascular and hematological medical conditions from trauma, deformity, acquired disease, conduction disorder, and drug abuse (e.g., coronary artery disease, hypertrophic cardiomyopathy, heart murmur, mitral valve prolapse, commotion cordis, Marfan's syndrome, peripheral embolism, hypertension, arrhythmogenic right ventricular dysplasia, Wolf-Parkinson-White syndrome, anemias, sickle cell anemia and sickle cell trait [including rhabdomyolysis], hemophilia, deep vein thrombosis, migraine headache, syncope).

MC-C12 Describe and know when to refer common medical conditions that affect the gastrointestinal and hepatic-biliary systems from trauma, chemical and drug irritation, local and systemic infections, psychological

stress, and anatomic defects (e.g., hepatitis, pancreatitis, dyspepsia, gastro-esophageal reflux, peptic ulcer, gastritis and gastroenteritis, inflammatory bowel disease, irritable bowel syndrome, appendicitis, sports hernia, hemorrhoids, splenomegaly, liver trauma).

MC-C13 Describe and know when to refer common medical conditions of the endocrine and metabolic systems from acquired disease and acute and chronic nutritional disorders (e.g., diabetes mellitus and insipidus, hypothyroidism, Cushing's syndrome, thermoregulatory disorders, gout, osteoporosis).

MC-C14 Describe and know when to refer common medical conditions of the renal and urogenital systems from trauma, local infection, congenital and acquired disease, nutritional imbalance, and hormone disorder (e.g., kidney stones, genital trauma, gynecomastia, monorchidism, scrotum and testicular trauma, ovarian and testicular cancer, breast cancer, testicular torsion, varicoceles, endometriosis, pregnancy and ectopic pregnancy, female athlete triad, primary amenorrhea, oligomenorrhea, dysmenorrhea, kidney laceration or contusion, cryptorchidism).

MC-C15 Describe and know when to refer common and/or contagious skin lesions from trauma, infection, stress, drug reaction, and immune responses (e.g., wounds, bacteria lesions, fungal lesions, viral lesions, bites, acne, eczema dermatitis, ringworm).

MC-C18 Describe and know when to refer common psychological medical disorders from drug toxicity, physical and emotional stress, and acquired disorders (e.g., substance abuse, eating disorders/disordered eating, depression, bipolar disorder, seasonal affective disorder, anxiety disorders, somatoform disorders, personality disorders, abusive disorders, and addiction).

MC-C20 Describe and know when to refer common cancers (e.g., testicular, breast).

MC-P4 Apply commonly used special tests and instruments (e.g., otoscope, stethoscope, ophthalmoscope, peak flowmeter, chemical "dipsticks" [or similar devices]) and document the results for the assessment of:

MC-P4b Heart, lung, and bowel sounds

MC-P4c Pupil response, size and shape, and ocular motor function

MC-P4d Body temperature

MC-P4e Ear, nose, throat and teeth

MC-P4f Urinalysis

MC-CP1 Demonstrate a general and specific (e.g., head, torso and abdomen) assessment for the purpose of (a) screening and referral of common medical conditions, (b) treating those conditions as appropriate, and (c) when appropriate, determining a patient's readiness for physical activity. Effective lines of communication should be established to elicit and convey information about the patient's status and the treatment program. While maintaining confidentiality, all aspects of the assessment, treatment, and determination for activity should be documented using standardized record-keeping methods.

MC-CP1.1 Derma

MC-CP1.4 Thorax, including the heart and lungs

MC-CP1.5 Abdomen, including the abdominal organs, the renal and urogenital systems

MC-CP1.7 Ear, Nose, and Throat