

Orthopedic Evaluation of Athletic Injuries I
ATEP 305
Fall 2003

Professor:	Michael J. Pringle M.S., ATC	Meets:	Tuesday / Thursday
Office:		Time:	9:30-10:45am
Office Phone:		Where:	
Clinic Phone:		Credit:	Three
E-mail:			
Office Hours:	M 1:00 – 3:00, TU 1:00 – 2:00, W 1:00 – 2:00, TH 1:00-2:00, F by appointment		

Text

Hoppenfeld S. *Physical Examination of the Spine and Extremities*. Norwalk, CT: Appleton and Lange; 1976.

Konin JG, Wiksten DL, Isear JA. *Special Tests for Orthopedic Examination*. Thorofare, NJ: Slack, Inc.; 1997.

Pringle M, Evans T. *Clinical Proficiencies and Psychomotor Skill Competencies, Volume V*.

Shultz SJ, Houghlum PA, Perrin DH. *Assessment of Athletic Injuries*. Champaign, IL: Human Kinetics; 2000.

Recommended Text

Bucher R. *Diversity Consciousness*. Upper Saddle River, NJ: Prentice Hall; 2000.

Course Description

The student will learn evaluation techniques including: manual muscle testing, soft tissue palpation, bone palpation, special joint integrity testing techniques for the lower quarter, and gait analysis. The student will be presented with practical situations in which critical thinking must be applied along with the application of special testing techniques. In addition to acquiring the skills necessary for evaluating orthopedic injuries, the student will be introduced to and come to an understanding of multicultural and diversity issues in their relationship to patient interaction, and how these issues effect medical treatment to various patients.

Grading

A	93-100%
B+	88-92%
B	83-87%
C+	78-82%
C	73-77%
D	65-72%
F	Below 65%

Oral Presentation_____	25%
Class Participation_____	5%
Class Assignments_____	10%
Written Examinations_____	60%
	100%

Psychomotor Skill Competencies

A list of clinical proficiencies and psychomotor competencies can be found within the required text, *Clinical Proficiencies and Psychomotor Skill Competencies, Volume V*. Each competency must be checked and initialed by a student in the Professional Phase of the Athletic Training Education Program. A King's College Approved Clinical Instructor must complete a second evaluation along with a grade of 1-5. You must earn a minimum grade of a 3 on an individual competency in order to perform that proficiency/competency. A minimum grade of 3 must be achieved in all competencies in order to pass the class. In addition, the *Clinical Proficiencies and Psychomotor Skill Competencies, Volume V* textbook must accompany the student to the Scandlon Sports Medicine Clinic during any clinical assignment. Failure to bring the textbook to the clinical assignment will necessitate removal from the assignment for retrieval of the textbook. This policy is not in effect for the Betzler Fields Athletic Training Room; however, the student is encouraged to bring the textbook to these clinical assignments as well. The completed psychomotor skill competencies list must be handed in during class on December 5th, 2002. Failure to hand in the completed list by this day will result in a grade of "F" for the class. The psychomotor skill competencies are part of your "class assignments" grade, which is worth 10% of your final grade.

Written Examinations

There will be three written examinations. The dates for each examination are specified in the class calendar found at the end of this syllabus. Class lectures and discussions will be included on the examinations. The final examination will given during the college's examination week. **All** examinations will be cumulative consisting of material from all previous Orthopedic Evaluation of Athletic Injuries I information and prior Athletic Training Classes. The Professor reserves the right to announce quizzes not found on the course calendar during the semester. Examinations are worth 60% of your final grade.

Class Assignments

There will be class assignments throughout the semester. All assignments will be collected at the beginning of class or presented in class. The class assignments are worth 10% of your final grade.

Journal

Each student will keep a personal journal. The contents of the journal will only be viewed by the instructor and student. The content of the journal will address cultural and diversity issues. The student will make journal entries according to what they have observed through personal experience, through the media, or by observation. The journal entry must relate to difference in medical treatment based on age, race, ethnic membership, religious preference, physical condition, disability, sexual preference, gender, social status or socio-economic background. There must be a minimum of one journal entry per week.

Confidentiality Position Paper

Is it possible for patient confidentiality to be kept in our current health care system? Is it ever ethical to break patient confidentiality? Explain your position to these questions in a short paper.

Lie: To Protect the Innocent and Fight Evil

Is it ever moral to lie to a patient about their medical condition or lie so a patient can receive medical treatment? Is it moral to render medical treatment and not charge the patient, thus having the medical facility absorb the cost? Explain your position to these questions in a short paper.

Oral Presentation - Junior Diagnostic Project

Each student must prepare an oral presentation on a topic pertaining to this class. The presentation should be 30 minutes in length. You should include in your presentation a combination of audio aids, visual aids, handouts, or anything else that you find helpful in having the class understand the subject matter. Be prepared to answer questions about your topic. Dress for success. All topics must be approved by the Professor. Presentation topics are due October 10th, with presentations taking place November 14th and 19th. You score a minimum grade of a "C" on the oral presentation. The Therapeutic Modalities topic may serve as the same theme for this presentation. The oral presentation is worth 25% of your final grade.

Class Participation

You are expected to participate in all class discussions in a positive manner. Non-participation in class activities will be counted as an absence. There will be ample opportunities to participate, such as: class discussions, class activities, and lab discussions/activities. Class participation is worth 10% of your final grade.

Class Attendance

You are expected to attend all scheduled classes. You are permitted two absences per semester, after that each absence will lower your grade one full grade. Being tardy for class two times will equal one absence.

Special Note

Students are expected to take examinations and hand in assignments on the established dates. If you are not present on the day of the examination, or do not hand in an assignment on time, you will receive a zero for the test or assignment. Make-up examinations will only be given in cases of emergency or extenuating circumstances. Extenuating circumstances or special consideration must be arranged for in advance with the Professor. These situations will be handled on a case-by-case basis. Illness must be verified in writing by a physician, and does not necessitate an acceptance by the Professor. The course calendar is provided for you as a courtesy by the Professor. Changes in the course calendar may occur during the semester.

Specifics

This class is trying to simulate a genuine clinical situation. Therefore, in laboratory situations, we need to have the patient (your class partner) assume the patient's role. To properly assume this role, the patient must wear proper attire. Proper attire for females is a one or two piece swimsuit. Males will be clothed in a brief type swimsuit only. All procedures will be carried out in the individual booths when possible.

Cooperation

Cooperation is permitted on class assignments. Cooperation consists of group discussion of the topics involved within the class or text material. The transfer of answers to or from any individual constitutes plagiarism. Answers are to be formulated on your own. All work that is handed in must be of your own completion. Any time two or more assignments contain identical answers, this constitutes plagiarism. Plagiarism will not be tolerated on any class assignment. Upon receiving the completed class assignments, it will be up to the Professor's discretion whether plagiarism or cooperation was involved. Any form of plagiarism will lead to a minimum penalty of a zero on the assignment and possible referral to the Associate Vice President for Student Affairs at King's College for all individuals involved.

**King's College
Athletic Training Education Program**

Research Paper Evaluation Criteria

CONTENT (40%)

- researched thoroughly
- proper analysis of data
- concepts and terminology used accurately and appropriately
- proper focus
- demonstrates insight
- quotations and cited material well-chosen
- properly defends assertions and opinions
- appropriate use of tables, figures, charts

ORGANIZATION (20%)

- logical progression
- clear and concise
- sections clearly and properly identified
- information grouped logically

SOURCES AND DOCUMENTATION (20%)

- referenced material highlighted
- proper citations
- proper bibliography format
- articles from appropriate sources

WRITING MECHANICS (10%)

- proper spelling
- proper grammar and syntax

WRITING STYLE (10%)

- appropriate level
- consistent
- interesting and readable
- carefully edited

LATE PENALTY (minus ½ letter grade per school day)

- paper not properly proofread
- paper guidelines not properly followed

King's College
Athletic Training Education Program

Junior Diagnostic Project

The Department of Sports Medicine has designated SMED 305 – Orthopedic Evaluation of Athletic Injuries I as the focus of the Junior Diagnostic Project for Athletic Training Education majors. This project will assess each student's knowledge and mastery of a variety of academic skills and will determine each student's ability to integrate learning across the King's College curriculum. The student will give an oral presentation, as described in the syllabus for SMED 305 – Orthopedic Evaluation of Athletic Injuries I. The student must receive a minimum grade of "C" for the oral presentation to remain an Athletic Training Education major.

Topic Selection

Each student is required to choose a topic that pertains to the class (SMED 305 – Orthopedic Evaluation of Athletic Injuries I) and which will be thoroughly examined and discussed. The topic should be of interest to the student. The student may refer to a list of topics that will be provided by the professor. The student will discuss the chosen topic with the professor before beginning the research process.

Assessment Objectives

A junior in the King's College Athletic Training Education Program must be able to meet the following objectives:

1. The student will have a thorough and comprehensive knowledge of what has been taught in all classes so far, including the ability to synthesize the material learned in all Sports Medicine/Athletic Training classes, and the ability to use this body of knowledge to research, assess, and solve problems.
2. The student will be able to clearly communicate this information using multiple techniques, including oral presentation, to a variety of audiences.
3. The student will be able to apply the methodology of data collection and data analysis to the solving of problems in Sports Medicine/Athletic Training.
4. The student will be able to articulate the various ethical and moral issues in Sports Medicine/Athletic Training and will be able to support their personal and professional viewpoints with a clear, sound, and logical defense.

Project Evaluation

See the attached Oral Presentation Evaluation Form.

**Athletic Training Education Program
Oral Presentation Evaluation Form**

Presenter _____

Please consider each of the categories and indicate with a number what you consider the most appropriate evaluation. 1 – unsatisfactory, 2 – below average, 3 – average, 4 – good, 5 – excellent, 0 – not observed. At the end of the evaluation sheet is a section where you can indicate further comments. Please be constructive with your comments. All evaluations will be summarized and discussed with the presenter. All comments will remain anonymous to the presenter.

Information

- 1. Showed thorough knowledge and understanding of the topic _____
- 2. Provided new insights on the topic _____
- 3. Used current and credible references _____
- 4. Organized the sequence of presenting material in a clear and logical manner _____

Multimedia

- 5. Demonstrated skill in the use and/or development of appropriate multimedia aids and methods that were supportive of the presentation _____
- 6. Quality of multimedia aids and methods used in presentation _____

Delivery

- 7. Maintained eye contact with audience _____
- 8. Spoke clearly and was adequately heard _____
- 9. Answered questions adequately, clearly, and concisely _____
- 10. Professionally attired _____
- 11. Adequate speaking skills demonstrated _____
- 12. Adequate medical terminology demonstrated _____
- 13. Professional mannerisms demonstrated while presenting _____
- 14. Speaker adequately prepared for the presentation _____

15. _____ minute requirement for presentation met _____ Yes No
(Presentation Time)

Your presentation grade will be deducted a letter grade for every minute the presentation is short of the required time. Your presentation grade will also be deducted a letter grade for every two minutes the presentation exceeds the required time. Example: Letter grade A for a 30 minute presentation that is given in 28:30 minutes will be lowered to a B+. Letter grade A for a 30 minute presentation that is given in 33:00 minutes will be lowered to a B+.

Total Points _____

Comments:

Evaluator: _____
(Print Name)

FALL 2003: T / TH Course Calendar

August	27	Tuesday	Lecture Chapter 1 Classification of Injuries - Shultz
	29	Thursday	Lecture Chapter 1 Classification of Injuries – Shultz
			<i>Diversity Discussion</i> <i>“A Village of 100”</i> <i>Read Chapter 1 Bucher</i> <i>“Diversity: An Overview”</i>
			Convocation Mass at 10:30am. The Department will meet at 10:15am on the first floor of Hafey-Marian Hall and walk over to the Mass in Scandlon together.
September	03	Tuesday	Lecture Chapter 2 Principles of Assessment - Shultz
	05	Thursday	Lecture Chapter 2 Principles of Assessment - Shultz
			<i>Diversity Discussion</i> <i>Chapter 1 Bucher</i> <i>Assignment: Ageism</i> <i>www.nh.org.au/Research</i>
	10	Tuesday	Lecture Chapter 8 Leg, Ankle, and Foot - Shultz Lecture Chapter 12 Ankle & Foot – Konin Lecture Chapter 8 Physical Examination of the Foot & Ankle - Hoppenfeld
	12	Thursday	Lecture Chapter 8 Leg, Ankle, and Foot - Shultz Lecture Chapter 12 Ankle & Foot – Konin Lecture Chapter 8 Physical Examination of the Foot & Ankle – Hoppenfeld

***Diversity Discussion
Ageism in Health Care
Assignment: Race
Reasonvsracism.com
Chapter 2 Bucher
“Diversity Skills and Success”***

- 17 Tuesday Lecture Chapter 8
Leg, Ankle, and Foot - Shultz
Lecture Chapter 12
Ankle & Foot – Konin
Lecture Chapter 8
Physical Examination of the Foot & Ankle - Hoppenfeld
- 19 Thursday Lecture Chapter 8
Leg, Ankle, and Foot - Shultz
Lecture Chapter 12
Ankle & Foot – Konin
Lecture Chapter 8
Physical Examination of the Foot & Ankle – Hoppenfeld

***Diversity Discussion
Racism in Patient Treatment
Assignment: Ethnicity
www.korea.ac.kr/~yoonin/worldrace/ethnicity.htm
Chapter 3 Bucher
“Personal and Social Barriers to Success”***

- 24 Tuesday Lab – Leg, Ankle, and Foot
- 26 Thursday *Written Examination #1
Chapters 1, 2 & 8
Chapter 12 (Konin)
Chapter 8 (Hoppenfeld)
Class Lecture & Discussion*

***Diversity Assignment Due
Personal Journal***

- October 01 Tuesday Lecture Chapter 9
Knee & Thigh - Shultz
Lecture Chapter 11
The Knee – Konin
Lecture Chapter 7
Physical Examination of the Knee - Hoppenfeld

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|----|----------|---|
| 03 | Thursday | <p>Lecture Chapter 9
Knee & Thigh - Shultz
Lecture Chapter 11
The Knee – Konin
Lecture Chapter 7
Physical Examination of the Knee - Hoppenfeld</p> <p><i>Diversity Discussion</i>
<i>Ethnicity</i>
<i>Assignment</i>
<i>Religious Preference</i>
www.tolerance.org/
<i>Chapter 4 Bucher</i>
<i>“Developing Diversity Consciousness”</i></p> |
| 08 | Tuesday | <p>Lecture Chapter 9
Knee & Thigh - Shultz
Lecture Chapter 11
The Knee – Konin
Lecture Chapter 7
Physical Examination of the Knee - Hoppenfeld</p> |
| 10 | Thursday | <p>Lab – Knee & Thigh
Oral Presentation Topic Due</p> <p><i>Diversity Discussion</i>
<i>Religion and Developing Diversity Consciousness</i>
<i>Assignment</i>
<i>Confidentiality Paper</i></p> |
| 15 | Tuesday | <p>Lecture Chapter 10
Hip, Pelvis, and Groin - Shultz
Lecture Chapter 10
The Hip – Konin
Lecture Chapter 6
Physical Examination of the Hip and Pelvis - Hoppenfeld</p> |

	17	Thursday	<p>Lecture Chapter 10 Hip, Pelvis, and Groin - Shultz Lecture Chapter 10 The Hip – Konin Lecture Chapter 6 Physical Examination of the Hip and Pelvis - Hoppenfeld</p> <p><i>Diversity Discussion</i> <i>Patient Confidentiality</i> <i>Assignment</i> <i>Chapter 5 Bucher</i> <i>“Communicating in a Diverse World”</i> <i>Socioeconomic Status</i> <i>www.apa.org/pi/urban/povres.html</i></p>
	22	Tuesday	<p>Lecture Chapter 10 Hip, Pelvis, and Groin - Shultz Lecture Chapter 10 The Hip – Konin Lecture Chapter 6 Physical Examination of the Hip and Pelvis - Hoppenfeld</p>
	24	Thursday	<p>Lab – Hip, Pelvis, and Groin</p> <p><i>Diversity Discussion</i> <i>Socioeconomic Status and the Impact on Health Care</i> <i>Assignment</i> <i>Chapter 6 Bucher</i> <i>“Teamwork”</i> <i>Paper “Lie: To Protect the Innocent & Fight Evil”</i></p>
	29	Tuesday	<p>Lab – Hip, Pelvis, and Groin</p>
	31	Thursday	<p><i>Written Examination #2</i> <i>Chapters 9 & 10</i> <i>Chapters 10 & 11 (Konin)</i> <i>Chapters 6 & 7 (Hoppenfeld)</i> <i>Class Lecture & Discussion</i></p> <p><i>Diversity Assignment Due</i> <i>Personal Journal</i></p>
November	05	Tuesday	<p>Lecture Chapter 12 Thorax and Abdomen - Shultz</p>

	07	Thursday	Lecture Chapter 12 Thorax and Abdomen - Shultz
			<i>Diversity Discussion</i> <i>Paper "Lie: To Protect the Innocent & Fight Evil"</i> <i>Assignment</i> <i>Chapter 7 Bucher</i> <i>"Conclusion"</i>
	12	Tuesday	Lab – Thorax and Abdomen
	14	Thursday	Oral Presentations
	19	Tuesday	Oral Presentations
	21	Thursday	Lecture Chapter 13 Recognition and Referral of General Medical Conditions - Shultz
			<i>Diversity Discussion</i> <i>Final Thoughts on Bucher</i> <i>Personal Journal Due</i>
	26	Tuesday	Follow Friday Class Schedule
	29	Thursday	No Class. Thanksgiving Break
December	03	Tuesday	Lecture Chapter 13 Recognition and Referral of General Medical Conditions - Shultz
	05	Thursday	Lecture Chapter 13 Recognition and Referral of General Medical Conditions - Shultz

*****Finals*****

Written Examination #3
Chapter 12 & 13
Class Lecture & Discussion

Course Objectives for SMED 305: Orthopedic Evaluation of Athletic Injuries

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The student will be able to:

1. Identify risk factors associated with congenital and acquired postural abnormalities, physical disabilities, and diseases (i.e. epilepsy, diabetes, asthma, congenital heart disease, absence of paired organs, visual impairments, etc.).
2. Identify sports specific environmental risk factors associated with climatic conditions, facilities and equipment, sanitation, etc., and associated risk management procedures/safety guidelines.
3. Identify the role of physical examinations and screening procedures in the identification of intrinsic injury/illness risk factors and potential disqualifying conditions.
4. Identify the purpose of standard physical fitness tests and contemporary testing equipment and accepted testing protocol for measurement of cardiovascular-respiratory fitness, body composition, posture, flexibility, and muscular strength, power, and endurance.
5. Identify the common etiological factors contributing to injury including congenital and/or acquired structural and functional abnormalities, inherent anatomical biomechanical characteristics, common injury mechanisms, and adverse environmental conditions.
6. Identify relationships between etiological factors and resulting injury/illness pathologies.
7. Identify typical symptoms and common clinical signs associated with athletic injuries/illnesses including those associated with local tissue inflammation (cellulitis) and systemic infection (lymphangitis, lymphadenitis, bacteremia).
8. Identify relationships between typical symptoms and clinical signs and injury/illness pathologies.
9. Identify commonly accepted techniques and procedures for clinical evaluation of common athletic injuries/illnesses including (a) history, (b) inspection, (c) palpation, (d) functional testing (range-of-motion testing, ligamentous/capsular stress testing, manual muscle testing, sensory and motor neurological testing, etc.), and (e) special evaluation techniques.
10. Construct and phrase questions appropriate to obtaining a medical history of an injured/ill athlete including a past history and a history of the present injury/illness.
11. Identify observable clinical signs typically associated with common athletic injuries/illnesses including structural deformities, edema, discoloration, etc.

12. Locate and palpate "key" anatomical structures commonly involved in injury pathology including bony landmarks, ligamentous/capsular tissues, musculotendinous structures, abdominal regions, etc.
13. Administer active and passive range-of-motion tests for all major joints of the body including the use of goniometric measurements.
14. Use manual muscle testing techniques including application of the principles of muscle/muscle group isolation, segmental stabilization, resistance/pressure, grading, etc.
15. Administer appropriate clinical laxity (stress) tests for ligamentous/capsular instability including application of the principles of joint positioning, segmental stabilization, pressure, etc.
16. Administer appropriate sensory and motor neurological tests for intracranial injuries (conscious and unconscious athlete) and injuries to the spinal cord, nerve roots, plexuses, and peripheral nerves.
17. Administer commonly used "special tests" for evaluation of athletic injuries to various anatomical areas (Thompson test, apprehension test, etc.).
18. Incorporate of appropriate examination techniques and procedures into an effective systematic scheme of clinical evaluation.
19. Recognize the initial clinical evaluation by the Certified Athletic Trainer as an assessment and screening procedure rather than a "diagnostic" procedure.
20. Appreciate the practical importance of thoroughness in the initial clinical evaluation of the athlete's injury/illness.
21. Accept the injured athlete's physical complaint(s) without personal bias or prejudice.
22. Use standard nomenclature of athletic injuries and communication of identified clinical signs and symptoms to medical personnel using commonly accepted medical terminology.
23. Use physical/physiological as parameters to be evaluated as a basis for development of individualized rehabilitation programs (muscular strength/ endurance, range of-motion, etc.)
24. use contemporary measurement and functional testing equipment (isokinetic devices, goniometers, dynamometers, calipers, etc.)

25. Use theory and principles associated with the use of special evaluation/therapeutic exercise techniques including (a) manual muscle testing, (b) proprioceptive neuromuscular facilitation (PNF), (c) underwater/pool exercises, and (d) joint mobilization.
26. Use of manual muscle testing techniques including application of the principles of muscle/muscle group isolation, segmental stabilization, resistance/pressure, grading, etc.
27. Measure range-of-motion for all major joints of the body through the use of a goniometer and other commonly used techniques.
28. Administer static and dynamic postural evaluation and screening procedures including functional testing for muscle shortening.
29. Use basic components of an effective physical examination including commonly recommended health factors to be evaluated and potential disqualifying conditions.
30. Use tasks required for entry-level proficiency of athletic trainers within the major domains of the NATA Role Delineation Study.
31. Use theoretical concepts, knowledge, and technical skills comprising the subject matter of athletic training (i.e., Competencies in Athletic Training).
32. Have acceptance of the professional, ethical, and legal parameters which define the proper role of the Certified Athletic Trainer as an educator.
33. Assess their own values and increase their understanding of diverse people and groups.
34. Learn to deal with cultural diversity issues in order to maximize interpersonal skills.
35. Have an increased awareness of their own cultural orientation.
36. Be aware of cultural assumptions, stereotyping, and prejudice.
37. Develop an understanding of privilege.
38. Become aware of their own cultural background, attitude, values and personality.
39. Identify different perspectives in relating to persons of different age, race, ethnic membership, religious preference, physical condition, disability, sexual preference, gender, or socio-economic background.
40. Develop skills in working with diverse professionals.
41. Understand different cultural views of medicine.