San José State University  
Department of Kinesiology (CASA)  
KIN 269 Evidence-Based Research in the Practice in Management and Assessment of Injuries to the Upper Extremity Spring, 2016

Course and Contact Information

Instructor: Masaaki Tsuruike, PhD, ATC  
Office Location: Spartan Complex (SPX) 115  
Telephone: (408) 924-3030  
Email: masaaki.tsuruike@sjsu.edu  
Office Hours: Tues Wed: 4:00 – 5:00 pm  
All other times by appointment only.  
Class Days/Time: T: 7:00 pm – 8:50 pm  
Classroom: SPX 153  
Prerequisites: Students must have the background of athletic training education or equivalent to the knowledge

Canvas  
Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on the Canvas learning management system used at SJSU. You are responsible for changing the settings so that e-mail that is sent to your Canvas account is forwarded to your regularly used email account. Announcements will be posted on Canvas and should be checked on a regular basis; students may choose to be alerted via text or email that announcements have been made.

Course Description
The course emphasizes current practices in the orthopedic assessment and care of upper extremity and injuries to competitive athletes. The course will take a multidisciplinary approach with scientific and clinical outcomes. Also, the orthopedic assessment and care of the shoulder, elbow and wrist are discussed.

Department of Kinesiology Graduate Program Learning Outcomes (GPLO)

Upon completion of the Master’s degree program in the Department of Kinesiology, students should be able to:

1. Demonstrate the ability to conduct and critique research using theoretical and applied knowledge.
2. Interpret and apply research findings to a variety of disciplines within Kinesiology.

3. Effectively communicate essential theories, scientific applications, and ethical considerations in each student's Kinesiology program concentration.

4. Interpret and apply research findings through acquired skills in order to become agents of change to address issues in Kinesiology through the application of knowledge and research.

**Graduate Athletic Training Education Program Learning Outcomes (GATEPLO)**

The mission of the Graduate Athletic Training Program is to enhance the mastery of athletic training discipline through a sound theoretical and research base, as well as diversity of thought and experiences. The Graduate Athletic Training Education Program seeks to:

1. Develop critical and independent thinkers

2. Facilitate and promote community interaction/aid in sports medicine

3. Foster scholarly and research activities

4. Develop exemplary athletic training professionals

5. Enhance and augment athletic training skills through evidence based exploration

**Course Learning Outcomes (CLO)**

Upon successful completion of this course, students will be able to:

1. Increase one’s knowledge of functional anatomy, physiology, neurophysiology, biomechanics and injury prevention, assessment and treatment regarding upper extremity.

2. Develop an appreciation of appropriate research publications and current clinical research in the field of athletic training/sports medicine.

3. Gain further appreciation for the multidisciplinary nature of the athletic training/sports medicine profession while understanding the mechanisms of injuries.

4. Apply recognition and assessment skills of shoulder disease, such as frozen shoulder to diverse populations: various age groups, disabled individuals, sport populations, etc.

5. Gain knowledge of the elbow injury in baseball players, known as “Tommy John surgery” and the rehabilitation process.
Required Texts/Readings

Textbook / Readings

Selected readings to be provided by the instructor. All readings are shown in an appendix as well as on the Canvas.

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five (45) hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Each student will be required to:
1. Read the articles selected in each of the topics to discuss proficiency in using numerous psychomotor skills to rehabilitate various anatomical and supportive structures.
2. Actively participate in class discussions, presentations and hands-on exercises.
3. Select an injury and understand its detailed mechanisms of overhead injuries, utilizing supportive literature of sound results and outcomes.
4. Present the aforementioned rehabilitation program for the upper extremity and demonstrate the techniques (exercise, interventions, etc.) to the class.
5. Critically review selected literature.

EVALUATION & GRADING

- Midterm Exam: 30%
- Short Paper (Written Critique): 25%
- Final Exam (comprehensive): 30%
- Surgery Observation Report: 10%
- Dissection Reports: 5%

The course is based on a percentage scale (100%). The breakdown is as follows:

- A: 100 - 93%
- A-: 92.9 - 90%
- B+: 89.9 - 87%
- B: 86.9 - 83%
- B-: 82.9 - 80%
- C+: 79.9 - 77%
- C: 76.9 - 73%
- C-: 72.9 - 70%
- D+: 69.9 - 67%
- D: 66.9 - 63%
- D-: 62.9 - 60%
- F: <60%
**Midterm Exam: 30%**

There will be one midterm exam covering all materials (lectures, labs, discussions, readings, etc.) to date from ALL units discussed during the course of the spring semester. The date and format of the midterm exam are to be determined. (GPLO 1-4) (GATEPLO 1, 3) (CLO 1, 2, 3, 4)

<table>
<thead>
<tr>
<th>Exam</th>
<th>Tentative Date</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>March 16</td>
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**Short Paper (Written Critique) 30%**

This short paper provides an opportunity to develop analytic and critical reading skills. Each student will submit a written critique of the articles below selected by the instructor. The student will also describe how you can apply the content of the article you reviewed for your patient(s).

You will first summarize the assigned article **IN YOUR OWN WORDS**.

Grading will be based on quality of content, identification of understanding of the study and quality of writing (syntax, grammar, and spelling). (GPLO 1, 2) (GATEPLO 3, 5) (CLO 1, 2, 4, 5)

Each paper should be typed, double-spaced, using a 12-point (or easily readable) font and 1” margins. Each paper should not exceed one and a half pages (1 1/2). However, less than 80% are considered too short (less than 1 page)

<table>
<thead>
<tr>
<th>Reading Articles</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>1) Bitter 2007</td>
<td>WED, April 13</td>
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<tr>
<td>2) Jones 2013</td>
<td>WED, April 20</td>
</tr>
<tr>
<td>3) Alberta 2010</td>
<td>WED, April 27</td>
</tr>
<tr>
<td>4) Oyama 2010</td>
<td>WED, May 4</td>
</tr>
<tr>
<td>5) Cools 2007</td>
<td>WED, May 11</td>
</tr>
</tbody>
</table>
Surgery Observation: 10%

You will write a one page surgery observation report. You will be expected to observe a surgery that helps you improve the knowledge of injuries in athletics. You will write about the surgical process, thoughts, and reflection on what you observed and learned and how it all relates to the research.

You may ask the Bay Area Surgery Group Inc. for an opportunity to observe a surgery. Dr. DH Haber, Team Orthopedist of Sports Medicine, SJSU will welcome you to observe his surgery. You may also seek an opportunity of surgery observation at your clinical site. (GPLO 3) (GATEPLO 1, 2, 5) (CLO 1, 4)

Dissection Reports: 5%

You will write a one page reflection on each of the dissections. You have dissection labs with the shoulder and forearm specimens for this class. You will be expected to observe such specimens performed by an orthopedist to improve your professional knowledge and skills. (GPLO 3) (GATEPLO 1, 2, 4) (CLO 1, 4)

Final Exam: 30%

The exam provides the opportunity to demonstrate mastery of course content. Exams may include true-false, multiple choice, matching, and essay questions that require integration and synthesis of knowledge. Excellent responses will demonstrate advanced and in-depth understanding of upper extremity injury especially the elbow, wrist, and hand. Responses should include material from assigned readings and class discussions.

Exams are to be taken on the dates scheduled. Make-up exams are permitted only for illness and emergency (TRULY EXTRAORDINARY CIRCUMSTANCES). The student is responsible for notifying the instructor and making arrangements at the earliest possible time. In most cases, the midterm exam must be completed before the next class meeting. All requests for make-up exams will be evaluated on an individual basis. (GPLO 1-4) (GATEPLO 1, 3) (CLO 1, 2, 3, 5)

Classroom Protocol

- All students in the class must be required to set a silent mode for your cell phone. Students are allowed to use your PC in the class. However, you are not allowed to access any unnecessary internets or emails.
- No food is allowed in the class.
- The class will basically have no break.
University Policies

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU’s policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. See University Policy S90–5 at http://www.sjsu.edu/senate/docs/S90-5.pdf. More detailed information on a variety of related topics is available in the SJSU catalog, at http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

Consent for Recording of Class and Public Sharing of Instructor Material

University Policy S12-7, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor’s permission to record the course and the following items to be included in the syllabus:

- “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”
  - It is suggested that the greensheet include the instructor’s process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
  - In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.
- “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”
Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

SJSU Writing Center

The SJSU Writing Center is located in Clark Hall, Suite 126. All Writing Specialists have gone through a rigorous hiring process, and they are well trained to assist all students at all levels within all disciplines to become better writers. In addition to one-on-one tutoring services, the Writing Center also offers workshops every semester on a variety of writing topics. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the Writing Center website at http://www.sjsu.edu/writingcenter. For additional resources and updated information, follow the Writing Center on Twitter and become a fan of the SJSU Writing Center on Facebook. (Note: You need to have a QR Reader to scan this code.)

SJSU Counseling Services

The SJSU Counseling Services is located on the corner of 7th Street and San Fernando Street, in Room 201, Administration Building. Professional psychologists, social workers, and counselors are available to provide consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit Counseling Services website at http://www.sjsu.edu/counseling.
KIN 269 EBR in the Practice in Management and Assessment of Injuries to the Upper Extremity, Spring 2016

Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2/3</td>
<td>Course Intro; EBR/M; Functional Anatomy Review of the Shoulder</td>
</tr>
<tr>
<td>2</td>
<td>2/10</td>
<td>Rehabilitation of Shoulder Impingement: Primary, Secondary and Internal</td>
</tr>
<tr>
<td>3</td>
<td>2/17</td>
<td>Rehabilitation of Micro-Instability Disabled Throwing Shoulder I</td>
</tr>
<tr>
<td>4</td>
<td>2/24</td>
<td>Rehabilitation of Micro-Instability Disabled Throwing Shoulder II</td>
</tr>
<tr>
<td>5</td>
<td>3/2</td>
<td>Classification and Treatment of Scapular Pathology Evaluations and Assessments of Scapular Dyskinesis</td>
</tr>
<tr>
<td>6</td>
<td>3/9</td>
<td>Rehabilitation of Macro-Instability and Acromioclavicular Joint Injury, Adhesive Capsulitis</td>
</tr>
<tr>
<td>7</td>
<td>3/16</td>
<td><strong>Midterm Exam</strong></td>
</tr>
<tr>
<td>8</td>
<td>3/23</td>
<td>Injuries to Elbow, Tommy John Surgery</td>
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<tr>
<td>9</td>
<td>3/30</td>
<td>Spring Break</td>
</tr>
<tr>
<td>10</td>
<td>4/6</td>
<td>Rehabilitation Following Ulnar Collateral Ligament Reconstruction Injuries to Wrist &amp; Hand</td>
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<tr>
<td>11</td>
<td>4/13</td>
<td>Injuries to Wrist &amp; Hand</td>
</tr>
<tr>
<td>12</td>
<td>4/20</td>
<td>Upper Extremity Cadaveric Dissections (Bay Area Surgical Center)</td>
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<tr>
<td>13</td>
<td>4/27</td>
<td>Upper Extremity Cadaveric Dissections (Bay Area Surgical Center)</td>
</tr>
<tr>
<td>14</td>
<td>5/4</td>
<td>Hands on Shoulder Rehabilitation Exercise</td>
</tr>
<tr>
<td>15</td>
<td>5/11</td>
<td>Final class overview and discussion</td>
</tr>
<tr>
<td>Final</td>
<td>5/18</td>
<td>Final Exam</td>
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</tbody>
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