

**San José State University  
Department of Kinesiology  
Graduate Athletic Training Education Program**

**KIN269: Evidence Based Research and Practice in  
Management and Assessment of Injuries to the Upper  
Extremity**

**Spring 2013**

<b>Instructor:</b>	Masaaki Tsuruike, PhD, ATC
<b>Office Location:</b>	Spartan Complex 071
<b>Telephone:</b>	(408) 924-3040
<b>Email:</b>	<a href="mailto:masaaki.tsuruike@sjsu.edu">masaaki.tsuruike@sjsu.edu</a>
<b>Office Hours:</b>	MR: 1:30pm-3:30pm All other times, by appointment only.
<b>Class Days/Time:</b>	M: 7:00 pm – 8:50 pm
<b>Classroom:</b>	SPX 075
<b>Adjunct Instructor Information:</b>	Dr. John Costouros ( <a href="mailto:costouros@stanford.edu">costouros@stanford.edu</a> ) Dr. Daniel Haber ( <a href="mailto:dfhaber@gmail.com">dfhaber@gmail.com</a> )
<b>Prerequisites:</b>	(SJSU listed or equivalent) KIN268 – EBM Assessment/Lower Extremity

**COURSE DESCRIPTION:**

This is a graduate course designed to critically examine current practices in the orthopedic assessment of and care for upper extremity injuries. The course will take a multidisciplinary approach, incorporating *scientific (research)*, *practical (clinical)*, and *outcomes assessment* bases. The efficacy of clinical practices, physical examination, on-field evaluation, initial care and follow-up treatment, as well as mechanics and pathomechanics of joint movement, detailed anatomy, etiology of specific injuries and special and stress tests will be discussed.

## **KIN PROGRAM LEARNING OBJECTIVES:**

1. Ability to interpret and apply evidence-based research to clinical and/or professional settings.
2. Apply and be receptive to the broad concept of cultural competence and diversity as related to social justice and equity issues.
3. Promote and model efficient movement and a holistic and sustainable approach to health and wellness across the life-span.
4. Develop and apply critical thinking and creativity through an interdisciplinary approach.
5. Become agents of change through the development of leadership skills to include community interaction and service.

## **STUDENT LEARNING OBJECTIVES:**

The overall purpose of this course will be to help students achieve an understanding of the evidence based medicine as it pertains to orthopedic evaluation of the upper extremity. Specific objectives are as follows:

1. To increase one's knowledge of functional anatomy, physiology, neurophysiology, biomechanics and injury recognition, assessment and treatment.
2. To develop an appreciation of appropriate research publications and current clinical research in the realm of athletic training/sports medicine.
3. To gain further appreciation for the multidisciplinary nature of the athletic training/sports medicine profession.
4. To grasp the knowledge of the procedures and theoretical foundations needed to study human biology.
5. To apply recognition and assessment skills to diverse populations: various age groups, disabled individuals, sport populations, etc.

## **REQUIRED TEXTBOOK:**

1. Ellenbecker TS. *Shoulder Rehabilitation Non-Operative Treatment*. Thieme (New York), ISBN 1-58890-370-2, Copyright 2006
2. Selected readings to be provided by the instructor.

## **RECOMMENDED TEXTBOOKS:**

1. Magee DJ. *Orthopedic Physical Assessment (fifth edition)*. Saunders (Philadelphia), ISBN 978-0-7216-0571-5, copyright 2008.

2. Kendall FP, McCreary EK, Provance PG, Rodgers MN & Romani WA. *Muscles: Testing and Function with Posture and Pain (fifth edition)*. Lippencott, Williams & Wilkins (Baltimore), ISBN 0-7817-4780-5, copyright 2005.
3. Levangie PK & Norkin CC. *Joint Structure and Function: A Comprehensive Analysis (fourth edition)*. FA Davis (Philadelphia), ISBN 978-0-8036-1191-7, copyright 2005.
4. Marieb EN & Hoehn K. *Human Anatomy & Physiology (eighth edition)*. Benjamin Cummings Publishers (Menlo Park), ISBN 978-0805395914, copyright 2010. [OR ANY BASIC ANATOMY BOOK]
5. Whiting WC & Zernicke RF. *Biomechanics of Musculoskeletal Injury (second edition)*. Human Kinetics (Champaign), ISBN 978-0-7360-5442-3, copyright 2008.

### LIBRARY LIAISON:

The Department of Kinesiology library liaison is Peggy Cabrera. She can be reached at [peggy.cabrera@sjsu.edu](mailto:peggy.cabrera@sjsu.edu) or (408) 808-2034.

### COURSE EVALUATION:

The course is based on a point scale (275 total points). The breakdown is as follows:

A	91-100%	B-	80%
A-	90%	C+	79%
B+	88-89%	C	72-78%
B	81-87%	C-	70%

**DISSECTION REPORTS (25 points each):** You will write a one page reflection on each of the dissections. [PLO 1, 2, 4: SLO: 1-5]

**SURGERY OBSERVATION REPORT (50 points):** You will write a 2 page surgery observation report. You will be expected to observe a surgery that is new to you and write about the surgical process, thoughts, and reflection on what you observed and learned and how it all relates to the research. [PLO 1, 2, 4: SLO 1-5]

**MIDTERM EXAM (100 pts):** There will be a *cumulative* midterm exam covering all materials (lectures, labs, discussions, readings, presentations, 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 [PLO 1,2,4: SLO: 1, 3, 4, 5]

**TAKE-HOME FINAL EXAM (100 pts):** There will be a *cumulative* final exam covering materials (lectures, labs, discussions, readings, presentations, etc.) from ALL units discussed during the course of the spring semester. The date and format of the final exam are to be determined.

[SLO: 1, 3, 4, 5]

## **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](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the [current academic calendar](http://www.sjsu.edu/academic_programs/calendars/academic_calendar/) web page located at [http://www.sjsu.edu/academic\\_programs/calendars/academic\\_calendar/](http://www.sjsu.edu/academic_programs/calendars/academic_calendar/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/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](http://www.sjsu.edu/advising/) at <http://www.sjsu.edu/advising/>. Assignments and Grading Policy

## **University Policies**

### **Academic integrity**

Students should know that the University's [Academic Integrity Policy](http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html) is available at [http://sa.sjsu.edu/judicial\\_affairs/faculty\\_and\\_staff/academic\\_integrity/index.html](http://sa.sjsu.edu/judicial_affairs/faculty_and_staff/academic_integrity/index.html). Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require 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](http://www.sa.sjsu.edu/judicial_affairs/index.html) is available at [http://www.sa.sjsu.edu/judicial\\_affairs/index.html](http://www.sa.sjsu.edu/judicial_affairs/index.html).

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

### **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 requires that students with disabilities requesting accommodations must register with the [Disability Resource Center](http://www.drc.sjsu.edu/) (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability.

### **Student Technology Resources (Optional)**

Computer labs for student use are available in the Academic Success Center located on the 1<sup>st</sup> floor of Clark Hall and on the 2<sup>nd</sup> floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library.

A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include digital and VHS camcorders, VHS and Beta video players, 16 mm, slide, overhead, DVD, CD, and audiotape players, sound systems, wireless microphones, projection screens and monitors.

### **Learning Assistance Resource Center (Optional)**

The Learning Assistance Resource Center (LARC) is located in Room 600 in the Student Services Center. It is designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. The center provides support services, such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. The [LARC website](http://www.sjsu.edu/larc/) is located at <http://www.sjsu.edu/larc/>.

### **SJSU Writing Center (Optional)**

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upper-division or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The [Writing Center website](http://www.sjsu.edu/writingcenter/about/staff/) is located at <http://www.sjsu.edu/writingcenter/about/staff/>.

### **Peer Mentor Center (Optional)**

The Peer Mentor Center is located on the 1<sup>st</sup> floor of Clark Hall in the Academic Success Center. The Peer Mentor Center is staffed with Peer Mentors who excel in helping students manage university life, tackling problems that range from academic challenges to interpersonal struggles. On the road to graduation, Peer Mentors are navigators, offering “roadside assistance” to peers who feel a bit lost or simply need help mapping out the locations of campus resources. Peer Mentor services are free and available on a drop –in basis, no reservation required. The [Peer Mentor Center website](http://www.sjsu.edu/muse/peermentor/) is located at <http://www.sjsu.edu/muse/peermentor/>

## KIN269-01: EBM Upper Extremity Assessment

\*\*\*NOTE: The course outline of topics is tentative and subject to change with fair warning; we will cover topics as time permits and according to guest speaker availability. Once all guest speakers and facilities have confirmed, the instructor will issue a course schedule.\*\*\*

Week	Date	Tentative Topics
1	01/28	Course Intro; EBR/M; Anatomy Review
2	02/04	Functional Anatomy Review of the Shoulder
3	02/11	Rehabilitation of Specific Shoulder Pathology
4	02/18	Rehabilitation of Micro-Instability
5	02/25	Rehabilitation of Adhesive Capsulitis
6	03/04	Rehabilitation of Acromioclavicular Joint Injuries
7	03/11	Classification and Treatment of Scapular Pathology
8	03/18	<b>Midterm Exam</b>
9	03/25	<b>NO CLASS: SPRING BREAK</b>
10	04/01	C-Spine Injuries
11	04/08	Injuries to Elbow
12	04/15	Rehabilitation Following Ulnar Collateral Ligament Reconstruction
13	04/22	Dr. John Costouros: Shoulder Girdle, School of Medicine, Stanford University
14	04/29	Upper Extremity Cadaveric Dissections (Bay Area Surgical Center)
15	05/06	Upper Extremity Cadaveric Dissections (Bay Area Surgical Center)
16	05/13	Injuries to Wrist & Hand