Course and Contact Information

Instructor: Masaaki Tsuruike, PhD, ATC
Office Location: SPX 115
Telephone: (408) 924-3040
Email: masaaki.tsuruike@sjsu.edu
Office Hours: Tues and Wed: 3:30 - 4:30 pm
Class Days/Time: Wednesdays: 5 - 6:50 pm
Classroom: YUH 128

Prerequisites: This course is intended for graduate students who have completed CAATE undergraduate programs and passed the board of certification examination (ATC). Other students must obtain the instructor's permission to enroll in the class.

Course Format

Course materials such as syllabus, handouts, notes, and assignment instructions 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

This course is designed to cover current topics in the field of athletic training education that have been discussed in the Journal of Athletic Training and/or the annual meeting of National Athletic Trainers’ Association. Topics may include, but are not limited to, outcomes research and practical applications for injury rehabilitation and management, data collection, and statistics. Three to four field trips will be also included to learn different clinical settings.

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 mastery of the 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 with other health care providers
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:

CLO 1. Discuss functional tests for return to play decisions
   1.1. Hamstring test
       1.1.1. Single bridge test
       1.1.2. Three consecutive straight leg raise as fast as possible test
   1.2. Ratio of the knee flexion to knee extension in isokinetic contraction
   1.3. Ratio of concentric contraction to eccentric contraction in shoulder external rotation during isokinetic contraction
   1.4. Chronic ankle instability
       1.4.1. Self-outcome instrument (FADI, FAAM, Sports Ankle Rating System)
       1.4.2. Star Excursion Balance Test (SEBT)/Y balance test
       1.4.3. The dorsiflexion lunge test
       1.4.4. Agility-T test
       1.4.5. Lower Extremity Functional Test (LEFT)
       1.4.6. Figure-of-8 hop test, Side-hop test, Up-down hop test, Single-hop test
   1.5. Functional tests for post-ACL reconstruction
       1.5.1. Single hop for distance, 6-m timed hop, triple hop for distance, crossover hop for distance
       1.5.2. Landing Error Scoring System (LESS)

CLO 2. Demonstrate data reduction and make a scientific graph

CLO 3. Describe non-traditional professional settings in which athletic trainers work

CLO 4. Identify an idea for a project or thesis and write a proposal for that culminating experience (project or thesis)

CLO 5. Engender a strong sense of leadership in young, professional athletic trainers, including Title IX.

CLO 6. Provide a forum of open discussion to explore the controversial, moral and ethical questions facing the athletic trainer professional.

Required Readings

Selected readings to be provided by the instructor. All readings are shown in the end of syllabus.
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:

**Grading Information**

- Discussion Responses: 75%
- Tentative Project Proposal (comprehensive): 20%
- Participation: 5%

**Determination of Grades**

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>100 - 93%</td>
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<tr>
<td>A-</td>
<td>92.9 - 90%</td>
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<td>B+</td>
<td>89.9 - 87%</td>
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<tr>
<td>B</td>
<td>86.9 - 83%</td>
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<tr>
<td>B-</td>
<td>82.9 - 80%</td>
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<tr>
<td>C+</td>
<td>79.9 - 77%</td>
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<tr>
<td>C</td>
<td>76.9 - 73%</td>
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<tr>
<td>C-</td>
<td>72.9 - 70%</td>
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<tr>
<td>D+</td>
<td>69.9 - 67%</td>
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<tr>
<td>D</td>
<td>66.9 - 63%</td>
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<tr>
<td>D-</td>
<td>62.9 - 60%</td>
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<tr>
<td>F</td>
<td>&lt;60%</td>
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**Discussion Responses: 75%**

Class Discussion Responses are designed to help a student measure functional assessments and learn return to play decision making in the field of athletic training. For discussion responses, you will summarize the limitation and delimitation of methods discussed in the class with at least one article which supports your opinion each time (one reference). You may use any of the articles provided in the class. This assignment provides an opportunity to develop analytic and critical reading skills and thinking.

The limitations are factors you cannot control in data collection, whereas the delimitations are boundaries you intentionally set in data collection under your control.

With regard to data reduction, descriptive statistics, such as mean and standard deviation, should be used. For data with isokinetic dynamometer and functional tests, error bars denoting the standard error of the mean (SE) should be included in the graph (below see the graph, indication error bars as SE).
You will also summarize the reflection of each of the field trips with at least one article which supports your opinion each time (one reference). The references can be found in Journal of Athletic Training, Athletic Training Education Journal, or any other health care provides’ journal, which must be categorized as a peer reviewed journal.

This discussion responses should be typed, single-spaced, using a 12-point (or easily readable) font and 1" margins. Your reflection should not exceed two pages including graphs. Less than one (1) page is considered too short.

**Individual Project Proposal: 20%**

You will propose a tentative project or thesis idea within the field of athletic training. The proposal should include the background of the project or research study, citing at least 5 professional journal articles; the purpose of the project and a hypothesis, if a research study; and the methodology.

**Classroom Protocol**

- Cell phones must be set on silent mode. Computers are allowed for class-related activities only. Scanning the internet, checking or sending e-mails, and other activities not related to the course is unprofessional and distracting to others.
- No food is allowed in the class.
- The class is scheduled for 110 minutes without a break.

**University Policies (Required)**

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on the Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Assignments and Deadlines</th>
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<tbody>
<tr>
<td>1</td>
<td>2/1</td>
<td>Course introduction</td>
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<td>Discussion: Research activity with human subjects</td>
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<td>Discussion Response 1, Due: 2/15</td>
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<td>3</td>
<td>2/15</td>
<td>Discussion: Current topics in athletic training (discussion of Title IX)</td>
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<td>4</td>
<td>2/22</td>
<td>Field trip I: 3:30 PM Evolution Trainers: <a href="http://www.evolutiontrainers.com/">http://www.evolutiontrainers.com/</a></td>
<td>Discussion Response 2 (Evolution), Due 3/1</td>
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<td>2044 Old Middlefield Way, Mountain View, CA 94043</td>
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<td>5</td>
<td>3/1</td>
<td>Discussion: Isokinetic Dynamometer for Upper extremity</td>
<td>Discussion Response 3, Due 3/8</td>
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<td>6</td>
<td>3/8</td>
<td>Discussion Isokinetic Dynamometer for Lower extremity</td>
<td>Discussion Response 4, Due 3/15</td>
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<td>3/15</td>
<td>Field trip II: 1:30 PM The Riekes Center: <a href="http://www.rieke.org/345">http://www.rieke.org/345</a></td>
<td>Discussion Response 5, (Riekes Center) Due 3/22</td>
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<td>5 Edison Way Menlo Park CA 94025</td>
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<td>Discussion Response 6, Due 3/29</td>
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<td>9</td>
<td>3/29</td>
<td><strong>Spring Break</strong></td>
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<td>10</td>
<td>4/5</td>
<td>Discussion: Functional tests for post-ACL reconstruction</td>
<td>Reid 2007</td>
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<td>Discussion Response 7, Due 4/12</td>
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<tr>
<td>11</td>
<td>4/12</td>
<td>Discussion: Predicting ACL injuries</td>
<td>Padua 2015, ter Stege 2014, Sugimoto 2015, Fox 2014</td>
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<td>Discussion Response 8, Due 4/26</td>
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<td>12</td>
<td>4/19</td>
<td>Field trip (TBA) or Discussion: Current topics in athletic training</td>
<td>Discussion Response 9, Due 4/26</td>
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<td>13</td>
<td>4/26</td>
<td>Field trip III: 2:00 PM Avaya Stadium:</td>
<td>Discussion Response 10, Due 5/3</td>
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<td><a href="http://www.sjearthquakes.com/avayastadium">http://www.sjearthquakes.com/avayastadium</a> 1123 Coleman Ave, San Jose, CA 95110</td>
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<tr>
<td>14</td>
<td>5/3</td>
<td>Discussion: Individual project proposals I</td>
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<tr>
<td>15</td>
<td>5/10</td>
<td>Discussion: Individual project proposals II</td>
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<tr>
<td>16</td>
<td>5/24</td>
<td>Final Evaluation</td>
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**Required Readings**

**Hamstring Tests**


**Chronic Ankle Instability**


**Functional Tests for Post ACLR and Injury Prediction**