

KINE 7970 - Biomechanics of Sport Technique Spring 2010

Meetings: M & W – 4:00-6:30 PM (MC 1127)

Instructors: Dr Wendi Weimar - Biomechanics - 844-1468 weimawh@auburn.edu

Course Description: The purpose of this course is to introduce the techniques and develop the skills needed to perform a biomechanical analysis of a specific sport technique.

Course Objectives: Upon completion of this course, students will: 1. Be able to break a skill into its component parts; 2. Be able to isolate the waypoints of skills; 3. Be able to analyze a videotaped performance; 4. Be able to videotape a performance to observe the critical components of a skill; 5. Be able to provide appropriate feedback to the performer regarding their skill performance;

Course Requirements: (1) You are required to come to class and participate (2) You are required to successfully complete: assignments, midterm and final (3) You are required to successfully complete the semester long project

Course Contents:

- Week 1. Review of skill analysis for a basic skill– prepared by instructor
Lab 1: Breaking a skill into components
- Week 2. Review of skill analysis for an advanced skill - prepared by instructor
Lab 2: Breaking advanced skill into components
- Week 3. Advanced camera basics
Lab 3: Capturing video is different lighting
- Week 4. Uploading and editing video– prepared by instructor
Lab 4: Upload video and trim
- Week 5. Using “in the action” feature– prepared by instructor
Lab 5: Capturing movement using “in the action” feature
- Week 6. Trimming “in the action” video – prepared by instructor
Lab 6: Trim “in the action” video.
- Week 7. Use “in the action” to provide immediate feedback – prepared by instructor
Lab 7: Use “in the action” to provide immediate feedback
- Week 8. Synchronize 2 videos from different angles – prepared by instructor
Lab 8: Synchronize 2 videos from different angles & provide feedback
- Week 9. Use “blending tool”- prepared by instructor
Lab 9: Use “blending tool” to compare movement of 2 performances & provide feedback to performer
- Week 10. Review progress of semester project
- Week 11. The “tracking tool” - prepared by instructor
Lab 11: Use the tracking tool

Week 12. Physic concept I - prepared by instructor
 Lab 13: Use the tracking tool to teach a physics concept
 Week 13. The “stromotion” tool - prepared by instructor
 Lab 12: Use the “stromotion tool”
 Week 14. Physic concept II- prepared by instructor
 Lab 14: Use stromotion tool to teach a physics concept
 Week 15. Defend semester project

Course Requirements:

Laboratory work, midterm and final exam will be given during this course.

8. Grading and Evaluation Procedure:

Lab work 30%	90 - 100 --- A
Mid Exam 30%	80 - 89 --- B
Final Exam 40%	70 - 79 --- C
		60 - 69 --- D
		Under 60 --- F

Class Policy Statements:

Excused Absences: Students are granted excused absences from class for the following reasons: Illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for University classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from this class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request and render a decision.

When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please see the *Tiger Cub* for more information on excused absences.

Make-Up Policy: Arrangement to make up missed major examination (e.g. hour exams, midterm exams) due to properly authorized excused absences must be initiated by the student within one week from the end of the period of the excused absences. Except in unusual circumstances, such as continued absence of the student or the advent of university holidays, a make-up exam will take place within two weeks from the time that the student initiates

arrangements for it. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins. The format of the make-up exam will be specified by the instructor depending on the exam.

Attendance. It is expected that students taking a graduate class will attend every class meeting, will arrive on time, and will actively participate in each class. Absences and late arrivals will not be tolerated. If you must miss class because of illness or other emergency, please try to notify the instructor in advance. You are still responsible for any work missed during an absence.

Academic Honesty Policy: All portions of the Auburn University student academic honesty code (Title XII) found in the *Tiger Cub* will apply to university courses. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

Cell Phones. As a courtesy to everyone, please turn off your cell phone during class. If you have a compelling reason for leaving your phone on, please let me know at the beginning of class. Also, please do not text–message during class.

Best Work. Please take pride in your work and be motivated to do your best work in this class; if you are, you will gain the maximum benefit from the course.

Disability Accommodations. Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by E–mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with **The Program for Students with Disabilities**, 1228 Haley Center, 844–2096.