

**Auburn University
College of Education
Department of Kinesiology
Course Syllabus**

1. Course Number: KINE 3620

Course Title: Biomechanical Analysis of Human Movement

Prerequisites: KINE 3020, MH 1610

Corequisites: none

Class Meeting Times: M, W, TH 9.30 am-12.00 pm Lab: F, 9.30am-12.00pm

Place: COLSM, Rm 1081 (Lecture), Rm 2116 (Lab)

Instructor: Ceren Yarar, MS, PT

Office: COLSM 2116 **Phone:** 334-844-1694 **Email:** czy0002@auburn.edu

Office Hours: M, W, TR: 12.00-1.00 pm; and by appointment

2. Date Syllabus Prepared: January 1, 2010

3. Text: Hamilton, N. Weimar, W. & Luttgens, K. (2001) *KINESIOLOGY --- Scientific Basis of Human Motion*. Eleventh Edition, WCB Brown & Benchmark Inc., Dubuque, Iowa.

4. Course Description: This course is designed to develop a fundamental understanding of the anatomical, neuromuscular, and biomechanical principles of human movement. Application of these concepts, as well as methods of motion analysis covered in this course, will enable one to evaluate human performance in greater detail.

5. Course Objectives: The students will:

1. Learn a systematic approach to the analysis of human motion
2. Understand the anatomical, neuromuscular, and biomechanical fundamentals of human motion
3. Apply anatomical and biomechanical analyses to the study and improvement of a broad spectrum of movement activities.

6. Course Requirements:

Two exams and surprise quizzes will be given during this course. In addition to exams and quizzes, laboratory assignments will be graded. Lab activities must be kept in a lab folder. The students are required to **staple** the labs and return all the labs placed in the folders to **get full credits from lab section**. Every unstapled lab assignment will cause **1 point deduction** from total lab grade. If a computer problem occurs with the blackboard system you **must notify the instructor immediately**. Surprise quizzes will cover material that is already covered in class, this is vital to keep up with the information throughout the semester. **There will be no make-up quizzes for missed surprise quizzes unless an excused absence is pre-arranged.**

7. Grading and Evaluation Procedure:

Labs: 50 pts total	90 – 100% --- A
Surprise Quizzes (5): 10 pts each	80 - 89 --- B
2 Exams: 100 pts each	70 - 79 --- C
Total: 300 pts	60 - 69 --- D
	Under 60 --- F

Extra credit opportunity will be given throughout the semester. Every student will have equal opportunity to earn the credit. 10 extra credit points will be possible and these will be added to your 300 total points.

A grade will be given based on the accumulation of the “exams, surprise quizzes, lab assignments, and extra credits”.

8. Class Policy Statements:

Participation: Students are expected to participate in all class discussions and participate in all laboratory exercises. It is the student’s responsibility to contact the instructor **PRIOR** to class if an illness or emergency requires the student to miss class. Any missed work due to a University approved excuse **MUST** be made up within 5 days.

Laboratory Activities and Exams: Labs are due one week after the date of lab activity unless an excused absence is pre-arranged. **No late work will be accepted. Students not turning in work by the scheduled start of class time will received a “0” grade on the lab activity.** The students must be present during the lab activity. If not, the student will not be allowed to perform the activity unless an excused absence is pre-arranged. Students are asked to review exams after they are returned and look up missed questions. If the answer is still unclear, please make an appointment to review the question and I'd be happy to go over any remaining questions you may have.

Attendance/Absences: Attendance is required at each class meeting. If an exam is missed, a make-up exam will be given only for University-approved excuses as outlined in the **Tiger Cub**. Arrangements to take the make-up exam **must be made in advance** and the exam taken within 5 days of the missed exam. Students who miss an exam because of illness should inform the instructor prior to the missed class if possible. A doctor's statement for verification of sickness is required and should clear the absence with the instructor the day they return to class. Other unavoidable absences from campus must be documented and cleared with the instructor **in advance**.

Questions/help: Students are encouraged to ask questions and seek extra help on a regular basis. **Please do not wait** until the day before an exam or laboratory is due. The goal is to keep up and enjoy the material!

Accommodations: Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096.

Honesty Code: The University Academic Honesty Code and the **Tiger Cub Rules and Regulations pertaining to Cheating will apply to this class.**

Classroom/laboratory Policies:

- All electronic devices must be turned off during classroom or laboratory periods, with the exception of laptops – which may be used for note taking **ONLY**. **NO phones or Text messaging during class is allowed. All phones and electronic devices must be put away prior to the start of class. If these are found out – the student will be asked to leave the class.**
- Students are expected to arrive to class on time. Those arriving late will not be permitted to hand in homework. Likewise, classes will end promptly at the scheduled time.
- Students are expected to come to class having completed the reading and prepared to discuss them.
- While laboratory sessions are more relaxed, students are expected to conduct themselves in a professional and safe manner. Students are not permitted to 'play' with laboratory equipment.
- Lab attire consists of loose fitting gym shorts, t-shirt and sneakers for easy movement. **In order to participate in laboratory sessions students must arrive to class in appropriate attire.** Those not properly attired will be asked to leave and will not be allowed to make up the assignments.
- No food or drinks are permitted in the laboratory.

Professionalism: As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College's conceptual framework. These professional commitments or dispositions are listed below:

- Engage in responsible and ethical professional practices
- Contribute to collaborative learning communities
- Demonstrate a commitment to diversity
- Model and nurture intellectual vitality

9. Course Contents:

Tentative schedule – subject to change

Topic	Readings
Introduction to Biomechanics	Chapter 1
The Musculoskeletal System ¹	Chapter 2
Muscular system review ²	Chapter 3
Nervous system review	Chapter 4
Math review, Measurement, Vectors	Appendix D, Chapter 10
Types of motion	Chapter 11
Linear motion	Chapter 12
Torque, Levers and Rotary Motion	Chapter 13

I have read and understand the syllabus – including the attendance, classroom policies, participation and grading policies for KINE 3620. I understand that the University Academic Honesty Code and the Tiger Cub Rules and Regulations pertaining to **Cheating** will apply to this class.

Printed name

Signature

date