

KINE 3620 –Biomechanics of Human Movement (4 cr.)

Dr. Wendi Weimar
Office: 20 Kinesiology Building
Office Hours: by appointment only
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Course Meetings:

MWF 10-11AM STACT 206

Text:

Hamilton, N., Weimar, W. & Luttgens, K. (2011) Kinesiology–Scientific Basis of Human Motion. Twelfth Edition, McGraw---Hill: New York, New York.

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 the student to evaluate human performance in greater detail.

Course Objectives:

The student will demonstrate an understanding of and the ability to:

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.

Course Requirements:

Three exams will be given during this course. “Pop” quizzes may also be given during the class. If a computer problem occurs with the blackboard or canvas system you must notify Dr. Weimar immediately. Surprise quizzes will cover material that is already covered in class, thus it 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.

Grading and Evaluation Procedure:

Homework.....20%	90 - 100 --- A
Project.....20%	80 - 89 --- B
Quizzes.....15%	70 - 79 --- C
Mid Exam.....20%	60 - 69 --- D
Final Exam....25%	Under 60 --- F

Class Policy Statements:

Participation: Students are expected to participate in all class discussions and participate in all homework and laboratory exercises. It is the student’s responsibility to contact the instructor if assignment deadlines are not met. Students are responsible for initiating arrangements for missed work.

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 Student Policy eHandbook. Arrangement to

take the make-up exam must be made in advance. Students who miss an exam because of illness need a doctor's statement for verification of sickness 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**.

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 alternative 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 at 1244 Haley Center, 844-2096 (V/TT).

Honesty Code: The University Academic Honesty Code and the **Student Policy eHandbook** pertaining to cheating and plagiarism will apply to this class.

Email: TigerMail is the official means of communication for Auburn University. The instructor will communicate with the class through Tiger Mail. You are responsible for this information, so please check your account regularly.

Contingency Plan: If normal classes are disrupted due to a high number of students experiencing illness or an emergency or crisis situation (such as a widespread H1N1 flu outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials. Additionally, course content and assignments may be made available to you via Canvas.

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.

Classroom and 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.

Classroom and Laboratory Policies:

- 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 the laboratory sessions are more relaxed, students are expected to conduct themselves in professional and safe manner. Students are not permitted to play with laboratory equipment.
- Lab attire consists of loose fitting gym shorts, t-shirts, and sneakers for easy movement. In order to participate in laboratory sessions, students must arrive to class in appropriate attire. Students not properly dressed will be asked to leave and will not be allowed to make up the assignments.

Professionalism: As faculty, staff, and students interact in professional settings, we 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

TENTATIVE SCHEDULE

[American Society of Biomechanics Omaha NE September 4-7; Dr. Oliver speaking at Japan Shoulder

Society September 25-October 1]

ALL COURSE MATERIALS WILL BE POSTED ON CANVAS: It is expected that you check the course on

CANVAS regularly as well as your email. Announcements will be sent via canvas to your email.

JANUARY

Wednesday 8	Introduction Chapter 1
Friday 10	Chapter 1

Monday 13	Chapter 1-2
Wednesday 15	Chapter 3
Friday 17	Chapter 3

Monday 20	No Classes
Wednesday 22	Chapter 3 Problems
Friday 24	Chapter 4

Monday 17	Chapter 5
Wednesday 19	Chapter 5
Friday 21	Chapter 5 Applications

Monday 27	Chapter 6
Wednesday 29	Chapter 6
Friday 31	Chapter 6 Applications

FEBRUARY

Monday 3	Review
Wednesday 5	EXAM 1
Friday 7	FLEX DAY

Monday 10	No Classes
Wednesday 12	Spring
Friday 14	Break

Monday 17	Chapter 7
Wednesday 19	Chapter 7

Friday 21	Chapter 7 Applications
Monday 24	Chapter 8
Wednesday 26	Chapter 8
Friday 28	Chapter 8 Problems
MARCH	
Monday 3	Chapter 10
Wednesday 5	Chapter 10
Friday 7	Chapter 10 Problems
Monday 10	REVIEW
Wednesday 12	EXAM 2
Friday 14	Chapter 11
Monday 17	Chapter 11
Wednesday 19	Chapter 11 Problems
Friday 21	Chapter 12
Monday 24	Chapter 12
Wednesday 26	Chapter 12 Applications
Friday 28	Chapter 13
Monday 31	Chapter 13
APRIL	
Wednesday 2	Chapter 14
Friday 4	Chapter 14
Monday 7	Chapter 14 Applications
Wednesday 9	Chapter 15
Friday 11	Chapter 15
Monday 14	Chapter 16
Wednesday 16	Chapter 16
Friday 18	Chapter 19
Monday 21	Chapter 19 & 21
Wednesday 23	Chapter 21
Friday 25	Review
FINAL EXAM	FRIDAY MAY 2 8:00-10:30PM