Course Title: Biomechanics and Anatomical Kinesiology
Course Number: KINE 3334
Credits: 3.00
Prerequisites: Credit in anatomy and physiology courses (BIOL 2301 and BIOL 2101) or CI
Co-requisite: Biomechanics and Anatomical Kinesiology Laboratory (KINE 3135)

Days/Hours of Class:
- Face-to-Face Meeting: Tuesday 12:30 pm – 1:50 pm at HPC2255
- Online Component: Blackboard

Dates: 1/12/2015 – 5/2/2015

Instructor Information
Name and Title: David Di Paolo, M.D., Adjunct Professor
Office location: HPC2165 (Biomechanics Lab)
Phone number: 903-245-0501
Email address: apollo227@mac.com
Office hours: by appointment

Teaching Assistants Information
Name: Mr. Raul Ramos
Email address: rramos4@patriots.uttyler.edu
Office location: HPC2170 (within Biomechanics Lab)

Textbook:

Catalog description:
Analysis of human movement, applying principles from Newtonian mechanics and study of structure and function of major joints and muscle groups.

Student Learning Objectives: After the full completion of this course the student will be:
1. Able to identify and discuss the major terminology and concepts related to human movement analysis.
2. Able to decide what biomechanical questions should be asked and studied related to activities of daily living, sports, basic movements and work related tasks.
3. Able to develop research to answer the biomechanical questions asked related to activities of daily living, sports, basic movements and work related tasks.
4. Able to distinguish kinematic from kinetic research related to the mechanics of human motion.
5. Able to list and explain the differences between qualitative and quantitative analysis.
6. Able to develop and implement kinematic, kinetic, and electromyography (EMG) research.

**Methods of Instruction**
To meet student learning objective, student learning experiences include but not limited to: a) online lectures, b) classroom demonstrations and discussion (face-to-face), c) problem solving situations and laboratory experiences, d) observations and analysis of movement performances, e) reading designated textbooks and supplementary materials upon assignment.

**Assessment and Measurement:**
The students will be evaluated on the basis of performance on periodic three examinations, weekly face-to-face quizzes and online quizzes and class participation. A percentage of total points possible determine the course grade.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89</td>
<td>B</td>
</tr>
<tr>
<td>70 – 79</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69</td>
<td>D</td>
</tr>
<tr>
<td>0 – 59</td>
<td>F</td>
</tr>
</tbody>
</table>

**Course Structure:**
- 300 points Three Non-Cumulative Exams (Exam I, Exam II, and Final Exam)
- 100 points Face-to-Face Quizzes
- 100 points Online Quizzes
- 25 points Class Participation (in the form of pop quizzes)
- Total Possible Points: 525 points

**Face-to-Face Quizzes:**
The in-class quizzes will be given at the start of the first class period for the previous weeks lecture material. **There will be no makeup quizzes given.** Therefore, it is imperative that you arrive early or on time for each class meeting. There may or may not be a quiz for a given week … therefore it is important to be prepared each time.

**Online Quizzes:**
The online quizzes will be taken after online lectures are completed. You are encouraged to use online quizzes to assess your own learning progress.

**Course Outline**

<table>
<thead>
<tr>
<th>Week 1</th>
<th>F2F</th>
<th>Online</th>
<th>Course Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course Overview</td>
<td>Module 1: What is Biomechanics?</td>
<td></td>
</tr>
<tr>
<td>Week</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module Name</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>---------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Week 2</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module 2: Kinematic Concepts for Analyzing Human Motion</td>
</tr>
<tr>
<td>Week 3</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module 3: Kinetic Concepts for Analyzing Human Motion</td>
</tr>
<tr>
<td>Week 4</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module 4: Biomechanics of Bones, Joints and Muscles</td>
</tr>
<tr>
<td>Week 5</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Review Session for Exam I</td>
</tr>
<tr>
<td>Week 6</td>
<td>F2F/Online</td>
<td>Exam I</td>
<td>Module 5: Linear Kinematics of Human Movement</td>
</tr>
<tr>
<td>Week 7</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module 6: Angular Kinematics of Human Movement</td>
</tr>
<tr>
<td>Week 8</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module 7: Linear Kinetics of Human Movement</td>
</tr>
<tr>
<td>Week 9</td>
<td></td>
<td></td>
<td>Spring Break</td>
</tr>
<tr>
<td>Week 10</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Module 7: Linear Kinetics of Human Movement (Continued)</td>
</tr>
<tr>
<td>Week 11</td>
<td>F2F/Online</td>
<td>Discussion and Quiz</td>
<td>Review session for Exam II</td>
</tr>
<tr>
<td>Week 12</td>
<td>F2F</td>
<td>Exam II</td>
<td></td>
</tr>
<tr>
<td>Week</td>
<td>F2F/Online</td>
<td>Module or Activity</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>-----------------------------------------</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Online</td>
<td>Module 8: Equilibrium and Human Movement</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>F2F</td>
<td>Discussion and Quiz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Online</td>
<td>Module 9: Angular Kinetics of Human Movement</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>F2F</td>
<td>Discussion and Quiz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Online</td>
<td>Review Session for Final Exam</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>F2F</td>
<td>Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

**Online Etiquette:**

*Tone Down Your Language:* If you feel particularly strongly about a point, it may be best to write it first as a draft and then to review it, before posting our statement. If someone states something you find offensive, mention it directly to the instructor. Remember the person may be new to online learning. What you find offensive may be an unintended and can be corrected by the instructor.

*Test for Clarity:* Messages may often appear perfectly clear to you as the writer but turn out to be confusing by another reader. One way to test for clarity is to read your message aloud to see if it flows smoothly. Be concise when possible when contributing to a discussion. If you have several points you want to make, it may be a good idea to post them individually in more focused messages rather than a single, all-encompassing message.

**Communication Policy:**

If you email me, expect a response within one business day at UT Tyler (M-F).

**Attendance Policy:**

Although I do not formally use attendance as part of your grade, your attendance is expected, but not recorded. Just to remember, quizzes and all exams, including the final, are to be taken at the assigned time. **There will be no exceptions!**

**Athletic Policy:**

I am aware of the difficulty of being both an athlete and an academic, thus I will be flexible regarding weekly quizzes, and tests for excused absences. An excused absence is one I am aware of, thus allowing for proper arrangements to facilitate the make-up of missing material. Therefore, I expect to have all athletic schedules prior to the beginning.
of the second week of class so we can sit down and discuss what classes you will be missing. One final note: you will only be excused if your game or travel conflicts directly with the class meeting.

**Cell phone Policy:**
There are 25pts or 6% of your grade related to class participation. If I see your cell phone during class you will lose those 25pts. I do not want to see it anytime during the class. If you are expecting an important call let me know before class and take the call outside of class. Furthermore, if you really feel the need to text message or check you facebook, etc…then just don't come to class that day! Very simple rule!

**Laptop Policy:**
There are 25pts or 6% of your grade related to class participation. If I see you using your laptop to "surf" the web or play games during class time you will lose 25pts. If you really feel the need to email or check you facebook, etc…then just don't come to class that day! Very simple rule!

**Study Partner Program:**
You are encouraged to study together as a group in this course. After the second exam, you can voluntarily form the study group of two students by signing up the study partner program. After the final exam, if any of the students in the group has improved his/her score, compared to the second exam, both students in the group will get bonus points. The bonus points are equivalent to the difference of second exam and final exam.

For example:

<table>
<thead>
<tr>
<th></th>
<th>Exam II</th>
<th>Final Exam</th>
<th>Bonus points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A</td>
<td>57</td>
<td>77</td>
<td>20</td>
</tr>
<tr>
<td>Student B</td>
<td>90</td>
<td>87</td>
<td>20</td>
</tr>
</tbody>
</table>

**University Policies**

**STUDENTS RIGHTS AND RESPONSIBILITIES**
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please go to the following site:
http://www.uttyle.edu/wellness/StudentRightsandResponsibilities.html

**GRADE REPLACEMENT**
If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to file an intent to use grade forgiveness will result in both the original and repeated grade being used to calculate your overall grade point average. A student will receive grade forgiveness (grade replacement) for only three (undergraduate student) or two (graduate student) course repeats during his/her career at UT Tyler (2006-2008 Catalog, P. 35).

**STATE-MANDATED COURSE DROP POLICY**
Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during his/her entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or
university. For purposes of this rule, a dropped course is any course that is dropped after
the 12th day of class (See Schedule of Classes for the specific date).
Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must
be submitted to the Registrar's Office and must be accompanied by documentation of the
extenuating circumstance. Please contact the Registrar's Office if you have any questions.

DISABILITY SERVICES
In accordance with federal law, a student requesting accommodation must provide
documentation of his/her disability to the Disability Support Service counselor. If you
have a disability, including a learning disability, for which you request an
accommodation, please contact the Disability Support Services office in UC 3150 or call
(903) 566-7079.

CLASS ATTENDANCE
Responsibility for class attendance rests with the student. When a student has a legitimate
reason for being absent, the instructor has the option of permitting make-up work.
The university reserves the right to consider individual cases of nonattendance. In general,
students are graded on the basis of intellectual effort and performance. In many cases,
class participation is a significant measure of performance, and nonattendance can
adversely affect a student's grade. When, in the judgment of the instructor, a student has
been absent to such a degree as to jeopardize success in the course, the instructor informs
the Office of Student Records that the student is to be dropped from the course.

APPROVED STUDENT ABSENCES
On those occasions when it may be necessary for students to miss a regularly scheduled
class in order to participate in an official university event or activity, faculty sponsors and
program directors are requested to observe the following procedures:
1. Faculty sponsors or program directors should draft a memorandum to the vice
president for academic affairs. This memorandum should include information concerning
the nature of the event, the date(s) on which students would be absent from class, and the
names of the students involved.
2. Copies of the memorandum addressed to the vice president should be given to each of
the students listed on the memorandum.
3. Students should be directed to communicate with their instructor(s) prior to the date of
the planned absence.
It is expected that students will not abuse the privilege of being absent from class for
authorized university activities, and that make-up assignments will be made at the
discretion and convenience of the instructor.

ACADEMIC DISHONESTY POLICY
At The University of Texas at Tyler students and faculty are responsible for maintaining
an environment that encourages academic integrity. Students and faculty members are
required to report an observed or a suspected case of academic dishonesty immediately to
the faculty member in charge of an examination, classroom or laboratory research project,
or other academic exercise.
Since the value of an academic degree depends on the absolute integrity of the work done by the student for the degree, it is imperative that a student maintain a high standard of individual honor in scholastic work. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, and collusion:
"Cheating" includes:
1. Copying from the paper of another student, engaging in written, oral or any other means of communication with another student, or giving aid to or seeking aid from another student when not permitted by the instructor;
2. Using material during an examination or when completing an assignment that is not authorized by the person giving the examination or making the work assignment;
3. Taking or attempting to take an examination for another student, or allowing another student to take an examination for oneself;
4. Using, obtaining, or attempting to obtain by any means, the whole or any part of an unadministered examination or work assignment.
"Plagiarism" includes the unacknowledged incorporation of the work of another person in work that a student offers for credit.
"Collusion" includes the unauthorized collaboration with another person in preparing written work that a student offers for credit.

GRADE APPEAL PROCEDURE
A student who wishes to contest a grade given by an instructor must initiate the procedure by contacting the instructor who assigned the grade. The instructor and the student should informally review the criteria for assignment of grades and the student's performance. The instructor may affirm the grade or revise the grade.
If the student is not satisfied after the informal discussion with the instructor, then the student may initiate a formal grade appeal by completing a Grade Appeal Form that may be obtained from the Office of Student Records. Normal grade appeals should be filed at the earliest date possible, but no later than six months from the final date of assignment. The instructor and the student should complete the appropriate parts of the form clearly indicating the instructor's rationale for the grade given and the student's basis for the grade appeal.
At each administrative level of the appeal process, an attempt will be made to resolve the issue. If the instructor holds one of the administrative positions used in the appeal process, then that level is omitted. If no resolution is reached at a particular level, then the appeal is forwarded with the recommendation of the administrator at that level with all documentation.
If the appeal is to be considered by the vice president for academic affairs, then a copy of the Grade Appeal Form shall be forwarded by the academic dean of the students. The Office of the President is the final step in the appeal process at The University of Texas at Tyler.

FOOD AND DRINK IN CLASSROOMS
Consumption of food and drink in university classrooms is prohibited.

INDOOR SMOKE-FREE CAMPUS
The University of Texas at Tyler is an indoor smoke-free campus. No smoking will be permitted in any building, office, hallway, classroom, laboratory, restroom, lounge, or any other indoor location.

**Note:** This syllabus is subject to change based on the needs of the class.