Course Title: Biomechanics and Anatomical Kinesiology Laboratory
Course Number: KINE 3135
Credits: 1.00
Co-requisite: KINE 3334
Days/Hours of Lab:
- KINE 3135.001 Thursday 8:00am – 10:00am
- KINE 3135.002 Friday 8:00am – 10:00am
- KINE 3135.003 Friday 10:00am – 12:00pm
- KINE 3135.004 Friday 1:00pm – 3:00pm
Dates: 08/24/2015 – 12/12/2015

Lab Room: HPC 2165

Instructor Information
Name and Title: X. Neil Dong, Ph.D., Associate Professor
Office location: HPC 2166 (within Biomechanics Lab)
Phone number: 903-565-5615
Email address: ndong@uttyler.edu
Office hours: Tuesday 2:00 pm – 5:00 pm
Or by appointment

Teaching Assistant Information
Name: Mr. Raul Ramos
Email address: rramos4@patriots.uttyler.edu
Office location: HPC 2170 (within Biomechanics Lab)

Textbook:

Catalog description:
Laboratory and field analyses related to mechanics and musculoskeletal involvement in movement.

Methods of Instruction
Student learning experiences include but are not limited to: a) problem solving situations and laboratory experiences, b) observations and analysis of movement performances, c) reading designated textbooks and supplementary materials upon assignment.

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

**Evaluation:**
The students will be evaluated on the basis of completing of laboratory experiences, and participation in analysis projects. A percentage of total points possible will determine the course grade.

- 90 – 100 A
- 80 – 89 B
- 70 – 79 C
- 60 – 69 D
- 0 – 59 F

**Course Structure:**

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
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<tbody>
<tr>
<td>150</td>
<td>Attendance (10 points for each lab, 30 points for attendance of oral presentation)</td>
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<tr>
<td>100</td>
<td>Peer Evaluation within Group Members</td>
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<tr>
<td>100</td>
<td>Project Report</td>
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<tr>
<td>50</td>
<td>Oral Presentation</td>
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<td>50</td>
<td>Project Proposal</td>
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<td>50</td>
<td>Signed Group Contract</td>
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Total Possible Points: 500 points

**Biomechanics Project:**
The purpose of the project is to allow the students the opportunity to utilize the biomechanics equipment to help answer interesting questions relating to movement. The students will be able to use Electromyography, 2D Kinematic Analysis Equipment and a Force Plate to investigate movement. These projects, together with the principles acquired throughout class projects, will provide students a unique prospective to human movement. These projects will be written as well as presented orally via PowerPoint and poster presentation style.

EMG Project: Each laboratory group will be responsible for collecting EMG data on a selected topic (e.g., different abdominal exercises) and subsequent presentation of the findings in both written and oral form. Although both class lectures and laboratory times will be set aside for this project, significant out of class time will be required for the successful completion of this project. I feel that this project will not only be fun, but will give you, as students, a distinct advantage when applying for graduate schools, or jobs requiring movement analysis. Additional information will be forthcoming regarding EXACTLY what this project entails.

2D Kinematics Project: Each laboratory group will be responsible for collecting 2-Dimensional Kinematic data on a selected topic (e.g., running, jumping, diving, etc) and subsequent presentation of the findings in both written and oral form. Although both class lectures and laboratory times will be set aside for this project, significant out of class time will be required for
the successful completion of this project. I feel that this project will not only be fun, but will give
you, as students, a distinct advantage when applying for graduate schools, or jobs requiring
movement analysis. Additional information will be forthcoming regarding EXACTLY what this
project entails.

Kinetic Force Plate Project: Each laboratory group will be responsible for collecting kinetic force
plate data on a selected topic (e.g., ground reaction forces) and subsequent presentation of the
findings in both written and oral form. Although both class lectures and laboratory times will be
set aside for this project, significant out of class time will be required for the successful
completion of this project. I feel that this project will not only be fun, but will give you, as
students, a distinct advantage when applying for graduate schools, or jobs requiring movement
analysis. Additional information will be forthcoming regarding EXACTLY what this project
entails.

Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Biomechanics Lab</td>
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<tr>
<td>Week 2</td>
<td>EMG Lab</td>
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<td>Week 3</td>
<td>Motion Capture Lab</td>
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<td>Week 4</td>
<td>Force Plate Lab</td>
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<tr>
<td>Week 5</td>
<td>Biomechanics Project: Forming Hypothesis</td>
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<td>Week 6</td>
<td>Biomechanics Project: Setting up a pilot test</td>
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<tr>
<td>Week 7</td>
<td>Biomechanics Project: Collecting data</td>
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<tr>
<td>Week 8</td>
<td>Biomechanics Project: Collecting data</td>
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<tr>
<td>Week 9</td>
<td>Biomechanics Project: Collecting data</td>
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<tr>
<td>Week 10</td>
<td>Biomechanics Project: Data Analysis</td>
</tr>
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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 follow this link: http://www.uttyler.edu/wellness/rightsresponsibilities.php

Grade Replacement/Forgiveness and Census Date Policies
Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar. Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:
- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

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 their 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 census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Disability Services
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@utttyler.edu

Student Absence due to Religious Observance
Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement:
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

Emergency Exits and Evacuation:
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

Academic Dishonest 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.