General Information
Instructor: Matthew Segovia, M.S.
Email: mdsegovia@utep.edu
Office Hours: By appointment via Zoom – scheduled as needed
J. Hamill, K.M. Knutzen, & T.R. Derrick; Lippincott, Williams & Williams
Class time: Asynchronous online delivery

Prerequisites KIN 1303, KIN 3331, MATH 1320 (or equivalent) and departmental approval

Course Description
A mechanical analysis of the internal and external force acting on the human body and the effects of these forces. Emphasis will be placed on the development of skills to analyze movement both qualitatively and quantitatively. Course materials will be presented in a semi-structured asynchronous manner, meaning you will need to view the lectures and take quizzes on your own time and at your own pace. Exams will be administered by the dates below through Blackboard. Please make sure you note these dates and make yourself available for approximately three hours. I will be available every day for virtual office hours should any student need clarification on material or have questions regarding content. Students are free to go at their own pace to complete the course.

Laboratory
Your laboratory instructor will provide students with all necessary information for the laboratory assignments. No assignments will require any equipment students do not already possess. Many of the lab assignments will be Microsoft Excel-based where students will be manipulating data to understand lecture content.

Additional Resources
Throughout the semester, additional assignments, readings, and information will be posted on Blackboard.

Learning Objectives
By the end of this course, students should be able to:
1. Describe human motion using appropriate, well-defined terminology;
2. Apply Newton’s Laws to identify causes of human motion;
3. Demonstrate a conceptual and computational proficiency with the above objectives;
4. Demonstrate an understanding of the real-world applications of the course materials.

Course Evaluation
Final Exam 25%
Exams I & II 20% (each)
Laboratory Grade 15%
Journals 15%
Quizzes 5%
Exams: There will be two mid-semester exams and one final exam for this course. Each exam will be worth 100 points. The Final Exam will be cumulative; material from the entire semester can be on it. Exam I&II will be made available for the entire week (Sunday through Saturday) to allow students time to review necessary material and take the exam on the day and time that works best for them. The Final Exam will take place during finals week. Please be aware however, each exam will only be available for 1 attempt and must be completed in a duration time of 150 minutes (2 hours and 20 minutes for work, plus an additional 10 for computer processes). Please plan accordingly and be mindful of the due dates!

Journal Entries: Journals will be completed on Blackboard and are meant to serve as a platform to share questions or interests regarding the topics covered. There will be four journals due during the semester on the broad topics of Basic Biomechanics (Intro to biomechanics), Linear & Angular Kinematics (Chapters 8&9), Linear Kinetics (Chapter 10), and Angular Kinetics (Chapter 11). In journal entries, students will be required to include the following three things (at minimum) in their post: 1) something they thought was interesting; 2) something they thought was confusing; and 3) how the information in the given chapter can be useful. While not required, students are encouraged to comment on others’ posts or answer any questions posed by a peer.

Quizzes: There will be five quizzes in the course as outlined in the course schedule. Similar to the exams, the quizzes will be open and available for the week to allow for completion at your own pace. Students must complete them in a single attempt. Quizzes are only meant to serve as a concept check throughout the semester on material covered up to that point, and will not rely on any math processes. Students are encouraged to regularly practice the various mathematical applications discussed in lectures.

Extra Credit: 5 points of extra credit can be earned in this course. To earn extra credit, students must identify a disorder/disease (Parkinson’s Disease, Cerebral Palsy, Muscular Dystrophy, Autism, etc.) that affects an individual’s ability to move because of the disorder/disease. Once a disease/disorder is identified, students must write at least a 1-page paper identifying how the disease/disorder affects movement abilities and explain the reasons why. Included in their paper, students must also describe what specific movements are challenging (gait, jumping, standing, etc.). Once completed, the paper must be submitted to Blackboard. The extra credit assignment must be uploaded to Blackboard before the final exam. At the end of the semester, the extra credit points will be added to your lowest mid-term exam score; not the final exam.

Grading Policy
A  ≥ 90.0%
B  80.0%-89.9%
C  70.0%-79.9%
D  60.0%-69.9%
F  <59.9%
Grades will not be rounded. For instance, if you have earned a 78.6%, you will earn a C; your percentage will not be rounded to a B.

Attendance Policy
There are no scheduled virtual meetings for this course. Each student may move through the weeks at their own pace and should plan for around 6 hours each week to review material (note this does not account for study time, laboratory time, journal entries, assessment time, or practice time). Be aware of required assignments each week and plan accordingly.
The last day to drop this course is April 1, 2021 without receiving a ‘W’ or failing grade.

Course Content
See the class schedule for approximate dates for each covered topic.
Exam Schedule
Exam I  Week of March 6th
Exam II  Week of April 17th
Final Exam  Week of May 9th

University Policies and Resources

Changes to this syllabus: The course schedule may be altered by the instructor, with sufficient notice being provided to students.

Cheating, Plagiarism, Scholastic Dishonesty, and Student Discipline: Cheating is obtaining a reward for ability by dishonest means. It is unethical and not acceptable. Plagiarism occurs whenever a student quotes, paraphrases or summarizes another person's work without providing correct citation. Plagiarism occurs whether the work quoted is a book, article, website, reader's guide like Cliffs Notes or SparkNotes, another student's paper, or any other source. An entire essay is fraudulent even if only a single sentence is plagiarized. Do not submit work under your name that you did not do yourself, ever. You may not submit work for this class that you did for another class. If you cheated or plagiarized, you will be subject to disciplinary action as stated in the UTEP undergraduate catalog policy.

“Scholastic dishonesty (which includes the attempt of any student to present the work of another as his or her own, or any work which s(he) has not honestly performed, or attempting to pass any examination by improper means) is a serious offense and will subject the student to disciplinary action. The aiding and abetting of a student in any dishonesty is held to be an equally serious offense. All alleged acts of scholastic dishonesty should be reported to the Dean of Students for disposition. It is the Dean of Students’ responsibility to investigate each allegation, dismiss the allegation, or proceed with disciplinary action in a manner which provides the accused student his or her rights of due process.” Refer to http://www.utep.edu/dos/acadintg.htm for further information.

UTEP has a site license for Turnitin.com, a plagiarism detection site that you can also use to check your own work for this or other classes to prevent getting in trouble. If you want to test your understanding of plagiarism, take the self-assessment at http://education.indiana.edu/~frick/plagiarism or visit http://www.turnitin.com

When an assignment specifies that you must perform a task individually, asking for your classmates’ help is collusion and thus scholastic dishonesty. Any instances of scholastic dishonesty will be reported to the Dean of Students Office.

Deadline Policy and Late Assignments: It is essential that you regularly visit the class Blackboard website prepared to work. Once a deadline has passed, you can no longer turn in your work for credit. Plan carefully to ensure you meet the deadlines. If you wait until the last minute, things that can go wrong often do. Start early so you have time to deal with problems and are still able to turn in your assignments on time. Do not procrastinate!

Missed Tests: All assignments will strictly follow UTEP’s attendance policy. Any missed assignment that does not meet the requirements of an excused absence will be counted as a 0. If you are going to / or miss an assignment and you believe the absence is excusable, you must contact the Professor within 24 hours of the assignments due date. Emailing later in the semester about missing grades, even if the absence was excused, will not be accepted. It is the student’s responsibility to keep track of when assignments are due and also communicating to the Professor when absences happen.

Students in Need of Assistance: UTEP seeks to provide reasonable accommodations for all qualified individuals who need accommodations or support for their learning. This university adheres to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required, affording equal educational opportunity. It is the student’s responsibility to register with the Center for Accommodations and Support Services: http://sa.utep.edu/cass/ in the UTEP Union Bldg. East Wing, Room 106 within the first two weeks of classes, and inform the faculty member to arrange for appropriate accommodations or support.
The CASS Office can also be reached in the following ways: Web: [http://cass.utep.edu/](http://cass.utep.edu/); Phone: (915) 747-5148 voice or TTY; Fax: (915) 747-8712; E-Mail: cass@utep.edu

**Campus Safety and Emergencies Notifications:** Information Technology at UTEP provides emergency notification via your mobile phone. Visit [http://www.utep.edu/it](http://www.utep.edu/it) for more information and registration. Check the UTEP website for health-related information and updates.

**Blackboard Help:** Students can receive help on blackboard 24/7 by calling 915-747-4357 and selecting option number 2, or by visiting [https://www.utep.edu/technologysupport/ServiceCatalog/Student_Services.html](https://www.utep.edu/technologysupport/ServiceCatalog/Student_Services.html)

**Course Schedule**

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<thead>
<tr>
<th>Week</th>
<th>Topic Covered</th>
<th>Online Assignment Due</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Module 1</strong></td>
<td>Syllabus &amp; Intro to Biomechanics</td>
</tr>
<tr>
<td>2</td>
<td>Chapter 1</td>
<td>Basic Terminology Skeletal Considerations for Movement I</td>
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<tr>
<td>3</td>
<td>Chapter 2</td>
<td>Skeletal Considerations for Movement II Neural Considerations for Movement Quiz 1</td>
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<tr>
<td>4</td>
<td>Chapter 8</td>
<td>Linear Kinematics</td>
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<tr>
<td>5</td>
<td>Chapter 8</td>
<td>PVA Projectile Motion Quiz 2</td>
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<tr>
<td>6</td>
<td>Chapter 9</td>
<td>Angular Kinematics Journal 2 Quiz 3</td>
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<tr>
<td>7</td>
<td>February 28 –March 6</td>
<td>Student self-review Exam I open all week EXAM I Mar 6 by 11:59pm</td>
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<tr>
<td>8</td>
<td><strong>Module 2</strong></td>
<td>Linear Kinetics</td>
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<tr>
<td>9</td>
<td><strong>Spring Break – No classes</strong></td>
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<tr>
<td>10</td>
<td>Chapter 10</td>
<td>Linear Kinetics II and Friction</td>
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<tr>
<td>11</td>
<td>Chapter 10</td>
<td>Linear Kinetics II and Friction Collisions/Impacts and Linear Kinetics III</td>
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<tr>
<td>12</td>
<td>Chapter 10</td>
<td>Work, Power, Energy Journal 3 Quiz 4</td>
</tr>
<tr>
<td>13</td>
<td>April 11 - 17</td>
<td>Student self-review Exam II open all week EXAM II April 17 by 11:59pm</td>
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<tr>
<td>14</td>
<td><strong>Module 3</strong></td>
<td>Angular Kinetics</td>
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<tr>
<td>15</td>
<td>April 25 – May 1</td>
<td>Angular Kinetics Journal 4 Quiz 5</td>
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<tr>
<td>16</td>
<td>May 2 - 7</td>
<td>Final Exam Review Time</td>
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<td></td>
<td>May 9 - 14</td>
<td>Final Exam Week</td>
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* All online assignments are due by 11:59pm the Saturday of the assigned week. For instance, Journal 2 is due February 27th at 11:59pm*