Catalog Course Description:
3 hours. Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton’s Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite(s): ENGR 2301 and MATH 1720.

Instructor
Dr. Reza A. Mirshams
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Course Information
Meeting Hours TuTh 4:00-5:20 PM
Office Hours MW 2-3 PM
Course webpage UNT Blackboard at https://learn.unt.edu.

Course Learning Outcomes:
Upon successful completion of this course, students will:
1. Apply kinematics and kinetics of particles in engineering problems.
2. Apply kinematics and kinetics of rigid bodies in engineering problems.

Required Textbook:

Author: R.C. Hibbeler,
Publisher: Prentice Hall Pearson,
http://www.pearsonhighered.com/
Homework Assignment Site:
http://www.masteringengineering.com,
ID: MEMIRSHAMS02184

Course Instruction and Homework Assignments
1. Attendance is required.

2. Backboard, at http://ecampus.unt.edu, will be used for posting the course materials and instructions, assignments, submission of assignments, email communications about the course, and the course grade-book.

3. Homework assignments will be assigned each Thursday. These problems will NOT be collected. Instead, the same problems will be assigned on the textbook website http://www.masteringengineering.com with due date on the following Thursday before the class hour.
4. You can obtain bonus points toward your final grade by solving bonus homework assignments. Please see the table on the last page.

Quizzes and Exams
1. A quiz, consisting of one of the exact homework problems or one very similar, will be given the following Thursday of each assigned homework.

2. There will be 10 quizzes each up to 15 minutes during the class hour. **See the table on the last page of this syllabus for the scheduled quizzes.** The lowest 2 quiz grades will be dropped. Make-up quizzes are NOT allowed.

3. Two term exams will be taken during the class hour on Thursday February 26th and April 9th. Exam questions will cover all topics discussed by the exam day.

4. Final exam will be a comprehensive exam to cover all topics discussed during the semester.

5. Exams and class quizzes are written and closed textbook and notebooks. A copy of the fundamental equations of dynamics will be provided.

6. It will be helpful to bring a ruler for solving graphical problems. It will not been allowed to use a laptop or an iPhone or iPad or any other handheld computers and cell phones during the exams and quizzes. Of course, you are allowed to bring a scientific/engineering calculator. However, sharing calculators during the exams will not be permitted.

7. Grades are based in part on the student's ability to communicate. You must present your entire solution in an orderly way for each problem. Full grade points will not be assigned only on the final answers without presenting correct steps. You must show complete process of your solution. Partial credit will be assigned only for correct steps have been taken in a solution.

8. Requests for the review of graded exam or quiz problems must be made the day the exam/quiz is handed back. Once class is dismissed, regrade requests will not be accepted.

9. Exam make-ups will only be given for University excused absences. The instructor must be notified before the exam time if you are going to miss class.

Grade Evaluation:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Class attendance</td>
<td>5%</td>
</tr>
<tr>
<td>Average of the required homework assignments</td>
<td>15%</td>
</tr>
<tr>
<td>Ten in-class scheduled quizzes (best 8 of 10)</td>
<td>15%</td>
</tr>
<tr>
<td>Two class exams (20% each, no drop)</td>
<td>40%</td>
</tr>
<tr>
<td>Final Exam (comprehensive)</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Average of the bonus homework assignments 10%

Grade Scales
A: ≥ 90%, B: 80 – 89 %, C: 70 – 79 %, D: ≥ 55 – 69 %, F: below 55%

Decimals in final total averages will be rounded up for assigning the grade. Grades will not be curved.
Disabilities Accommodation:
All reasonable accommodation will be made to facilitate special needs. If special accommodations are required, the student must first meet with the staff of the Office of Disability Accommodation (ODA), Union Suite 322, (940) 565-4323. After meeting with that office, please contact me to discuss what accommodations will be necessary. For more information, see http://www.unt.edu/oda.

Additional Class Policies
1. This syllabus is subject to change at any time during the semester with changes to be announced during the class hours and posted on the Blackboard.
2. Cell phones, iPhones, iPods, iPads, laptops, smartphones, and tablets must be turned off or in silent mode before the start of the class and left in your pocket, purse, or book bag.
3. In email communications, please put your name and course number in the subject line.
4. An I (incomplete) grade is given only for extenuating circumstances and in accordance with University and Departmental Policies.
5. The UNT Catalog procedures on cheating and plagiarism will be vigorously enforced. It is the duty of each student to protect their work so it is not available to others for submission as their efforts. This is especially true of files that are generated on the computer. Students that knowingly allow others to use their work are partners in this unethical behavior. All rules relating to academic dishonesty will be enforced in accordance with University policies.
6. State common law and federal copyright laws protect this course lectures and materials. They have my own original expression and revisions to the textbook author(s). Whereas you are authorized to take notes in class, thereby creating a derivative work from my lecture, and/or make a print of my lecture notes/slides. The authorization extends only to making one set of notes for your own personal use and no other use. You are not authorized to record my lectures, to provide your notes to anyone else or to make any commercial use of them without express prior permission from me.