Engineering Design Graphics

Course Description

This course is about the application of engineering analysis principles and methods to the mechanical system components. It covers the following: fastener, springs, gears, brakes, clutches, couplings, bearings.

Learning Objectives

- Understand different types of failure modes and criteria
- Understand systemic approaches to figure out the critical and weakest point in given mechanical system
- Analyze the expecting stresses in an actual mechanical system
- Design mechanical systems meet the required strength
- Understand basic theories in bolted connections, gears, springs, bearings, and its selection guide line.
- Understand the design processes of mechanical systems

Major Course Requirements

**Quizzes**

Short quiz will be asked every week to review previous lecture.

**Assignments**

Homework and lab work will be assigned every week as related to the topics in class. Please refer the covered topics and schedule in this syllabus. Late assignments are not accepted. Assignments missed due to excused absences must be made up within one week of the absence.

**Projects**

Personal and team based projects will be assigned, and project workshops will be held. Detail information will be discussed and updated during the class.

**Exams**

Exams will be taken three times.
Evaluation and Grade

- Project 15%
- Assignments 20%
- Exam #1 20%
- Exam #2 20%
- final exam 25%


Required or Recommended Readings

Textbook:

Recommended or Supplemental Reading:

Website:
Black board(WebCT) on university website (class note and assignment will be announced here)

State Adopted Proficiencies/TExES competencies (COE)

Course Policies

Attendance/tardiness
Absences are not recommended in general. Scheduled exam absences or No-show on projects presentation will not be accepted unless there exists legitimate excuses (illness, death in the family, etc.) and adequate documentation is furnished. However, it is the student's responsibility to obtain class notes, handout materials, if any, etc. when a scheduled lecture is missed.

Late work and Make-up Exams

Extra Credit

Cell Phone/Electronic Device Usage

Academic Integrity/Plagiarism

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in Grade F.
Dropping a Class

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. November 4th is the last day to drop a class with an automatic grade of “W” this term.

Preferred methods of scholarly citations

Classroom/professional behavior

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

Grade Appeals*

As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

Disabilities Accommodations*

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101.
If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

*Required by SACS

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