

<b>INSTRUCTOR:</b>	James Langley	<b>E-MAIL:</b>	jlangley@alvincollege.edu
<b>OFFICE:</b>	N109	<b>PHONE:</b>	281-756-3784
<b>OFFICE HOURS:</b>	MONDAY 8:00am – 9:00am AND 1:00pm – 6:30pm, TUESDAY BY APPOINTMENT, WEDNESDAY 4:30pm – 6:30pm, THURSDAY 8:00am – 9:00 AND 12:00pm-12:30pm, FRIDAY 8:00am – 9:00am		
<b>WEBSITE:</b>	<a href="http://www.alvincollege.edu">www.alvincollege.edu</a> or web address for individual discipline/program, if applicable		

## WELCOME TO ACC:

**Course Title: Machine Design**

**Course Number: DFTG 2406**

**Credit Hours: 4**

**Lecture Hours: 2**

**Lab Hours: 4**

**Total Contact Hours: 96**

**Term and Year: Spring 2018**

**Class Days & Times: Mondays – Lecture: 6:30pm – 7:20pm / Lab 7:30pm – 9:20pm**

**Classroom Location: N108**

### **A. COMMUNICATING WITH YOUR INSTRUCTOR**

All electronic communication between ACC faculty and students will be through college email. All correspondence **requires** use of your ACC email address (example@student.alvincollege.edu). Please be sure to check your email on a regular basis so that you do not miss important information.

If you are a new student or a returning student who does not have an email account, please access

<http://www.alvincollege.edu/Campus-Technology> to set-up your WebACCess ID and ACC student email account. Additional information, including technical assistance, can be acquired on the Campus Technology website or by phone (281.756.3544) and email (itservices@alvincollege.edu).

### **B. COURSE DESCRIPTION**

Theory and practice of design. Projects in problem-solving, including press fit, bolted and welded joints, and transmission components.

### **C. STUDENT LEARNING OUTCOMES**

Utilize the steps used in the design process, terminology, mechanical processes to produce drawings.

### **D. PRE-REQUISITE COURSES: DFTG 1433**

**CO-REQUISITES: None**

### **E. REQUIRED TEXTBOOK AND SUPPLEMENTAL READINGS**

**None**

For more information about the textbooks, including details about how to order your book online and have it delivered to you, visit the ACC College Store at [www.alvincestore.com](http://www.alvincestore.com).

## **F. COURSE OUTLINE**

Week 1 :	Course Introduction
Week 2 :	Design Process
Week 3 :	Principles Of Mechanisms
Week 4 :	Power Transmission - Gears
Week 5 :	Power Transmission - Cams
Week 6 :	Power Transmission - Pulleys
Week 7 :	Stress Analysis Using Solidworks Simulation
Week 8 :	Spring Break
Week 9 :	Exam
Week 10:	Stress Concentration
Week 11:	Interference Fit & Contact Analysis
Week 12:	Weldments
Week 13:	Design Optimization
Week 14:	Holiday
Week 15:	Final Exam Review
Week 16:	Final Exam

## **G. EXAMS AND MAJOR ASSIGNMENTS**

There will be lab assignments given for the material covered within the course. Each lab assignment varies in points and will be graded via Blackboard. There will be 2 exams given for the semester. Each exam will cover material covered within the course. Each exam is 100 points each and will be graded via Blackboard. Exam dates will be on Blackboard. All exams are to be taken in the Industrial Design Technology lab.

## **H. POLICIES ABOUT COURSEWORK AND DEADLINES**

NO LATE OR INCOMPLETE LAB ASSIGNMENTS OR EXAMS WILL BE ACCEPTED. Missing labs and exams will be given a grade of zero. Lab assignments and exams will be submitted in Blackboard. Do not email your assignments.

### **COURSE WORK SECURITY**

Be sure to back up all of your work on additional devices (flash drives, computers etc.) Software, computer, flash drive, internet, or Blackboard errors and/or mishaps will not be an excuse for late or missing course work. **ALL COURSE WORK WILL BE DUE ON THE DUE DATE GIVEN!** Just to be safe, attempt to submit home assignments at least 24 hours before the due date. It is your responsibility to know the due dates and times.

## **I. GRADING SUMMARY**

### **Grading System:**

90-100 A  
80-89 B  
70-79 C  
60-69 D  
Below 60 F

### **Grade Break-Down:**

Total Lab Assignment points + Total Exam Points = Total Points Earned (Total Points Earned / Total Possible points) x 100 = Final Grade

## **J. CLASS ATTENDANCE POLICY**

Alvin Community College students are required to attend classes. If an absence is unavoidable, the student is responsible for completing all work missed during the absence. Instructors will not withdraw students for non-attendance, except in developmental courses. Absences in excess of two weeks will be to be reported to the Office of Advising Services, along with appropriate recommendations. Departments and faculty may have other attendance policies for their course.

Faculty may issue the grade of FX for non-attendance after the official census date. The FX grade has no grade points assigned per semester hour due to a student's non-attendance.

#### **K. STUDENT CONDUCT**

It is the right of each student to participate in his or her learning, and it is the responsibility of each student to not interfere with the learning of other students. It is the expectation of the college that each student assumes the responsibility to follow college policies and procedures governing classroom conduct on campus and online. Instructors are authorized to establish within reason, rules of conduct within the classroom. Instructors may ask a student to temporarily leave the classroom whenever the behavior is believed to be disruptive or inappropriate. Additional information is located in the [ACC Student Handbook](#).

#### **L. CODE OF ACADEMIC INTEGRITY AND HONESTY**

Alvin Community College students are members of an institution dedicated to the pursuit of knowledge through a formalized program of instruction and learning. At the heart of this endeavor, lie the core values of academic integrity which include honesty, truth, and freedom from lies and fraud. Because personal integrity is important in all aspects of life, students at Alvin Community College are expected to conduct themselves with honesty and integrity both in and out of the classroom. Incidents of academic dishonesty will not be tolerated and students guilty of such conduct are subject to severe disciplinary measures. Additional information is located in the [ACC Student Handbook](#).

#### **M. WITHDRAWAL FROM CLASS/COLLEGE**

It is recommended that the student talk to the instructor before withdrawing. Current course withdrawal information can be found in the printed version of the ACC Schedule for this semester or online at [ACC Course Withdrawal Instructions](#). Students who file withdrawal requests by the published deadline and have not exceeded the withdrawal maximum will receive a grade of W.

##### **Six Drop Limit**

The Texas Legislature passed a ruling that limits the number of classes a student can drop during their years as an undergraduate student to six. This policy applies to any student who was a first time college freshmen fall, 2007, or later, who attends a Texas public institution of higher education. Courses dropped while attending a private or out of state college do not count toward the six drop limit. For further information, refer to the [ACC Catalog](#) or contact Student Services.

#### **N. EVALUATION OF INSTRUCTION**

Alvin Community College is dedicated to student success. As part of its ongoing improvement efforts, students will provide input for each course prior to the end of the semester enrolled. Evaluations will be completed in either online or paper format as directed by the Office of Institutional Effectiveness & Research.

#### **O. COURSE GRADE APPEAL PROCESS**

Students have one year from the date of the grade assignment to challenge a grade. Refer to the grade appeal process as published in the [ACC Catalog](#).

#### **P. STUDENTS RIGHTS AND RESPONSIBILITIES**

Know your student rights and responsibilities by reviewing the ACC Student Handbook available in the POD under Student Support Services.

The College encourages students to discuss their concerns with the appropriate instructor or other campus administrator who has the authority to address the concerns. Concerns should be expressed as soon as possible to allow early resolution at the lowest possible administrative level. Informal resolution shall be encouraged but shall not extend any deadlines in this policy, except by mutual written consent. Students interested in learning more about the complaint process, may go to the ACC website at <http://www.alvincollege.edu/Campus-Information/Student-Complaints> for additional information.

#### **Q. ACC ACADEMIC SUCCESS AND SUPPORT SERVICES**

The [ACC Library](#) is an excellent source for research and writing help. Quiet rooms are available for studying and doing class work. For more information, visit the [ACC Library Website](#) or call 281-756-3559.

The [ACC Tutoring/Learning Lab](#), located upstairs in building A, provides students with a variety of services including tutoring (math, writing, and other disciplines); computers and printers; and tables/carrels. Call 281-756-3566 or visit the [ACC Tutoring/Learning Lab Website](#) for more information.

#### **Educational Technology**

Alvin Community College educational technology includes [MY Blackboard](#) for distance delivery and web-enhancement of courses. Technical support can be obtained by completing the [Online Support Form](#).

All students have a [WEBACCESS](#) account to access numerous college services. If you need information or experience problems with WebACCess, your password, computers in a campus lab, or college email, please call the Help Desk at 281-756-3544 or email [helpdesk@alvincollege.edu](mailto:helpdesk@alvincollege.edu).

#### **Financial Literacy Resources**

Various financial literacy resources can be found at <http://www.alvincollege.edu/Financial-Literacy> . These resources are designed to help improve students' understanding of financial concepts and services.

#### **Food and Toiletry Assistance**

Students in need of assistance with food or toiletry items should contact: [food@alvincollege.edu](mailto:food@alvincollege.edu) or [toiletries@alvincollege.edu](mailto:toiletries@alvincollege.edu) .

#### **Americans with Disabilities Act**

ACC complies with ADA and 504 Federal guidelines by affording equal access to individuals who are seeking an education. Students who have a disability and would like classroom accommodations must register first with the Office of Disability Services, A 136, or call 281-756-3533. Instructors are not able to provide accommodations without approved documentation from the Office of Disabilities.

#### **Assessment and Care Team (ACT)**

ACT is committed to providing ACC staff, employees and students with supportive resources through practical, collaborative and thoughtful approach to the prevention, identification, assessment, intervention and holistic management of situations that may be disruptive in a student's academic progress or to the well-being of campus employees. To educate and empower all members of the College community, resources and procedures are available to prevent, deter, and respond to concerns.

The Alvin Community College ACT accepts reports regarding any individual or incident at any time through an online referral form on the Assessment and Care Team page at <http://www.alvincollege.edu/ACT>, direct email to: [ACareTeam@alvincollege.edu](mailto:ACareTeam@alvincollege.edu), or by contacting the Alvin Community College Police Department at 281-756-3700 or 832-250-3365 (after hours).

### **R. MENTAL HEALTH COUNSELING AND SUICIDE PREVENTION SERVICES**

Students may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating, and/or lack of motivation. These mental health concerns or stressful events may diminish academic performance and/or reduce the ability to participate in daily activities. ACC Counseling Service assist students with issues that may negatively impact academic success. To contact a counselor, call the office of Advising Services at 281-756-3534. Consultation and referrals are confidential. The Counseling Referral form is located at: <http://www.alvincollege.edu/CounselingServices.aspx>

#### **Emergencies:**

If you or someone you know at ACC feels overwhelmed, hopeless, depressed, and/or is thinking about dying by suicide, supportive services are available by calling 281-756-3531 and asking to speak with a Counselor. You may also call the National Suicide Prevention Hotline 1-800-273-8255. This is a 24 hour, toll free, confidential suicide prevention hotline available to anyone in suicidal crises or emotional distress. If, however, you or someone you know is in an immediate crisis, go to the nearest emergency room, or call 911.

### **S. DISCLAIMER**

Faculty reserve the right to modify this syllabus as needed and will notify the students of any changes using email or Blackboard.