

INSTRUCTOR:	Luis Hernandez	E-MAIL:	lhernandez@alvincollege.edu
OFFICE:	N107	PHONE:	281-756-3784
OFFICE HOURS:	By appointment		
WEBSITE:	www.alvincollege.edu or web address for individual discipline/program, if applicable		

WELCOME TO:

Course Title: Structural Drafting

Course Number: ARCE 2452

Credit Hours: 4

Lecture Hours: 2

Lab Hours: 6

Total Contact Hours: 128

Term and Year: Fall 2017

Class Days & Times: Mondays Lecture 7:00pm – 8:20pm / Lab 8:30pm – 9:50pm

Classroom Location: N108

A. COMMUNICATING WITH YOUR INSTRUCTOR

The preferred method of communicating with your instructor is through the ACC email or you may call me at 281-756-3784. Please leave your first and last name, a phone number or an e-mail address where I can contact you and explain what you need to discuss with me.

B. COURSE DESCRIPTION

A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute

C. STUDENT LEARNING OUTCOMES

Identify components of structural systems; use reference materials; produce drawings for concrete, wood, and steel framing systems; draw design details and connections for framing components; and draw column and beam details for manufacture and assembly utilizing various fastening methods.

D. PRE-REQUISITE COURSES:

DFTG 2419

CO-REQUISITES: N/A

E. REQUIRED TEXTBOOK AND SUPPLEMENTAL READINGS

Structural Steel & Design (Second Edition) David C. MacLaughlin / Hector Estrada, USB Flash drive (1GB minimum), (1) One inch three ring binder.

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.alvincstore.com.

F. COURSE OUTLINE

1. Chapter 1 & 2, Discuss: Introduction to class, Cad Software, Review Arch & Structural Experience, Steel Manual & Members sizes, Structural erection drawings, shop details & bill of material Lab #2: Identify member sizes in Steel Manual, Create blank structural erection drawings, shop details & bill of material
2. Test #1, Discuss: Steel building framing, Metal roofing Component, Connection Lab #3: Identify steel framing, metal roofing component, connection plate & clip information
3. Chapter 3 & 4, Discuss: Metal sheeting & trim, Wooden Framing, Bracing Lab #4: Identify Metal sheeting & trim, Wooden Framing, Bracing
4. Chapter 5, Discuss: Concrete Slab, CMU construction, Curved Members, Joist Lab #5: Identify Concrete Slab, CMU construction, Curved Members, Joist
5. Chapter 6 & 7, Discuss: Anchor Rods plan & details, Lab #6: Identify Anchor Rods plan & details, drawing Anchor Rod plan & details
6. Test #2, Chapter 8 & 9, Discuss: Stairs, Handrails, & Caged Ladder Lab #7: Identify Stairs, Handrails, & Caged Ladder parts
7. Chapter 10 & 11, Metal grating, Concrete Deck Lab #8: Identify Metal grating, Concrete Deck
8. Chapter 12 & 13, Crane beam, Support columns, & bracing Lab #9: Identify Crane beam, Support columns & bracing parts
9. Discuss: Building Framing, Steel take off, Estimating detail schedule, Lab #10: Detail column, rafter, secondary framing
10. Test #3, Discuss: Metal sheeting & trim, MBCI web site Lab #11: Detail sheeting & trim, MBCI web site
11. Discuss: Arch. Drawing take-off of commercial & residential. Lab #12: Mark-up drawings for take-off & estimate
12. Discuss: Final Exam project, shop detail , & design for final Lab #13: Prep E-drawing, shop detail, & design for final
13. Discuss: Final Exam project, shop detail , & design for final Lab #14: Prep E-drawing, shop detail, & design for final
14. Finals assigned
15. Finals due

G. EXAMS AND MAJOR ASSIGNMENTS

There will be lab assignments given for the material covered within the course. The lab assignments are to be completed during lab time. Each lab assignment varies in points and will be graded via Blackboard. There will be home assignments given for the material covered within the course. The home assignments are to be completed and submitted by the date given on Blackboard. Each home 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

Lab assignments are due at the end of the lab time. Home assignments and exams with due dates will be posted on Blackboard. NO LATE OR INCOMPLETE LAB ASSIGNMENTS, HOME ASSIGNMENTS OR EXAMS WILL BE ACCEPTED. Missing labs, home assignments and exams will be given a grade of zero. Lab assignments, home 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

Grade Break-Down:

Labs: 50%, Semester Projects 20%, Exams 30%

J. WITHDRAWING 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.

K. 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 at <http://www.alvincollege.edu/Programs-Degrees/Course-Catalogs>.

L. 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 are to be reported to the Office of Advising Services, along with appropriate recommendations. Departments and faculty may have other attendance policies for their course.

M. 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.

N. CLASSROOM PROTOCOL

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. This information is published in the ACC Student Handbook on page 42.

O. 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.

P. ACC ACADEMIC SUCCESS AND SUPPORT SERVICES

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.

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.

[ACC Counseling Services](#) assist students with issues that may negatively impact academic success. To contact a counselor, call the office of Advising Services at 281-756-3534.

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 until the proper process has been followed.

Assessment and Care Team (ACT)

The Assessment and Care Team is committed to improving community safety through a proactive, collaborative, coordinated, objective, and thoughtful approach to the prevention, identification, assessment, intervention and management of situations that pose a threat to the safety and well-being of the campus community. To educate and empower all members of the College community, resources and procedures are in place to prevent, deter, and respond to concerns regarding acts of violence. Alvin Community College offers assistance to departments and individuals in detecting indicators for concern and resources to protect themselves and their environments.

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, or by contacting the Alvin Community College Police Department at 281-756-3700 or 832-250-3365 (after hours).

[MY Blackboard](#) support can be obtained by completing the [Online Support Form](#).

[WEBACCESS](#), Passwords or ACC Computer Lab Information: If you experience problems with WebACCess, please call the Help Desk at 281-756-3544 or email helpdesk@alvincollege.edu.

Q. MENTAL HEALTH COUNSELING AND SUICIDE PREVENTION SERVICES

As a student, you 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 your academic performance and/or reduce your ability to participate in daily activities. Advising services employs two Licensed Professional Counselors who can assist students with issues that negatively impact academic success. 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 requests at the Enrollment Services Center or by calling 281-756-3531, ask for 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.

R. DISCLAIMER

(The instructor reserves the right to modify this syllabus as needed and will notify the students of any changes using email or Blackboard.)