# Structural Steel Detailing 202410.ARCE1315.1A1

### **CREDIT**

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

#### MODE OF INSTRUCTION

Hybrid

# PREREQUISITE/CO-REQUISITE:

**DFTG 2319** 

### **COURSE DESCRIPTION**

This course covers the preparation of structural steel drawings and bills of material for the purpose of fabrication and erection. Emphasis will be placed upon using structural design framing plans to develop detailed steel members, connections and assemblies.

## **COURSE OBJECTIVES**

Upon completion of this course, the student will be able to

- 1. Use AISC, ASD, LRFD, and OSHA standards
- 2. Interpret and draw design / erection drawing
- 3. Detail structural beams from a design drawing
- 4. Detail structural columns from a design drawing
- 5. Make a basic structural bill of materials
- 6. Detail structural platforms with flooring, handrail, ladder and stairs

#### INSTRUCTOR CONTACT INFORMATION

Instructor: Brent Campbell

Email: bacampbell@lit.edu

Office Phone: 409-245-8667

Office Location: TA5 room 108B

Office Hours: Thursday 7:30pm –8:30pm

## **REQUIRED TEXTBOOK AND MATERIALS**

- 1. Structural wheel
- 2. Flash Drive 1GB minimum

Approved: SAS / 12/1-2023



- 3. Access to computer with AutoCAD
- 4. Notebook with dividers
- 5. Basic sketch equipment
- 6. Calculator

### ATTENDANCE POLICY

All work during absence must be made up.

20% absence allowed – 4 tardies are equivalent to 1 absence.

Miss more than 20% of classes and receive a grade of F for the course.

## **DROP POLICY**

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

#### **COURSE CALENDAR**

DATE	TOPIC	READINGS	ASSIGNMENTS
		(Due on this Date)	(Due on this Date)
Week 1	Intro & equipment		All assignments due
Week 2	Borders		Per semester schedule
Week 3	Beam basics, anatomy		Shown in blackboard
Week 4	Connections		
Week 5	Beams		
Week 6	Columns		
Week 7	Blocks & cuts		
Week 8	Beam details		
Week 9	Beam details		
Week 10	Beam details		
Week 11	Column details		
Week 12	Column details		
Week 13	Bracing		
Week 14	Assemblies		
Week 15	Assemblies		
Week 16	Final details & notebooks		

## **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

Assignments 25%

Test 25%

Professionalism 10%

Projects 20%

Final 20%

## **GRADE SCALE**

• 90-100 A

• 80-89 B

• 70-79 C

• 60-69

• 0-59 F

### **TECHNICAL REQUIREMENTS**

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <a href="https://lit.edu/online-learning/online-learning-minimum-computer-requirements">https://lit.edu/online-learning/online-learning-minimum-computer-requirements</a>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

## **DISABILITIES STATEMENT**

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email <a href="mailto:specialpopulations@lit.edu">specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations@lit.edu">Specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations">Specialpopulations</a>—

## STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at <a href="https://www.lit.edu">www.lit.edu</a>. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

## **STARFISH**

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

# ADDITIONAL COURSE POLICIES/INFORMATION

- 1. No food, drinks or use of tobacco products in class.
- 2. No foul or harsh language will be tolerated.
- 3. Turn off all cell phones during lectures.
- 4. Headphones may be worn only upon instructor approval.
- 5. Do not bring children to class.
- 6. No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can

and will be removed from the class for the semester. Cheating can result in expulsion from LIT.

7. If you wish to drop a course, the student is responsible for initiating and completing the drop process.

If you stop coming to class and fail to drop the course you will earn an "F" in the course.

8. Back-ups

It is the student's responsibility to make back-up copies of their work. Do not rely on the server to be

there 100% of the time. I cannot help you if you lose your work. Remember that in order for your work

to be graded it must be turned in.

- 9. Internet usage
  - a. Classroom computers have access to the internet.
  - b. Student usage of the internet will be monitored.