CIVL 3121 What is CIVL 3121? 1/2



# What is CIVL 3121?

Course Title: Structural Analysis I

Course Description:

Analysis of statically determinate structures; reactions, shear, and moment; truss analysis; deflections; influence lines and moving loads.



# What is CIVL 3121?

Prerequisites: CIVL 2131 - Statics

Corequisites: CIVL 3322 - Mechanics of Materials

Course Meetings:

Tuesday/Thursday; 9:40 - 11:05 ES 114

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## What is CIVL 3121?

Instructor:

Dr. Charles Camp, Office: ES 106B

Phone: 678-3169 (office) Email: cvcamp@memphis.edu

Office hours:

An "open door policy" or by appointment

Class web site: www.ce.memphis.edu/3121



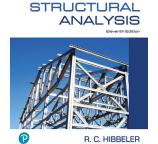
## What is CIVL 3121?

Required Textbooks:

#### **Structural Analysis**

Russell C. Hibbeler 11<sup>th</sup> Edition Pentice-Hall, 2024

ISBN-13: 9780138026394



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## What is CIVL 3121?

## Course Learning Outcomes

Course Learning Outcomes	POs*	Assessment Tools
Compute the determinacy and stability of structures.	1	Homework
Analyze truss structures	1, 2, 3, 6	Homework and Exam
Determine the shear force and moment in beams and frames	1	Homework and Exam
4. Determine influence lines for beams	1	Homework and Exam
Compute deflections of beams using direct integration, conjugate beam, and energy methods.	1, 2, 3, 6	Homework and Exam



## What is CIVL 3121?

### Course Learning Outcomes

- An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply both analysis and synthesis in the engineering design process, resulting in designs that meet desired needs.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to recognize the ongoing need for additional knowledge and locate, evaluate, integrate, and apply this knowledge appropriately.
- An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

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## What is CIVL 3121?

#### Grading

The final grades for the course will be based on the following percentages:

Components	Percentages	
Homework	10%	
Weekly Quizzes	10%	
2 Exams (25% each)	50%	
Final Exam	30%	



# What is CIVL 3121?

### Grading

Final letter grades will be based on the following scale which reflects the percentages as noted above.

Exam/Homework	Grade
90-100	Α
87-89	B+
84-86	В
80-83	B-
77-79	C+
74-76	С
70-73	C-
Below 70	F

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# What is CIVL 3121?

### Grading

- Regular attendance is necessary to maintain pace with the lectures and the class's progress.
- If you must be absent, please make sure you know the assignment for the following class meeting and turn in any work due that day.



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# What is CIVL 3121?

### Make-up Work

- Generally, if a student misses a quiz or an exam, a score of zero will be recorded.
- However, the student may be allowed to make up an exam if a valid reason for the absence is presented to the instructor at the next class meeting.
- If the student must miss an exam because of a conflict in their schedule, they must notify the instructor in writing at least two days before the absence.

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# What is CIVL 3121?

## Make-up Work

➤ To have your two lowest quiz scores two lowest homework scores excluded from your class average, join the Remind page of the class (remind.com) using the code **ce3121**.





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What is CIVL 3121?

Any questions?



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