



## North Central State College

### MASTER SYLLABUS

2025-2026

A. Academic Division: Engineering Technology, Business & Criminal Justice Division

B. Discipline: Mechanical Engineering

C. Course Number and Title: MECT2330 Statics

D. Assistant Dean: Brooke Miller, M.B.A.

E. Credit Hours: 3  
Lecture: 2 hours  
Laboratory: 2 hours

F. Prerequisites: PHYS1110c

G. Last Course/Curriculum Revision Date: Fall 2025    Origin date: 07/28/2011

H. Textbook(s) Title:

*Applied Statics & Strength of Materials*

- Author: Limbrunner
- Copyright Year: 2022
- Edition: 7th
- ISBN: 9780135716762

I. Workbook(s) and/or Lab Manual: None; Class Handouts will be distributed

J. Course Description: A problem course dealing with bodies at rest; it lays the necessary groundwork for further study in the design and analysis of structures and machines. Emphasis is placed upon the importance of the ability to draw free-body diagrams used in solving problems. (TAG # OET007)

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:



# North Central State College

## SYLLABUS ADDENDUM

<b>Academic Division:</b>	Engineering Technology, Business & Criminal Justice Division	<b>Discipline:</b>	Mechanical Engineering Technology
<b>Course Coordinator:</b>	Brooke Miller		
<b>Course Number:</b>	MECT-2330	<b>Course Title:</b>	Statics
<b>Semester / Session:</b>	Fall 2025/ Session A	<b>Start / End Date:</b>	8/11/2025 thru 12/13/2025

### Instructor Information

<b>Name:</b>	Hemanta Dulal	<b>Credentials:</b>	MS in Mechanical Engineering
<b>Phone Number:</b>	419-755-4702	<b>E-Mail Address:</b>	hdulal@ncstatecollege.edu
<b>Office Location:</b>	Kehoe Center Room 005	<b>Office Hours:</b>	By Appointment (MW 1:45-5:00PM)

### I. Topical Timeline / Course Calendar (Subject to Change):

Class	Week of:	Topic	Chapter/section	Homework
1	08/11/2025	Chapter 1: Introduction	1.1 – 1.6	Chapter 1 Homework
2	08/18/2025	Quiz #1	1.1 – 1.6	
3	08/26/2025	Chapter 2: Principles of Statics	2.1 – 2.8	Chapter 2 Homework
4	09/02/2025	Quiz #2	2.1 – 2.8	
5	09/09/2025	Chapter 3: Resultants of Coplanar Force Systems	3.1 – 3.7	Chapter 3 Homework
6	09/16/2025	Quiz #3	3.1 – 3.7	
7	09/23/2025	Chapter 4: Equilibrium of Coplanar Force Systems	4.1 – 4.6	Chapter 4 Homework Midterm Exam
8	09/30/2025	Midterm	1.1 – 4.6	
9	10/07/2025	Fall Break – No Class		
10	10/14/2025	Chapter 5: Analysis of Structures	5.1 – 5.6	Chapter 5 Homework
11	10/21/2025	Quiz #4	5.1 – 5.6	
12	10/28/2025	Chapter 6: Friction	6.1 – 6.7	Chapter 6 Homework
13	11/04/2025	Quiz #5	6.1 – 6.7	
14	11/11/2025	Chapter 7: Centroids and Centers of Gravity	7.1 – 7.4	Chapter 7 Homework
15	11/18/2025	Quiz #6	7.1 – 7.4	
16	11/25/2025	Thanksgiving Break (11/27 – 12/1)		
17	12/02/2025	Chapter 8: Area Moments of Inertia	8.1 – 8.6	Chapter 8 Homework
18	12/09/2025	Final Exam	All Sections	Final Exam

### II. Grading and Testing Guidelines:

#### Final Grade Calculation

Activity	Qty	Points	Percentage
Quizzes			20%
Mid-term			30%
Final			30%
Homework			20%

Course Number: \_\_\_\_\_  
Semester / Session: \_\_\_\_\_

Course Title: \_\_\_\_\_  
Start / End Date: \_\_\_\_\_

### III. Examination Policy:

1. The reasons for which a student will be excused from taking an examination \_\_\_\_\_
  - a. Hospitalization (with documented verification)
  - b. Death in the immediate family (with documented verification)
  - c. Personal illness or illness in immediate family - (doctor's excuse required).
2. A student who misses an examination for any reason is responsible for loss of the points.
3. No makeup opportunity will be given for absences of unscheduled quizzes.

### IV. Class Attendance and Homework Make-Up Policy:

Attendance Requirements: All students are required to attend all scheduled classes and examinations. Each faculty member has the right to establish regulations regarding attendance that he/she considers necessary for successful study.

Students who do not attend classes may be administratively withdrawn from those classes. However, failure to attend classes does not constitute withdrawal, and students are expected to process a formal withdrawal through the Student Records Office in Kee Hall.

### V. Classroom Expectations:

As a NC State Student, be it it online or hybrid, your conduct in this course is subject to the NC State Student Code of Conduct. [Links to an external site.](#)

As a future professional in your field, **you will be expected to conduct yourself as a professional in this course in ALL work and communications** - be it assignments, discussion forums, Canvas Inbox, emails etc.

This includes but is not limited to:

- **Being respectful of classmates' opinions, work and comments**  
*Good test = Is this something I would/should say to a co-worker in person?*
- **Being respectful in communications with the instructor**  
*Good test = Is this something I would/should say to my boss in the workplace?*
- **Being respectful of diversity**  
*Good test = Is this a comment/joke that is at some other groups, ethnicity, political etc. expense?*  
**Note: Offensive "jokes", slurs or hate speech** [Links to an external site.](#) will NOT be tolerated
- **Using Non-Profane, Appropriate Language**  
*Good test = Is this language you would use in the workplace or in front of your grandmother?*
- **Using proper. NON-"Text speak" Language to make Yourself Easily Understood**  
*Good test = Could my older boss understand what I have written?*

**Failure to conduct yourself as a professional and meet standards above in this course will result in the following consequences** in this course:

- **1st Instance** = Written warning from the instructor documenting issue  
*(No points deductions)*
- **2nd offense** = **Mandatory** meeting with the instructor and or Department Chair or Division Dean  
*(Related assignment/Participation subject to Point Deductions)*
- **3rd offense:** College Disciplinary procedures filed with the NC State Judicial Committee as a violation of the Student Code of Conduct.  
*(Course Grade subject to F)*

Course Number: \_\_\_\_\_  
Semester / Session: \_\_\_\_\_

Course Title: \_\_\_\_\_  
Start / End Date: \_\_\_\_\_

**Extreme or repeated unprofessional behavior will result in initiating college disciplinary procedures** as outlined in [the NC State Student Code of Conduct](#). [Links to an external site.](#) NCSC Disciplinary hearings can result in a variety of consequences, including and up to suspension or being expelled from the college.

Outcomes	Assessments – How it is met & When it is met
1. Solve for forces in all planar structures for machines at rest, or in constant motion, with due regard to friction.	Problem based quizzes, homework and exams
2. Solve for forces in selected space frames and trusses.	Problem based quizzes, homework and exams
3. Analyze and compute centroids and moment of inertia	Problem based quizzes, homework and exams

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70–72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Poor
00–59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.\* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

\* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

**Important information regarding College Procedures and Policies can be found on the syllabus supplement located at**

**<https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf>**