# **Clackamas Community College**

Online Course/Outline Submission System

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Section #1 General Course Information		
Department:Engineering Science		

Submitter

First Name: Eric Last Name: Lee Phone: 6163 Email: elee

## Course Prefix and Number: ENGR - 211

## # Credits:4

Contact hours

Lecture (# of hours): 44 Lec/lab (# of hours): Lab (# of hours):

Total course hours: 44

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

## Course Title: Statics

**Course Description:** 

First term of engineering mechanics sequence. This course focuses on the study of force systems acting on particles or rigid bodies under equilibrium conditions.

## Type of Course:Lower Division Collegiate

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?
No
Is this course part of an AAS or related certificate of completion?
No
Are there prerequisites to this course?
Yes
Pre-reqs:Pass MTH-252
Have you consulted with the appropriate chair if the pre-req is in another program? Yes (A 'Yes' certifies you have talked with the chair and have received approval.)*
Are there corequisites to this course?
Yes
Co-reqs:PH-211
Are there any requirements or recommendations for students taken this course?
No
Are there similar courses existing in other programs or disciplines at CCC?
No
Will this class use library resources?
No
Is there any other potential impact on another department?
No
Does this course belong on the Related Instruction list?
No
GRADING METHOD:
A-F or Pass/No Pass
Audit:No
When do you plan to offer this course?
✓ Fall

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

#### No

Will this course appear in the college catalog?

#### Yes

Will this course appear in the schedule?

## Yes

**Student Learning Outcomes:** 

Upon successful completion of this course, students should be able to:

- 1. represent forces, moments, and couples in a vector setting;
- 2. apply the concept of equilibrium to solve engineering problems in which a body is fixed in place.
- 3. calculate the moments of inertia for two dimensional shapes.

This course does not include assessable General Education outcomes.

#### Major Topic Outline:

- 1. General Principles.
- 2. Force Vectors.
- 3. Equilibrium of a Particle.
- Force Systems Resultants.
- 5. Equilibrium of a Rigid Body.
- 6. Structural Analysis, Internal Forces.
- 7. Friction.
- 8. Center of Gravity and Centroid.

Does the content of this class relate to job skills in any of the following areas:

Increased energy efficiency
 Produce renewable energy
 Prevent environmental degradation
 Clean up natural environment
 Supports green services

No

Percent of course:0%

## Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

- 1. Is there an equivalent lower division course at the University?
- 2. Will a department accept the course for its major or minor requirements?
- 3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

## ✓ PSU (Portland State University)

✓ OIT (Oregon Institute of Technology)

✓ OSU (Oregon State University)

Identify comparable course(s) at OUS school(s)

Oregon Tech - ENGR 211 OSU - ENGR 211 PSU - EAS 211

How does it transfer? (Check all that apply)

✓ required or support for major

First term to be offered:

Next available term after approval

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