



### The Scenario:

It is January 18th. You are a student enrolled in MET 320 and have logged in and are ready to continue your class. You have already viewed the welcome module and have completed some of the Fundamental Principles Module.

These notes appear on the mockup to assist you in navigating through the features.

[Go to PLE Mockup](#)

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↻

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

🔔

1

🌲

Icon to be determined

New Feature

Indicates completed module

✓

Indicates module in progress

Resume

Announcement

1/16/2015 10:13 AM

Assignment 2 has been updated to clarify Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur

[Previous Announcements](#)

» 0. Welcome and Course Logistics

▼

» 1. Fundamental Principles

▼

» 2. Bending of Beams

▼

» 3. Shearing Stress

▼

» 4. Stress in any Given Direction

▼

» 5. Design for Cyclic Loading

▼

New Features

On this page:  
1. Close the announcement.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⏮

⏭

🔄

http://someURL.odu.edu

🏠

Some Bookmark

🔖

Some Other Bookmark

➔

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔 1

👤

🌲

✅

» 0. Welcome and Course Logistics

⌵

Resume

» 1. Fundamental Principles

⌵

» 2. Bending of Beams

⌵

» 3. Shearing Stress

⌵

» 4. Stress in any Given Direction

⌵

» 5. Design for Cyclic Loading

⌵

» 6. Design of Shafts

⌵

⌵

Click to reveal content.  
Stays open unless closed,  
therefore more than one can be open at a time.

Reveals quick assignment  
list and module options

- On this page:
1. View the notifications
  2. View the user menu
  3. View the assignment quick list and module options.
  4. Open module 2.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⏮

⏭

🔄

http://someURLodu.edu

🏠

Some Bookmark

📌

Some Other Bookmark

➔

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍

search

🔔

<sup>1</sup>

👤

🌲

✅

» 0. Welcome and Course Logistics

▼

Resume

» 1. Fundamental Principles

▼

» 2. Bending of Beams

▼

» 3. Shearing Stress

▼

» 4. Stress in any Given Direction

▼

» 5. Design for Cyclic Loading

▼

» 6. Design of Shafts

▼

▼

✓ 2.A Complete Readings

2.B Homework #1

2.C Greeting Message

2.D Module Feedback

Module Resources

Print Module

On this page:  
1. View the module resources.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

Resume

0. Welcome and Course Logistics

1. Fundamental Principles

1.1 Overview

1.A Complete Readings - Due 1/14/2015 at 11:59 PM

1.2 Course Introduction and Statical Equilibrium

12.1 Introduction to Design of Machine Elements

12.2 Defining Engineering and the Design Process

12.3 Stages of Design

12.4 Utilizing Machine Design Information and Standards

12.5 Computational Tools

12.6 Defining Statistical Equilibrium

1.B Homework #1 - Due 1/18/2015 at 11:59 PM

1.3 Engineering Materials

13.1 Assumptions

1.4 Compressive Stress and Strain

14.1 Tension and Compression Stress

14.2 Strain

14.3 Stress and Strain Diagram

14.4 Hooke's Law

1.5 Tension and Compression in SI Units

15.1 Conversion Factors

1.C Greeting Message - Due 1/18/2015 at 11:59 PM

1.6 Force and Mass

16.1 Force and Mass

1.7 Statistically Indeterminate Problems

17.1 Statistically Indeterminate Problems

17.2 Example Problem #1

17.3 Example Problem #2

1.8 Center of Gravity

18.1 Center of Gravity

18.2 Composite Areas

18.3 Example Problem #3

1.9 Summary

1.D Module Feedback - Due 1/19/2015 at 11:59 PM

On this page:  
1. Start at topic 2.1  
(in the scenario you've  
already completed 2.1 -  
2.2.6, but starting at 2.1 will  
navigate you through the  
various content layouts for  
this demo.)

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

Home

»

Announcements

Announcements

January 18, 2015 11:00 AM

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

January 15, 2015 10:15 AM

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

January 12, 2:00 PM

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

On this page:  
1. Go back to the home page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⬅️➡️🔄

http://someURL.odu.edu

🏠

Some Bookmark

📌

Some Other Bookmark

➡️

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔<sup>1</sup>

👤


Announcements

My Questions 1

My Posts

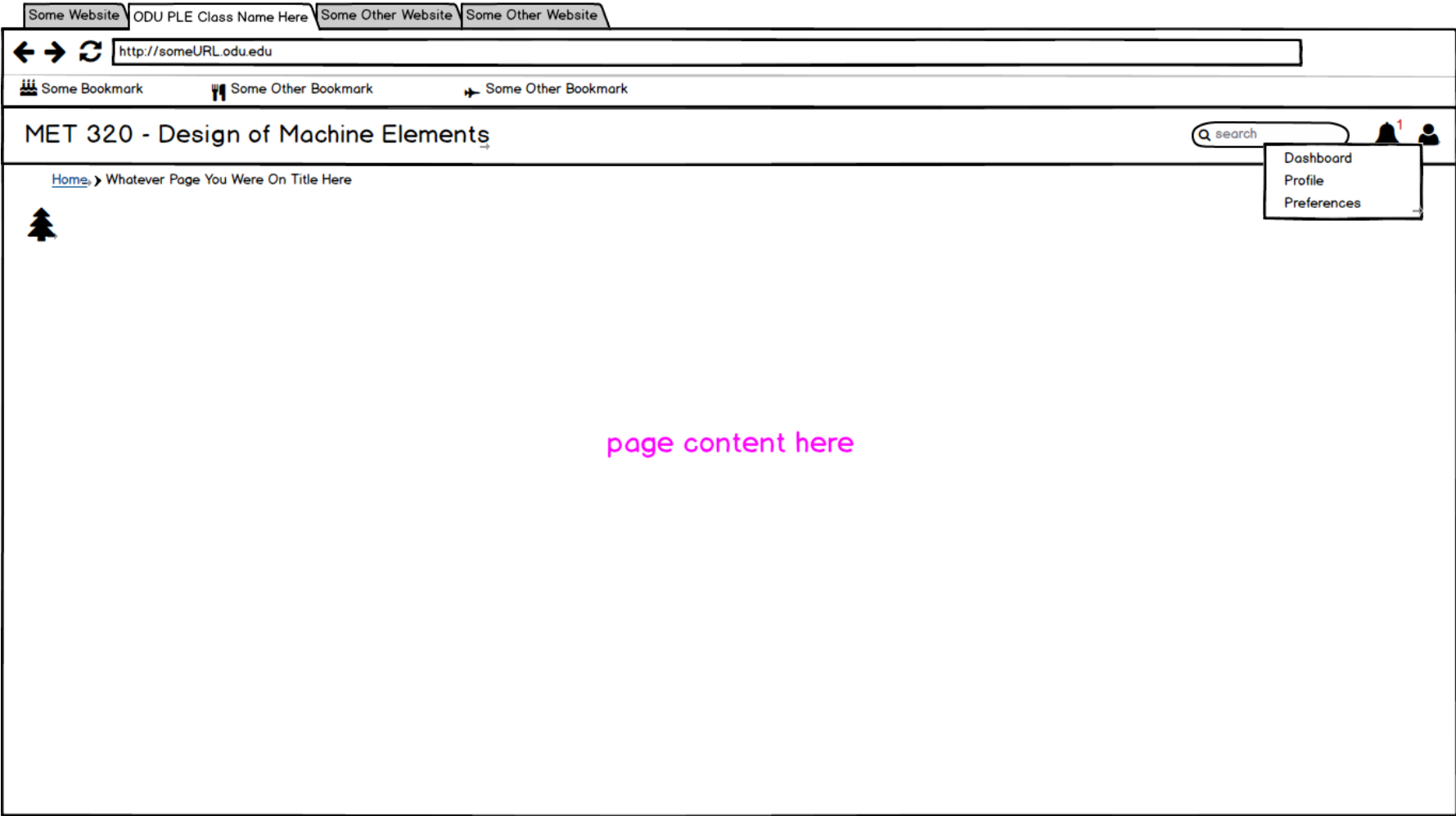
My Drafts

[Home](#) > Whatever Page You Were On Title Here



page content here

On this page:  
1. Go back to the home page.



On this page:  
1. View the preferences.



Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⏮

⏭

🔄

http://someURL.odu.edu

🏠

Some Bookmark

📌

Some Other Bookmark

➡

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔

1

👤

Home

➤

Preferences

🌲

Preferences

Printing

Discussion Notifications

☐ Print transcripts when printing content

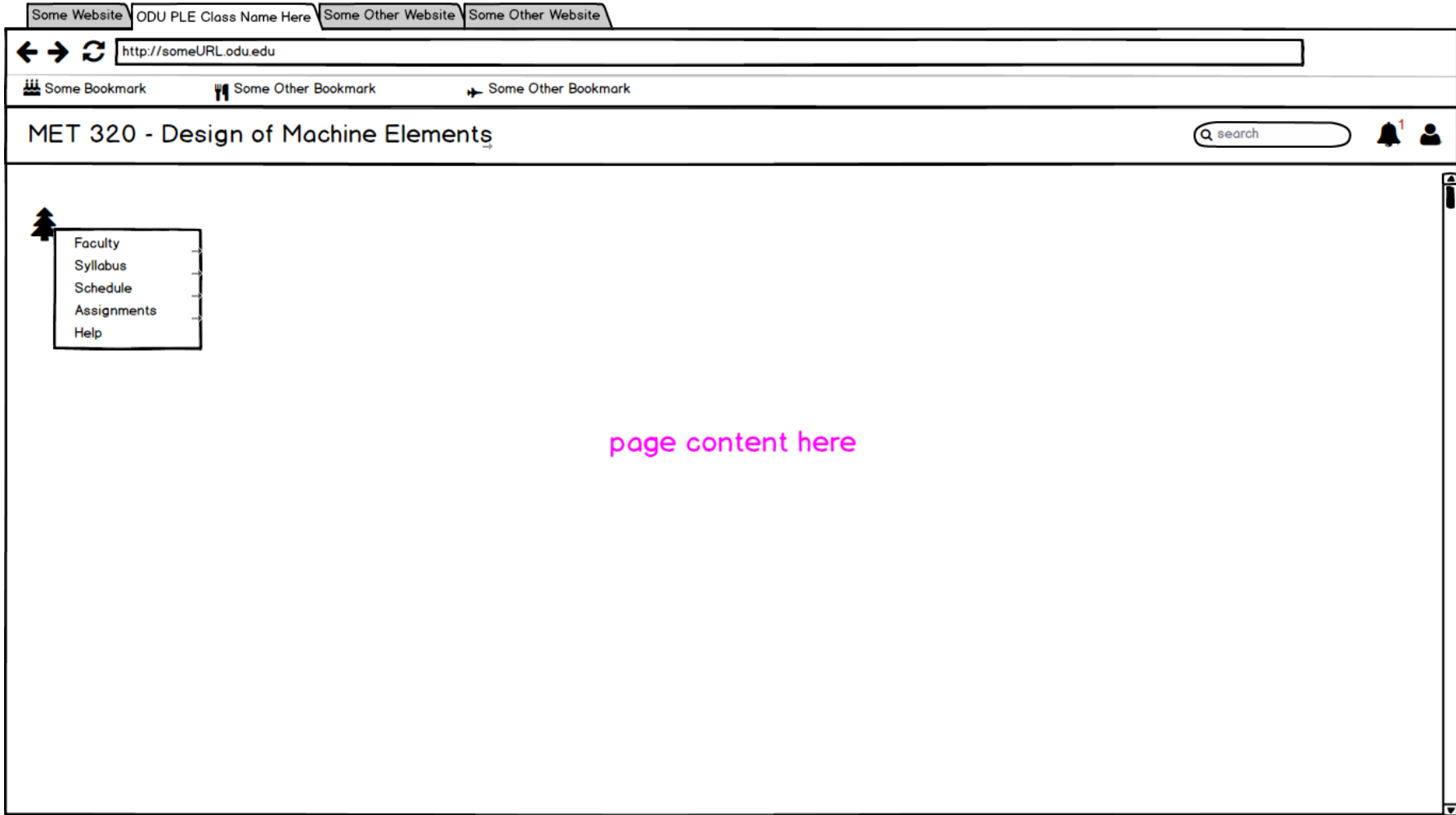
☐ Email

☐ Text

other preferences here

Set Preferences

On this page:  
1. Go back to the home page.



On this page:  
1. View the following:  
- faculty  
- syllabus  
- schedule  
- assignments

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⏮

⏪

↺

http://someURL.odu.edu

🏠

Some Bookmark

👤

Some Other Bookmark

➔

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍

search

🔔

<sup>1</sup>

👤

[Home](#) > Assignments

🌲

Assignments

✅

» 1. Welcome and Course Logistics

1/12/2015 - 1/14/2015

📅

» 2. Fundamental Principles

1/14/2015 - 1/19/2015

✅

📅

[2.A Complete Readings](#)

Due 1/14/2015 at 11:59 PM

✅

📅

[2.B Greeting Message](#)

Due 1/18/2015 at 11:59 PM

📅

2.C Homework #1

Due 1/18/2015 at 11:59 PM

📅

[2.D Module Feedback](#)

Due 1/19/2015 at 11:59 PM

📅

» 3. Bending of Beams

1/19/2015 - 1/28/2015

📅

» 4. Shearing Stress

1/29/2015 - 2/8/2015

📅

» 5. Stress in any Given Direction

2/9/2015 - 2/12/2015

2/12/2015 - 2/18/2015

On this page:

1. Go back to the home page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⏮

⏭

🔄

http://someURL.odu.edu

🏠

Some Bookmark

📌

Some Other Bookmark

➡

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔

1

👤

Home

Resources

🌲

Resources

» 0. Welcome and Course Logistics

» 1. Fundamental Principles

📄

[Some resource here](#) (10 KB)

📄

[Some resource here](#) (10 MB)

📄

[Some resource here](#) (5 MB)

📄

[Some resource here](#) (1 MB)

» 2. Bending of Beams

» 3. Shearing Stress

» 4. Stress in any Given Direction

On this page:  
1. Go back to the home page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

Home

>

Faculty

Faculty

Professor Moustafa Moustafa

Office Hours Kaufman 111C

Email [mmoustaf@odu.edu](mailto:mmoustaf@odu.edu)

Telephone Phone [757-683-3767](tel:757-683-3767)

Fax [757-683-5666](tel:757-683-5666)

Actual content and format TBD

About Your Professor

• Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt

• ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris

• nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum

• dolore eu fugiat nulla pariatur.

More Stuff Here

• Lorem ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

More Stuff Here

• Lorem ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

More Stuff Here

• Lorem ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

On this page:

1. Go back to the course information menu.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⬅️ ➡️ ↺️

http://someURL.odu.edu

🏠 Some Bookmark

📖 Some Other Bookmark

➡️ Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔<sup>1</sup>

👤

[Home](#) > Syllabus

🌲

Syllabus

Expand All

» Course Readings

» Course Description

» Course Objectives

» How the Course Works

» Student Responsibilities

» Grading Criteria

» Course Policies

» University Policies

Lecture 3 hours, 3 credits.

Prerequisite: CET 220.

A rapid review of the fundamental principles of statics and strength of materials and working stresses followed by practical analyses of fundamental machine elements such as Beams and shafts. Mechanical systems design including belt drives, clutches and brakes as well as welded and riveted joints will be also covered.

Instructor written description of the course: This is one of the most important courses that help prepare students to become future successful engineers. By learning this material, you will be able to design mechanical parts and assemblies, analyze your design and check it for safe operation under various loading conditions. You will be able to perform theoretical stress analysis and to optimize the design to last for an accepted operating life, considering an appropriate factor of safety Note: This class is delivered online to all eligible students on and off campus.

Faculty Teaching Philosophy: To maximize student learning potential by creating an environment that utilizes state of the art technology.

At the conclusion of this course, the students will be able to:

- \* Synergize forces, moments, torques, stress and strain information
- \* Analyze, design and/or select machine elements, with attention to safety, reliability, and societal and fiscal aspects

"Expanded All" has been clicked, this link will read "Collapse All"

Using CTRL+P in the real browser will print the current page in a stylized format optimized for printing.  
[Click here to see what using CTRL+P would produce](#)

On this page:

1. View the printed page sample.
2. Go back to the course information menu.

## Syllabus

### Course Readings

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat

### Course Description

Lecture 3 hours; 3 credits.

Sample printed page. 1 of X.

Prerequisite: CET 220.

A rapid review of the fundamental principles of statics and strength of materials and working stresses followed by practical analyses of fundamental machine elements such as Beams and shafts. Mechanical systems design including belt drives, clutches and brakes as well as welded and riveted joints will be also covered.

Instructor written description of the course: This is one of the most important courses that help prepare students to become future successful engineers. By learning this material, you will be able to design mechanical parts and assemblies, analyze your design and check it for safe operation under various loading conditions. You will be able to perform theoretical stress analysis and to optimize the design to last for an accepted operating life, considering an appropriate factor of safety. Note: This class is delivered online to all eligible students on and off campus.

### Course Objectives

Faculty Teaching Philosophy: To maximize student learning potential by creating an environment that utilizes state of the art technology.

At the conclusion of this course, the students will be able to:

- \* Synergize forces, moments, torques, stress and strain information
- \* Analyze, design and/or select machine elements, with attention to safety, reliability, and societal and fiscal aspects

### How the Course Works

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat



## Schedule

January

[Export to Google Calendar](#) | [Outlook](#)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11	12	13	14	15	16	17
	0. Welcome and Course Logistics					
		<a href="#">✓ 0.A Review the Outline</a> <a href="#">✓ 0.B Review Welcome</a> <a href="#">✓ 0.C Review Course Introduction</a>	<a href="#">1 Fundamental Principles</a> <a href="#">✓ 0.D Module Feedback</a> <a href="#">✓ 1.A Complete Readings</a>			
18	19	20	21	22	23	24
<a href="#">0. Welcome and Course Logistics</a>	<a href="#">2. Bending of Beams</a>					
<a href="#">1 Fundamental Principles</a>						
<a href="#">1B Homework #1</a> <a href="#">1C Message Greeting</a> <a href="#">1D Module Feedback</a>						
25	26	27	28	29	30	31
<a href="#">2. Bending of Beams</a>	<a href="#">3. Shearing Stress</a>					
<a href="#">2.A Complete Readings</a> <a href="#">2.B Syllabus Quiz</a> <a href="#">2.C Homework #2</a>						

On this page:

1. Go back to the home page.



Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

🔔1

👤

Home

➤

1. Fundamental Principles

➤

1.1 Overview

🌲

Module Progress

X%

1.1 Overview

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat

Objectives

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat

Relevance

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat

On this page:

1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

← → ↺

http://someURL.odu.edu

📖 Some Bookmark

🔖 Some Other Bookmark

🔖 Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔<sup>1</sup> 👤

Home > 1. Fundamental Principles > 1.A Complete Readings

📊 X%  
Module Progress

🌲

📅

Assignment - 1.A Complete Readings

Due January 14, 2015 at 11:59 PM

No Deliverables

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

◀ →

Upon hovering the mouse over the arrow, all navigation arrows will have a pop-up with the title for the previous or next course. This is an example of what would appear next to this arrow.

◀

2.1 Overview

Example

Completed

✓

2.2 Course Introduction And Statistical Equilibrium

▶

Example

On this page:  
1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⬅➡🔄

http://someURL.odu.edu

🏠

Some Bookmark

📌

Some Other Bookmark

➡

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍

search

🔔

1

👤

Home > [1. Fundamental Principles](#) > 1.2 Course Introduction and Statistical Equilibrium

🌲

Module Progress

X%

1.2 Course Introduction and Statistical Equilibrium

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in

[1.2.1 Introduction to Design of Machine Elements](#)

[1.2.2 Defining Engineering and the Design Processes](#)

[1.2.3 Stages of Design](#)

[1.2.4 Utilizing Machine Design Information Standards](#)

[1.2.5 Computational Tools](#)

[1.2.6 Defining Statistical Equilibrium](#)

Resources

📄

[Lecture Notes](#)

🌐

[Website Address Here](#)

📄

[Another Resource Here](#)

Will all be direct links to subtopics

On this page:  
1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

← → ↺

http://someURL.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

Home > 1. Fundamental Principles > 1.2 Course Introduction and Statistical Equilibrium > 1.2.1 Introduction to Design of Machine Elements

X%

12.1 Introduction to Design of Machine Elements

Some title

Some title

Some title

Some title

Some title

Some title

Questions

Ask a new question

Tensile Strength of Fabric

How is the tensile strength of fabric measured? Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

2 comments

John Smith

9/1/2015 10:55 AM

Some Title

It is measured by Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

0 comments

Bill Jones

9/1/2015 11:12 AM

Some Other Title

It is measured by Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

0 comments

Jane Doe

9/2/2015 5:30 AM

Tensile Strength of Steel

How is the tensile strength of steel measured? Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud

1 comment

John Doe

9/1/2015 10:25 AM

On this page:  
1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

← → ↺

http://someURL.odu.edu

🏠 Some Bookmark

📖 Some Other Bookmark

➔ Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔 1

👤

Home > 1. Fundamental Principles > 1.2 Course Introduction and Statistical Equilibrium > 1.2.2 Defining Engineering and the Design Process

🌲

Module Progress

X%

1.2.2 Defining Engineering and the Design Process

⏮

⏭

Click to show transcript.

⏮

⏭

Show Transcript

Download Transcript PDF

Some title

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium.

Questions

[All](#) [Pinned](#) [My Posts](#)

[Ask a new question](#)

Tensile Strength of Fabric

How is the tensile strength of fabric measured? Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea

2 comments

John Smith

9/1/2015 10:55 AM

Some Title

It is measured by Lorem ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

0 comments

Bill Jones

9/1/2015 11:12 AM

Some Other Title

It is measured by Lorem ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

0 comments

Jane Doe

9/2/2015 5:30 AM

Tensile Strength of Steel

How is the tensile strength of steel measured? Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud [more...](#)

1 comment

John Doe

9/1/2015 10:25 AM

- On this page:
1. View the transcript.

2. Go to the next page.

[Home](#) > [1. Fundamental Principles](#) > [1.2 Course Introduction and Statistical Equilibrium](#) > [1.2.2 Defining Engineering and the Design Process](#)



### 1.2.2 Defining Engineering and the Design Process

Module Progress

The text highlights as the audio is played.

## Transcript

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum  
 sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo  
 id pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor  
 eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet  
 massa ultrices luctus facilisis maximus cursus ac arcu. Maecenas eu nulla in  
 orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non  
 molestuada tristique.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum  
 sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo  
 eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor  
 eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet  
 massa ultrices luctus facilisis maximus cursus ac arcu. Maecenas eu nulla in  
 orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non  
 molestuada tristique.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum  
 sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo  
 eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor  
 eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet  
 massa ultrices luctus facilisis maximus curae ac arcu. Maecenas eu nulla in  
 orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non  
 molestuada tristique.

I prem insum dolor sit amet consectetur adipisicing elit sed do eiusmod

[Hide Transcript](#)[Download Transcript PDF](#)

Some title

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tordit odit. Curabitur cursus leo leu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas ne nulla in orci porta pretium.

## Questions

[Ask a new question](#)

[All](#) [Pinned](#) [My Posts](#)

### Tensile Strength of Fabric

How is the tensile strength of fabric measured? Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea

[Reply](#)

2 comments


John Smith

9/1/2015 10:55 AM

## Some Title

It is measured by Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo et pellentesque consequat. Curabitur sapien nib, vestibulum sed tortor eget, posuere rhoncus nib. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

Reply



0 comments

*Bill Jones*

9/1/2015 11:12 AM

Some Other Title

It is measured by Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

[Reply](#)

★★★★☆

 **Endorsed**

0 comments

Jane Doe

9/2/2015 5:30 AM

### Tensile Strength of Steel

How is the tensile strength of steel measured? Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud [more ...](#)

[Reply](#)

1 comment

John Doe

9/1/2015 10:25 AM

On this page:

1. Hide the transcript.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

🔔<sup>1</sup>

👤

Home

›

1. Fundamental Principles

›

1.2 Course Introduction and Statistical Equilibrium

›

1.2.X Subtopic Title Here

🌲

Module Progress

X%

1.2.3 - 1.2.6 Content Here On Separate Pages

On this page:  
1. Go to the next page.



Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

[Home](#) > [1. Fundamental Principles](#) > 1.B Homework #1

Module Progress

X%

Assignment - 1.B Homework #1

Due January 18, 2015 at 11:59 PM

*Deliverables - Solved Homework Problems*

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

Note: Marking the assignment as complete does not submit it to Blackboard. Please submit the assignment to Blackboard before continuing.

Mark as Complete

✓

Normally, you could navigate to the next page, but for the sake of demonstration, Mark the assignment as Complete to continue the demo.

On this page:  
1. Mark the assignment as complete.



Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

[Home](#) > [1. Fundamental Principles](#) > 1.B Homework #1

X%

Module Progress


Assignment - 1.B Homework #1

Due January 18, 2015 at 11:59 PM

*Deliverables - Solved Homework Problems*

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

Note: Marking the assignment as complete does not submit it to Blackboard. Please submit the assignment to Blackboard before continuing.

Completed 

On this page:

1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↺

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

[Home](#) > [1. Fundamental Principles](#) > 1.D Module Feedback

X%

Assignment - 1.D Module Feedback

Due January 19, 2015 at 11:59 PM

*Deliverables - Submitted Feedback Form*

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipisicing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat luctus posuere. Donec blandit ligula non malesuada tristique.

Complete

On this page:

1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

←

→

↻

http://someURL.odu.edu

Some Bookmark

Some Other Bookmark

Some Other Bookmark

MET 320 - Design of Machine Elements

Q search

1

Home

>

1. Fundamental Principles

>

1.X Title Here

Module Progress

X%

1.3 - 1.8 Content Here On Separate Pages

Displays if an announcement has been posted while you are on the course. Also notifications bell on top is updated +1.

An announcement has been posted.

On this page:  
1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⬅️➡️🔄

http://someURL.odu.edu

🏠

Some Bookmark

📖

Some Other Bookmark

➡️

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔<sup>1</sup>

👤

Home

➤

1. Fundamental Principles

➤

1.9 Summary

🌲

Module Progress

X%

1.9 Summary

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque dictum sem id mauris vehicula lobortis. Aliquam ut tortor odio. Curabitur cursus leo eu pellentesque consequat. Curabitur sapien nibh, vestibulum sed tortor eget, posuere rhoncus nibh. Curabitur efficitur tellus risus. Nullam sit amet massa ultrices lacus facilisis maximus cursus ac arcu. Maecenas eu nulla in orci porta pretium. Fusce placerat

On this page:

1. Go to the next page.

Some Website

ODU PLE Class Name Here

Some Other Website

Some Other Website

⏮

⏭

🔄

http://someURL.odu.edu

🏠

Some Bookmark

📌

Some Other Bookmark

➔

Some Other Bookmark

MET 320 - Design of Machine Elements

🔍 search

🔔<sup>1</sup>

👤

🌲

✅

» 0. Welcome and Course Logistics

⌵

✅

» 1. Fundamental Principles

⌵

Start

» 2. Bending of Beams

⌵

» 3. Shearing Stress

⌵

» 4. Stress in any Given Direction

⌵

» 5. Design for Cyclic Loading

⌵

» 6. Design of Shafts

⌵

⌵

The demo is complete.