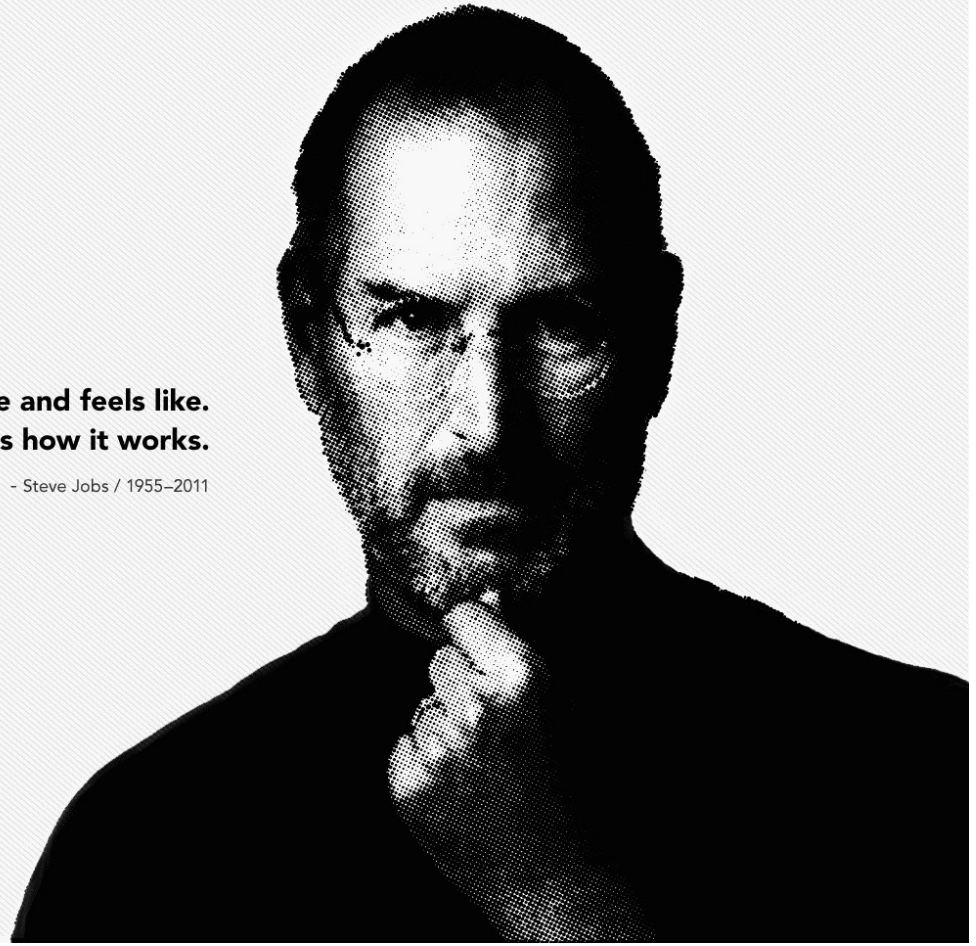
ENGR 1322/1332
Engineering Design with CAD

Dr. Jeff Callicoat

COURSE INTRODUCTION

Design is not just what it looks like and feels like.
Design is how it works.

- Steve Jobs / 1955–2011



Agenda

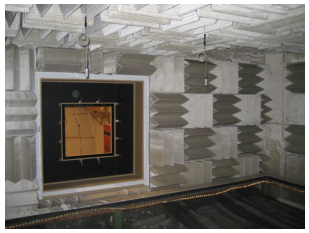
Instructor & TA Introductions

Course Introduction

Syllabus and Assignments

Canvas

Instructor

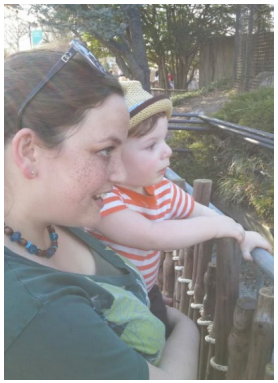

Dr. Jeff Callicoat

Background:

PhD, Mechanical Engineering,
Experimental Structural Acoustics for UAV design.


Previous work:
Mechanical design engineer for space satellite systems.

Ditch Witch, Product Proving Department


Course Overview

OSU ENGR 1322/1332 Catalog Description:

- Introduction to engineering design using modern design methodologies and computer-aided tools. Design, construction and testing through participation in a multidisciplinary team-based design project contest.

Course Structure:

- **Lecture** – focused on the Design Process (design theory, methodologies, tools, case studies, etc.)
- **Lab** – focused on a particular Computer Aided Design (CAD) software
  - ENGR 1322 – AutoCAD
  - ENGR 1332 - SolidWorks

Why do I have to take this class?

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1. Fundamentally, your engineering education is preparing you to solve problems and participate in the design process.
2. During your tenure, you have multiple opportunities to practice the design process:
   - Academic coursework projects
   - Extracurricular activities
   - Senior Design
3. You may never crack a math, physics, or thermo textbook once you leave the University, but undoubtedly you will participate in the engineering design process over and over again.

Why should I be excited to take this class?

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1. Modeling is lots of fun.
2. We talk about real stuff – engineering case studies, failures, practical examples.
3. No. 1 again.

Course Details

See course syllabus

Items of Note:

- The CAD software you need is available to download for **FREE** through OSU!
  - *For assistance with downloads or installation, contact CEAT ITS.*
- Get a **computer mouse**.
- Your lowest Assignment grade (Lecture or Lab) will be **dropped**.
  - *The syllabus quiz will not be dropped.*
- Utilize your **class time** for help, as well as the **Piazza Q&A website**.
- If you experience a problem submitting work on Canvas, take photos/screenshots to **document**.
- **Due dates** and times are given in China Standard Time (Beijing Time).
- **No late work is accepted!**

Success Tips

1. To get a good course grade:
   - Your goal is to accumulate as many points as you can.
   - Submit all assignments – don't leave points on the table!
2. Saving your work:
   - Thumb drive/external drive/Cloud/ H: drive (personal space)
   - **Save often – technology isn't perfect.**
3. Be patient with the software.
4. Utilize the **Piazza** Q&A site and your in-person **class time**!
5. Canvas dropboxes are used for submitting all assignments.
   - Canvas does have glitches and becomes sluggish at times.
   - You are responsible for getting your assignments in on time, so don't wait until the last minute! **NO LATE WORK IS ACCEPTED.**

What constitutes cheating in this course?

1. Turning in another person's work.
2. Copying portions of another person's model and inserting them into your own model.
3. Having someone else create portions of your model for you.
4. Copying answers from another person's paper or computer during a test.

Note: Sending your electronic files to someone else sets you up to be caught for cheating.
If that person turns in the file as his/her own work, you will BOTH receive an automatic zero.

It is okay to get help, but the work you submit must be ENTIRELY your own!

Online Classroom Course Management Tools

https://canvas.okstate.edu

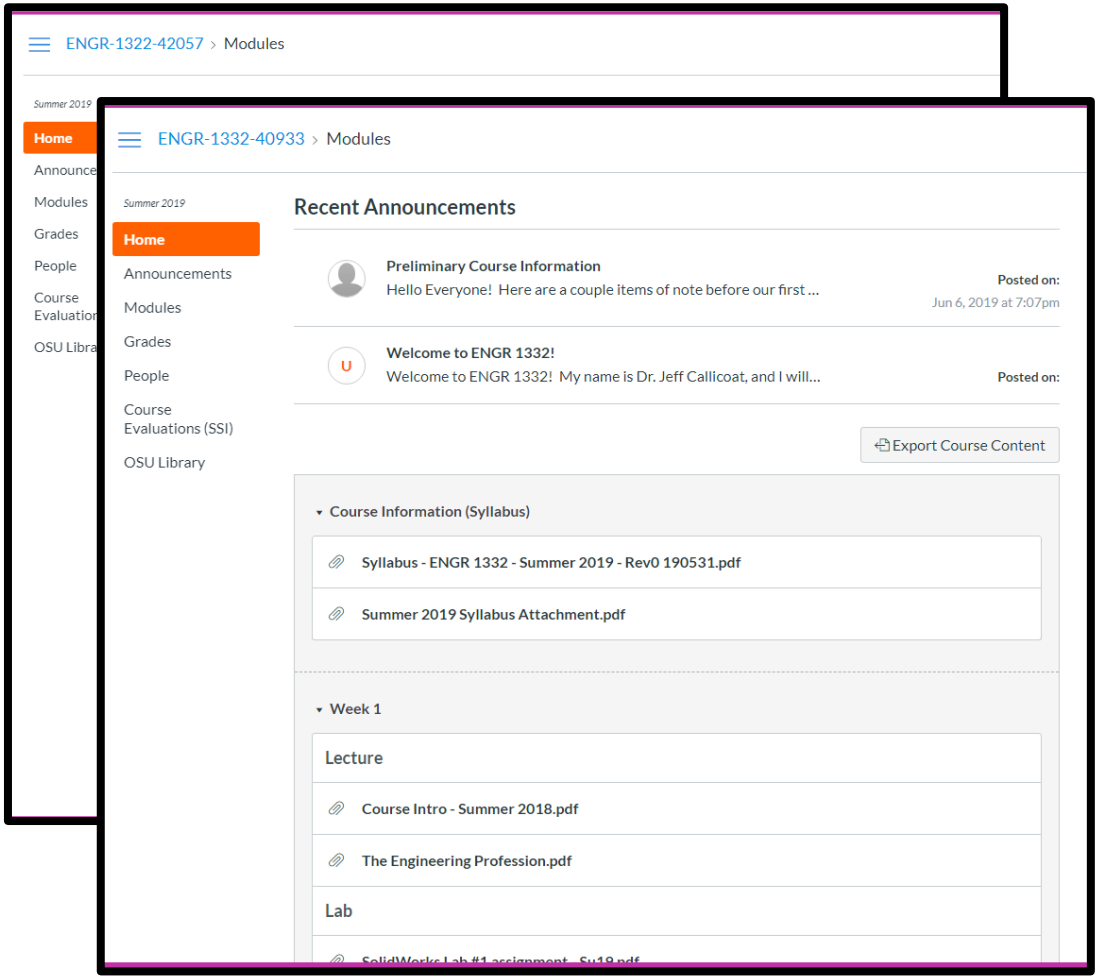
Announcements

Modules:

- Lecture slides, assignments, supplemental material
- Videos

Dropboxes for assignments

Grades



Have a great semester!