

University of Notre Dame
College of Engineering



NOTRE DAME
DESIGN D3CK

EG 20100: Engineering Design Studio Training
Spring 2014

Instructor:

Natalie Gedde:

ngedde@nd.edu

TA's:

Kevin Sonnen (3D Modeling, Printing):

ksonnen@nd.edu

Joe Rudy (Arduino, Soldering)

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Paul Minutolo (CNC Techno Router):

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Leah Fisher (Laser Cutter):

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Course Info:

Location:

www.n3d.nd.edu

Stinson Remick 213-217

About N3D:

The Notre Dame Design Deck provides workspace, equipment, and training to facilitate hands on learning for Notre Dame undergraduate engineering students involved with class activities, design competitions, personal projects, and other endeavors.

Course Description:

This course serves as an introduction to the facilities, equipment, policies, and safety guidelines of the Notre Dame Design Deck. Students are oriented in basic safety guidelines and facility use policies and introduced to several pieces of N3D equipment through hands on tutorials. The course is pass/fail.

Course Objectives:

Participation in this course seeks to accomplish the following learning objectives:

- Familiarize students with N3D safety guidelines
- Establish an attitude of risk management and respectful use of N3D equipment and facilities

- Build basic competency for using certain N3D equipment, including:
 - Laser cutter
 - 3D Printer
 - Arduinos/soldering
 - CNC Techno Router
- Enable students to successfully engage in future projects utilizing N3D resources

Communications:

General questions and course feedback should be directed to Kevin Sonnen (ksonnen@nd.edu). Questions about specific tutorials should be directed to the TA(s) instructing that module (See above). Questions about registration, course credit, access to N3D equipment after the completion of the course, etc. should be directed to Natalie Gedde (ngedde@nd.edu). This course is still in development and a certain amount of flexibility is required. We appreciate any feedback on how the course can be improved.

Course Schedule:

The course will consist of two modules. Module 1 consists of a safety overview, Arduino Part 1, and 3D modeling/3D printing. Module 2 consists of a laser cutter, techno router, and Arduino Part 2 tutorial. All sessions will meet in 213 Stinson Remick.

Module 1	Session 1	Wednesday, January 29th	7:00 PM – 9:00 PM
	Session 2	Tuesday, February 4th	7:00 PM – 9:00 PM
	Session 3	Monday, February 10th	7:00 PM – 9:00 PM
Module 2	Session 1	Wednesday, February 19th	7:00 PM – 9:00 PM
	Session 2	Tuesday, February 25th	7:00 PM – 9:00 PM
	Session 3	Monday, March 3rd	7:00 PM – 9:00 PM

Assignments:

Satisfactory completion of this course requires:

- Completion of the safety quiz
- Completion of each tutorial quiz
- Attendance at one session for each module
- Completion of each tutorial deliverable

Before beginning the course, students are required to complete the safety quiz. For each tutorial, students will complete a tutorial quiz and deliverable.

Safety:

Safety is of paramount importance for all activities at N3D. Complete safety guidelines can be found at <http://engineering.nd.edu/groups/n3d/safety>. All users of N3D are expected to follow the safety guidelines at all times. Furthermore, N3D is to be approached with a safety conscious attitude that seeks to manage risk and communicate respect for the facility and equipment.