Online Design Portfolio
EDSGN 100 Introduction To Engineering Design

Section 09       Hao Jing
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Submitted by: Hao Jing
Submitted to Xinli Wu
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Abstract

The Design Portfolio is for class Introduction to Engineering Design (EDSGN 100) in Spring 2016, which is a class introduces the basic concepts and the design process of engineering. This Portfolio will display some of the homeworks during the class as well as two major projects.
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Education:

- Cumulative GPA 3.93 out of 4.00

College: Penn State University
Freshman
- Major: Engineering

Experiences:

- Volunteer 2012 Shanghai EXPO October 2012
- Internship in Shanghai BeiXuan Technology Company June 2015

Language:

- Speak Chinese and English

Activities:

- Mu Alpha Theta 2012-2015
- Table-tennis club 2011-2015
- Penn State Racing 2015
Course Syllabus

The following are some ground rules to help us maintain a steady progress through the semester:

1. Assignments are due at the start of the class period before the lecture begins. Assignments submitted after this time will receive a 20% deduction. A further 20% reduction will be applied for every week beyond the first.

2. The instructor will discuss any exam or assignment grade within 48 hours (excluding weekends and holidays) of its return, after which time the discussion is closed.

3. Excellent teamwork can improve the course grade by as much as 4% (2% per design project). Poor team work will lower your grade by the same amount.

4. Punctual attendance is mandatory for all the class periods. Course grade will be dropped to the next lower grade for every two classes missed. All excused absences must be supported by written documentation, such as doctor's receipt, Penn State athletics travel notice, ROTC notice, etc.

5. No makeup labs will be available for the Design sessions since this is unique to this section.

6. No cell phone including text message is permitted in the classroom.

7. Students are responsible for any missed handout and homework assignment for any unexcused missed class.

8. Students must use Penn State access account email address when he/she emails the instructor.

Academic Integrity:

Senate Policy 49-20 Academic Integrity
Definition and expectations: Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.

Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.

The Penn State Principles:
1. I will respect the dignity of all individuals within the Penn State community;
2. I will practice academic integrity;
3. I will demonstrate social and personal responsibility;
4. I will be responsible for my own academic progress and agree to comply with all University policies.

Related sites:
- Code of Conduct, [http://www.sa.psu.edu/ja/codeconduct.html](http://www.sa.psu.edu/ja/codeconduct.html)
- Academic integrity, [http://www.psu.edu/ufs/policies/47-00.html - 49-20](http://www.psu.edu/ufs/policies/47-00.html - 49-20)

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Practice Problems

1. Solidworks Tutorials: Revolves and Sweeps

2. Entertainment Center
Detail Drawings:

The Convey or Belt
Dough Tube
Main Design Features:
1. A crank that can work the inner mechanisms and turn the conveyor belt.
2. It is food safety and durable
3. A stand to hold the dumpling maker above the table, allowing dumplings to slide out the bottom when it is finished.
The Second Design Project
The USB Bracket
The Project Report link

The Prototype

The CAD model
Assembly Drawings:

The Design Features:

1. Design must be able to fit a 7 port USB hub.
2. Design must be able to be vertically mounted
3. Design must have a new cable retention system.
4. Design must be able to be additively manufactured.
5. Survive an environment from 0-25 degrees celsius.
Summary and Conclusions

This online Portfolio includes the homework, projects as well as exam problems thought the whole semester. It is a perfect learning process for the first year for the beginning of the engineering.
Acknowledgement

Thanks for any help by the course professor: Xinli, Wu, Ph.D., P.E. and the sponsorship during the semester!