ENGR 2110 - Creative Decisions & Design
Spring 2017

Instructor: Dr. C. Coates
Office hours: TR 1330-1500, M 1330-1430
Lecture: MW, 1100–1215, Annex 122
Studio: W 1520-1820, Annex 122
Armstrong site: http://www.engineering.armstrong.edu
Georgia Tech site: http://2110.me.gatech.edu/

Text: Introductory Mechanical Design Tools by William Singhose, Jeff Donnell


Course Objectives: To learn—fundamental procedures for solving engineering design problems—the essential details of analyzing, synthesizing, and implementing design solutions—with flexibility, adaptability, and creativity—the techniques which allow an engineer to tackle new, unsolved, open-ended problems—by doing through team and individual projects and assignments.

Course Requirements (100%)
1) Studio Reports 10%
2) In-Lecture Quizzes 8%
3) Service Based Learning (leadership/initiative/responsibility/professionalism) 10%
4) Mini project 15%
5) Major project 40%
   Planning Report and Presentation (5%)
   Evaluation Report and Presentation (5%)
   Competition score (10%)
   Presentation to Judges on Competition Day (5%)
   Final Oral Presentation (5%)
   Final Report (10%)
6) Classroom discussions 8%
7) Other presentations 4%
8) Lab Deliverables 5%

Reality Check (1)
This course is about—understanding alternatives—problem solving—organization—writing—presenting—getting a taste of the real world

Professionalism—Projects, Reports, Attendance.

Reality Check (2)

Do’s
– follow instructions
– be in class on time
– be in studio on time
– pay attention
– use the tools that are presented
– read the book
– give professional presentations
– act professionally
– follow procedures (safety)
– clean-up in studio
– report damaged equipment

Don’t’s
– miss class
– turn in hand written reports
– give hand written presentations
– close your minds to the alternatives
– sleep in class—wear a hat in class
– bring food into studio
– leave a mess in studio.
Attendance
You should attend all lectures, missing lectures will result in a final grade penalty as follows:
2-3 missed lectures = 1 letter grade reduction
4-5 missed lectures = 2 letter grade reduction
6-7 missed lectures = 3 letter grade reduction
8-9 missed lectures = 4 letter grade reduction

You must attend all studios–attendance will be taken–missing a studio results in a 0 for that studio grade.

Service Based Learning (SBL)
This course has a service based learning component. It involves assisting high school students in the design and construction of a manned hovercraft. Details on the competition may be found here:
http://engineering.armstrong.edu/edc/

Quiz policy
Periodically there will be a quiz at the end of the lecture, these will cover anything from the reading to the lecture to the studio assignments.

Assignments Policy
Most assignments are group assignments. Each group member will rate every other group member periodically. A student identified as consistently unprofessional will be investigated by me. If the accusation is determined to be true, his/her letter grade for one or more group projects may be reduced by one letter. Individual assignments will be labeled as such. No collaboration is permitted on individual assignments. Failure to comply with this policy will result in a zero for that particular assignment and may result in additional consequences as per Armstrong’s honor code violation policy.
https://www.armstrong.edu/administration/student-integrity-academic-integrity-policy

Course Lab Assistant
The lab assistant for this course is Mr. Paul Chastain, pc0178@stu.armstrong.edu. Email him and cc me if you need to repair or replace equipment or you need to go in the lab at an unscheduled time.

Additional Tutoring
The CST tutoring center as well as the Engineering Studies Learning Center (UH240) provides free tutoring for most lower level mathematics and science courses.
(http://advise.armstrong.edu/tutorialservices.html)

Office Hours
Office hours are listed at the top of this document. You are encouraged to stop by for assistance if you feel you are having academic problems or you wish to discuss an assignment/project in more detail or you may just want to discuss engineering matters. Please stop by ONLY during office hours. If you cannot make the designated office hours, send me an email and we will make an appointment for a convenient time. It is also more efficient if you let me know ahead of time what topic or problem you wish to discuss as well.

Academic Integrity Policy:
Violations of the Armstrong State University Academic Integrity Policy (including cheating and plagiarism) are taken very seriously. Any violation of this policy will become part of the student’s permanent educational record. More information on the Academic Integrity policy and procedure can be found at www.armstrong.edu/studentintegrity.

Title IX Clause:
Armstrong is dedicated to providing a safe and equitable learning environment for all students. Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Title IX Office in Victor Hall Room 245 or by email diversity@armstrong.edu. This is important for the safety of the whole Armstrong community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can
initiate the report on behalf of another person. The University Counseling Center provides 24/7 confidential support, and the [http://www.armstrong.edu/counseling_center](http://www.armstrong.edu/counseling_center) describes reporting options and other resources.

**Disability Related Accommodations**

Armstrong State University is committed to providing reasonable accommodations to students with documented disabilities, as required under federal law. Disabilities may include learning disabilities, ADD, psychological disorders, brain injury, Autism Spectrum Disorders, serious chronic medical illnesses, mobility impairment, communication disorders, vision or hearing loss or temporary injuries. The purpose of disability accommodation is to provide equal access to the academic material and equal access to demonstrate mastery of the material. Students with disabilities must meet all the academic requirements and standards of the class, including the attendance policy. If you have a disability and need accommodations, please contact the Office of Disability Services, located on the second floor of Memorial College Center, room 208. You will need to meet with Disability Services Staff, who can help you gather documentation of your disability or refer you to an appropriate resource for assessment. Once documentation of the disability is gathered and approved, Disability Staff will provide you with an Accommodation Letter, detailing the appropriate, approved accommodations, which you should present to me so we can discuss and implement your accommodations. Disability accommodations work best starting at the beginning of the semester, but can be approved and started at any point in the semester. Accommodations start at the time the Accommodation Letter is presented to faculty, within reasonable timelines. Accommodations are not given retroactively. Accommodations are not part of your academic transcript.

**IMPORTANT DATES**

Tests/Quizzes: See schedule
First day of classes: Monday, Jan 9
Last day to withdraw without automatic academic penalty of WF: W, Mar 1
Last day of classes: Friday, April 28
No class: Monday, Jan 16, MLK Day
No class: Mar 13-17 Spring Break
Final Exam: There is no final exam for this course