

Application for Capstone Course for Existing Course

Course Subject and Number ENGR 430 & ENGR 432

Course Name Senior Clinic I & Senior Clinic II

Contact Person Jeff Arrington (Jeff.Arrington@acu.edu, x2209)

Explanations are presented in the letter found on pages 3-6 of this document.

For Capstone courses:

Explain how your course or courses will meet the learning outcomes:

- Habits of mind that foster integrative thinking between the liberal arts core curriculum and their major field of study.
- Achievement and demonstration through advanced research and/or creative projects the ability to frame questions, carry out critical analysis, and produce work of substantial complexity and quality related to their chosen field of study.
- Reflect and demonstrate their ability to think critically, globally, and missionally about their discipline.

Explain how your course or courses will meet the required assignments:

- Research assignment
- Faith and vocation assignment
- Comprehensive skills and accomplishments inventory

Attachments:

Attach a course syllabus

- If necessary, attach additional explanatory material that might be helpful to faculty reviewing this course for capstone and writing intensive status, such as assignments or grading rubrics.

**Core Curriculum Implementation Team (CCIT) Recommendation
for the Senior-Year Integrative Capstone
Approved by UGEC 11.14.2012, UUAC 12.5.2012**

“In addition to other discipline-related course goals, the senior-year integrative capstone experience will challenge the student to critically analyze, reflect, and write about the major discipline from the perspective of Christian Worldview” (Liberal Arts Core Curriculum at ACU, p. 6.).

While it is understood that the senior-year integrative capstone will vary widely across the disciplines including a specific course or cluster of courses, it is important that there be some common elements across major fields of study. Each department will submit to the UGEC its plan for implementing the senior-year integrative capstone.

Students who complete their senior-year integrative capstone should have demonstrated the following student learning outcomes:

- Habits of mind that foster integrative thinking between the liberal arts core curriculum and their major field of study.
- Achievement and demonstration through advanced research and/or creative projects the ability to frame questions, carry out critical analysis, and produce work of substantial complexity and quality related to their chosen field of study.
- Reflect and demonstrate their ability to think critically, globally, and missionally about their discipline.

The student learning outcomes for the senior-year integrative capstone may be accomplished using a wide variety of assignments, projects, internships, research, performances, presentations, or other products; however, the following products are required of each senior-year integrative capstone and will contribute to the calculation of grades:

- A required paper with a minimum length of 2000 words (approximately 7 pages) and worth a minimum of 10% of the assessment for the course in which it is included. This paper provides an opportunity for a summative assessment of the student’s information literacy skills, including the proper citation of a minimum of 5 appropriate sources that support their research. Options to satisfy this prompt include, but are not limited to, a traditional research paper; an evaluative/reflective essay that accompanies a creative or scholarly work (such as a senior art show or recital), describing elements of the creative process; or a business plan that incorporates market research and analysis with the proposal of a specific entrepreneurial venture.
- An assignment that demonstrates the student’s ability to think critically about faith and vocation as it is expressed in a particular discipline met by a course or experience in the students’ degree plan or major.
- A comprehensive skills and accomplishments inventory reflecting the student’s scholarship (research and creative activities), accomplishments, co-curricular activities, service, leadership, internships, integrative thinking, knowledge, etc.

April 26, 2015

Re: ENGR 430 & ENGR 431 as a Capstone Experience

Greetings,

This letter provides explanations of how ENGR 430 Senior Clinic I and ENGR 432 Senior Clinic II meet the required learning outcomes and the required assignments. Items will be addressed in the order in which they are listed on the application cover page that may be found following this letter. The course syllabus, with appropriate sections highlighted, is attached after the application.

Learning Outcomes:

1. "Habits of mind that foster integrative thinking..."

The central task for students in the Clinic courses is completion of an engineering design from customer specification through prototyping. Course learning objectives stated in the syllabus (S pg 2) include:

- 3(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- 3(d) an ability to function on multidisciplinary teams
- 3(g) an ability to communicate effectively
- 3(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

Note that 3(c), 3(d), etc. refer to criteria required by ABET of all engineering programs that seek accreditation. Course learning objective 3(c) specifically addresses Capstone outcome 1. This is achieved through consideration and ranking of multiple alternatives through lenses such as cost, impact on the environment, social and political implications, and the imposition of constraints associated with ethical, health and safety considerations. Course learning objective 3(h) is also implicitly related to Capstone learning outcome 1.

2. "Achievement and demonstration through..."

The design project is by nature a creative project that will require (a) research and review of literature to learn about relevant technical content and responses to similar needs in the past and documented in a literature review and a scope of work and problem statement, (b) analysis of alternative solutions through a variety of lenses because students are required to generate multiple possible solutions and choose among them and document their work in weekly activity report, draft reports and final written and oral reports, and (c) evaluation against professional technical and ethical standards as documented in draft and final written and oral reports that are evaluated by department faculty and members of the technical staff of the company that serves as

customer, and will be reviewed annually by members of the Engineering Advisory Board for the program.

3. "Reflect an ... to think critically, globally, and missionally about their discipline"
The evaluation of the final design will include considerations of the availability of materials and capital and human resources needed to implement the proposed solution. This implies global thinking, as solutions that might be appropriate in one locale/economy may not be appropriate or may be less appropriate in another locale/economy.

Each student will complete a Statement of Faith in ENGR 431. An evaluation of the final design in light of ethical standards such as these published by the American Society of Mechanical Engineers¹ will be included in the draft and final reports.

The Fundamental Principles

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

1. Using their knowledge and skill for the enhancement of human welfare;
2. Being honest and impartial, and serving with fidelity the public, their employers and clients; and
3. Striving to increase the competence and prestige of the engineering profession.

The Fundamental Canons

1. Engineers shall hold paramount the safety, health and welfare of the public in the performance of their professional duties.
2. Engineers shall perform services only in the areas of their competence.
3. Engineers shall continue their professional development throughout their careers and shall provide opportunities for the professional and ethical development of those engineers under their supervision.
4. Engineers shall act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest or the appearance of conflicts of interest.
5. Engineers shall build their professional reputation on the merit of their services and shall not compete unfairly with others.
6. Engineers shall associate only with reputable persons or organizations.
7. Engineers shall issue public statements only in an objective and truthful manner.
8. Engineers shall consider environmental impact in the performance of their professional duties.

¹ From https://community.asme.org/colorado_section/w/wiki/8080.code-of-ethics.aspx

Required Assignments:

1. Research assignment

Quoting from the syllabus for ENGR 430, "Each team member will do a review of the current literature related to the design project. This is an individual assignment. The literature review must contain a minimum of 2000 words and 5 peer reviewed sources." (See ENGR 430 syllabus pg 3).

This assignment is worth 100 of the 850 total points available for the course.

2. Faith and vocation assignment

Quoting from the syllabus for ENGR 432, "Each team member will submit an essay statement of reflecting on her or his integration of faith and engineering." (See ENGR 432 syllabus pg 3).

This assignment is worth 100 of the 1210 total points available for the course.

3. Comprehensive skills and accomplishments inventory

Quoting from the syllabus for ENGR 430, "Each team will develop two professional documents for distribution to project sponsors and external project evaluators. The Scope of Work and Problem Statement and Statement of Qualification format will reflect the professional standards of the specific engineering industry of the project sponsor and/or external project evaluator." The purpose of these two statements is to persuade a prospective client of the team's understanding of the design challenge and of their capacity to address the problem at hand. This Statement of Qualifications is thus a comprehensive skills and accomplishments inventory formatted according to professional standards in the engineering industry.

This assignment is worth 55 of the 850 total points available for the course.

On behalf of the engineering program,

Jeff Arrington, Ph.D.
Director of Engineering

Senior Clinic 1– ENGR 430, Section 01

Abilene Christian University

Credit Hours: 3

Semester and Year: Fall 2015

Pre-requisites/co-requisite: Completion of ENGR 390 with a grade of C or higher.

Class Meeting Times and Location

Lecture Tuesday and Thursday in Bennett 233 from 12:00pm to 1:20pm

Laboratory Tuesday in Bennett 114 from 1:30 pm. to 4:20 pm

The final exam is scheduled for 10:00 to 11:45 am on Friday, December 8, 2015.

Required Text and Software

NONE

Catalog Description

The first of a two-course senior-level engineering design experience. Students will engage in team-based professional level engineering design projects using design procedures to develop specifications, alternate solutions, and engineering drawing and plans while considering external constraints. In collaboration with clients, students will develop an engineering design to be prototyped in ENGR 432. **A writing-intensive course. Contributes to completion of university capstone requirements.**

Intended Audience

This is a required course for engineering majors and intended to be completed during the fall semester of the senior year.

Contact Information

Name: Matthew Steele, Ph.D, P.E., Assistant Professor of Engineering

Office: Foster Science 317

Phone: 325-674-2002

Email: mts13a@acu.edu

Office Hours: M (10:00 -11:00 am) T (1:30-2:30 pm) W (10:00 – 11:00 am and 1:30 – 3:30) and Friday (1:30 – 3:30 pm). Additional office hours can be arranged as needed.

TEACHING PHILOSOPHY

Engineering is a well-respected profession. The public entrusts engineers to be honest, competent, and ethical. Many codes of ethics for these fields indicate that the commitment to protecting the health, safety, and welfare of the public is of paramount importance. These values are in harmony with Christian principles and ideals. Christian engineers should be honest (Matthew 5:37), work hard to ensure competency (Colossians 3:23), and put the public's interest ahead of his or her own (Luke 6:31). In light of these principles, this course will be taught such that you will gain an appreciation for the professional nature of engineering. It will be taught so as to give you every opportunity to begin to develop competency in these fields. This will require homework, quizzes, test, and group discussion. The instructor especially encourages the discussion of topics that would bear on integrating faith and

professional responsibilities (cheating on licensure exams, weapons design and manufacture, environmental laws and employment opportunities in developing nations, etc.)

Learning Objectives

The activities of the course support the assessment of the following ABET Outcomes:

Criterion 3

3(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic environmental, social, political, ethical, health and safety, manufacturability, and sustainability

3(d) an ability to function on multidisciplinary teams

3(g) an ability to communicate effectively

3(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.³

ABET Learning Objectives	Course Competencies	Measurement ¹
3(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic environmental, social, political, ethical, health and safety, manufacturability, and sustainability	Creatively apply systematic design process to a real-world problem	Final written project report
	Develop, evaluate, and synthesize alternate design solutions	Scope of Work Problem Statement Final Written Report
3(d) an ability to function on multidisciplinary teams	Work productively as a member of an engineering design team	Team Member Assessments
	Interface effectively with clients and professionals in industry,/government/education	Statement of Qualifications Problem Statement Weekly Activity Reports Draft and Final Written Report
	Create and communicate professional, interdisciplinary ideas	Draft and Final Written Reports Oral Report Team Logo Team Member Assessments Weekly Activity Reports
3(g) an ability to communicate effectively	Create professional written responses and reports constructed from technical publications and sources	Final Written Report Literature Review ²
3(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	Utilize problem-solving and core engineering education to discover best practices and solutions for the design sponsor	Final Written and Oral Reports Team Member Assessments
	Utilizing the sponsor identified constraints and professional standards to shape and evaluate the results of the design process	Problem Statement Draft and Final Written Reports

¹ For sake of consistency, many submitted items will be assessed using a rubric developed by a faculty committee.

² The Literature Review will be submitted in partial fulfillment of university capstone requirements.

GRADING POLICY

Weekly Activity Reports – (14 reports x 10 points = 140 points)

Each project team is responsible to submission of weekly activity reports identifying concerns, indicating progress, and outline current plans for the project. Additionally, each team member will report their weekly time commitment to the project rounded to nearest 0.25 hour.

Participation/Attendance (50 points team assessment and 50 points faculty assessment and attendance record)

Part of your final grade in this course will depend upon your attendance and your respectful participation during class. Faculty assessments will be based upon student's professional characteristics including punctuality, attendance, collegial attitude, and participation. Participation may be evaluated at any time during class, students, either individually or as a group, are subject to be requested to participate in class discussions, demonstrations, and written exercises. Evaluations of each team member will be made by all members of the team regarding the contributions made by the team member.

Draft Reports (3 draft reports x 50 points=150 points)

Two draft submissions of design project report and one draft submission of design economic analysis are required during the semester to evaluated team progression and conformance to format and content requirements. Submission of a draft report includes posting to the project website hosted by the department.

Team Logo – (50 points)

Each team will develop a team logo that will be utilized on all team documents. The logo must be submitted digitally in a vector file format, and, upon approval of the instructor, the logo must be posted to the project website hosted by the department.

Scope of Work and Problem Statement / Statement of Qualifications – (110 points Total)

Each team will develop two professional documents for distribution to project sponsors and external project evaluators. The Scope of Work and Problem Statement and Statement of Qualification format will reflect the professional standards of the specific engineering industry of the project sponsor and/or external project evaluator.

Literature Review (100 points)

Each team member will complete a review the current literature related to the design project. **This is an individual assignment.** The literature review must contain a minimum of 2,000 words and 5 peer reviewed sources.

Final Written and Oral Presentation Submission – (200 points Total)

During the final examination time each project design team will submit their final written design report along with an oral presentation of the design detailed in the written report. Submission of the final written design report includes posting to the project website hosted by the department.

Calculation of Final Course Grade-

Weekly Activity Reports.....	140 points
Team Logo.....	50 points
Scope of Work and Problem Statement.....	50 points
Statement of Qualifications.....	60 points
Literature Review.....	100 points
Draft Reports.....	150 points
Participation/Attendance.....	100 points
Final Written Design Report.....	100 points
<u>Final Oral Design Presentation.....</u>	<u>100 points</u>
Total Points	850 points

90% and above	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
59% and below	F

ACADEMIC INTEGRITY POLICY

Academic integrity is defined as academic work completed as assigned for each class by the individual or group responsible for the work. Violations of academic integrity and other forms of cheating involve the intention to deceive, mislead, or misrepresent and therefore, are a form of lying. Such actions are contrary to behavioral norms that flow from the nature of God. Academic misconduct includes, but is not limited to, the following: 1) Failure to give credit to sources used in a work in an attempt to present the work as one's own, 2) Submission of papers or projects obtained from another source (e.g., research service or club paper file) as one's own, and 3) Falsifying information orally or in writing. Academic misconduct may result in, but is not limited to, a zero on the assignment and/or an F in the course. Additionally, the department chair, Dean of the College of Arts and Sciences, and the Dean of Student Life will be notified. See the full university policy, including how to appeal a decision, by following this link:
<http://www.acu.edu/campusoffices/studentlife/judicialDocuments/AcademicIntegrityPolicy.pdf>.

ADA COMPLIANCE STATEMENT

“Abilene Christian University is dedicated to removing barriers and opening access for students with disabilities in compliance with ADA and Section 504 of the Rehabilitation Act. The Alpha Scholars Program facilitates disability accommodations in cooperation with instructors. In order to receive accommodations, you must be registered with Alpha Scholars Program, and you must complete a specific request for each class in which you need accommodations. If you have a documented disability and wish to discuss academic accommodations, please call our office directly at 325-674-2667.”

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To educate students for Christian service and leadership throughout the world.

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THE MISSION OF THE ENGINEERING AND PHYSICS DEPARTMENT:

The ACU engineering program strongly supports the university's mission of educating students for Christian service and leadership throughout the world. In support of this mission, ACU engineering graduates will attain:

- a deep and broad understanding of engineering principles and practices as evidenced by professional employment, continued professional development, and graduate study in engineering or other professional fields.
- an extensive knowledge of the innovative design processes unique to engineering professionals as demonstrated by using critical thinking skills to contribute to the scientific and technical literature, patents and intellectual property, professional societies, and creative designs.
- a thorough understanding of Christian service and leadership as shown in their commitments to professionalism, ethics, and service and leadership within the engineering profession, the church, and society.

COURSE SCHEDULE (Instructor reserves the right to modify the course schedule as necessary)

Week	Date	Topics/Activities	Assignment Due Date
1	8/24/2015 8/26/2015	Syllabus, project identification, and group identification	None
2	8/31/2015 9/2/2015	Group project assignments, contracts, sponsor visit preparation	Weekly Activity Report,
3	9/7/2015 9/9/2015	Design Process Literature Reviews	Weekly Activity Report Team Logo
4	9/14/2015 9/16/2015	Design Report expectations and deliverables	Weekly Activity Report
5	9/21/2015 9/23/2015	Scope of work and Problem Statements	Weekly Activity Report Design Gant Chart
6	9/28/2015 9/30/2015	Statement of Qualifications (SOQ)	Weekly Activity Report
7	10/5/2015 10/7/2015	Resumes	Weekly Activity Report Scope of Work and Problem Statement
8	10/12/2015 10/14/2015	Professional Presentations	Weekly Activity Report SOQ
9	10/19/2015 10/21/2015	Patent Search	Weekly Activity Report Design Report Draft 1 (Electronic Submission)
10	10/26/2015 10/28/2015	Economic Analysis	Weekly Activity Report
11	11/2/2015 11/4/2015	Engineering and Industrial Standards	Weekly Activity Report Literature Review
12	11/9/2015 11/11/2015	Dress for Success	Weekly Activity Report Design Economic Analysis Draft 1
13	11/16/2015 11/18/2015	Presentation Practice Days in Class	Weekly Activity Report Design Report Draft 2
14	11/23/2015 11/25/2015	Project Work Days	Weekly Activity Report
15	11/30/2015 12/2/2015	Project Work Days	Weekly Activity Report
16	12/8/2015	Final Presentation of written and oral design report	Final Written and Oral Design Report

Laboratory periods are scheduled for team project work, instruction during these periods will be as needed to address project challenges as they arise.

Senior Clinic 2 – ENGR 432, Section 01

Abilene Christian University

Credit Hours: 3

Semester and Year: Spring 2016

Pre-requisites/co-requisite: Completion of ENGR 430 with a grade of C or higher.

Class Meeting Times and Location

Lecture Tuesday and Thursday in Bennett 233 from 12:00pm to 1:20pm

Laboratory Tuesday in Bennett 114 from 1:30 pm. to 4:20 pm

The final exam is scheduled for 10:00 to 11:45 am on Tuesday May 3, 2016.

Required Text and Software

NONE

Catalog Description

The second of a two-course senior-level engineering design experience. Students will engage in team based professional level engineering design projects using design procedures to develop specifications, alternate solutions, and engineering drawing and plans while considering external constraints. Using engineering design procedures students complete a prototype of the design created during the first part of the design sequence (ENGR 430). **A writing-intensive course. Contributes to completion of university capstone requirements.**

Intended Audience

This is a required course for engineering majors and intended to be completed during the spring semester of the senior year.

Contact Information

Name: Matthew Steele, Ph.D, P.E., Assistant Professor of Engineering

Office: Foster Science 317

Phone: 325-674-2002

Email: mts13a@acu.edu

Office Hours: M (10:00 -11:00 am) T (1:30-2:30 pm) W (10:00 – 11:00 am and 1:30 – 3:30) and Friday (1:30 – 3:30 pm). Additional office hours can be arranged as needed.

TEACHING PHILOSOPHY

Engineering is a well-respected profession. The public entrusts engineers to be honest, competent, and ethical. Many codes of ethics for these fields indicate that the commitment to protecting the health, safety, and welfare of the public is of paramount importance. These values are in harmony with Christian principles and ideals. Christian engineers should be honest (Matthew 5:37), work hard to ensure competency (Colossians 3:23), and put the public's interest ahead of his or her own (Luke 6:31). In light of these principles, this course will be taught such that you will gain an appreciation for the professional nature of engineering. It will be taught so as to give you every opportunity to begin to develop competency in these fields. This will require homework, quizzes, test, and group discussion. The instructor especially encourages the discussion of topics that would bear on integrating faith and

professional responsibilities (cheating on licensure exams, weapons design and manufacture, environmental laws and employment opportunities in developing nations, etc.)

Learning Objectives

The activities of the course support the assessment of the following ABET Outcomes:

Criterion 3

3(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic environmental, social, political, ethical, health and safety, manufacturability, and sustainability

3(d) an ability to function on multidisciplinary teams

3(g) an ability to communicate effectively

3(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

ABET Learning Objectives	Course Competencies	Measurement ¹
3(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic environmental, social, political, ethical, health and safety, manufacturability, and sustainability	Creatively apply systematic design process to a real-world problem	Draft and Final written reports
	Develop, evaluate, and synthesize alternate design solutions	Draft and Final written reports
3(d) an ability to function on multidisciplinary teams	Work productively as a member of an engineering design team	Team Member Assessments
	Interface effectively with clients and professionals in industry,/government/education	Draft and Final written reports
	Create and communicate professional, interdisciplinary ideas	Draft and Final written reports Oral Report Team Member Assessments Weekly Progress Reports
3(g) an ability to communicate effectively	Create professional written responses and reports constructed from technical publications and sources	Draft and Final written reports Statement of Faith ²
3(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	Utilize problem-solving and core engineering education to discover best practices and solutions for the design sponsor	Draft and Final written reports Oral Report Team Member Assessments Economic Analysis
	Utilizing the sponsor identified constraints and professional standards to shape and evaluate the results of the design process	Problem Statement Draft and Final written reports

¹ For sake of consistency, many submitted items will be assessed using a rubric developed by a faculty committee.

² The Literature Review and Statement of Faith will be submitted in partial fulfillment of university capstone requirements.

GRADING POLICY

Weekly Activity Reports – (16 reports x 10 points = 160 points)

Each project team is responsible to submission of weekly activity reports identifying concerns, indicating progress, and outline current plans for the project. Additionally, each team member will report their weekly time commitment to the project rounded to nearest 0.25 hour. Weekly Activity Reports are due each Friday (Electronically).

Participation/Attendance (50 points team assessment and 50 points faculty assessment and attendance record)

Part of your final grade in this course will depend upon your attendance and your respectful participation during class. Faculty assessments will be based upon student's professional characteristics including punctuality, attendance, collegial attitude, and participation. Participation may be evaluated at any time during class, students, either individually or as a group, are subject to be requested to participate in class discussions, demonstrations, and written exercises. Evaluations of each team member will be made by all members of the team regarding the contributions made by the team member.

Draft Reports (2 draft reports x 50 points=100 points)

Two draft submissions of design project report are required during the semester to evaluated team progression and conformance to format and content requirements. Submission of a draft design project report includes posting to the project website hosted by the department.

Economic Analysis – (150 points Total, 50 points draft report and 100 points final report)

Each team will develop an economic analysis for their final design, in addition to submission of a draft of a design economic analysis. The analysis will include total costs, complete parts lists, labor requirements, and both two professional documents for distribution to project sponsors and external project evaluators.

Statement of Faith (100 points)

Each team member will submit an essay statement of reflecting on her or his integration of faith and engineering. (For satisfaction of University Capstone requirements)

Final Design Submission (300 points)

Each team submit their design working prototype of their selected project. For full consideration As-Built plans must be included with submissions along with verification of prototype testing, and both must be posted to the project website hosted by the department.

Final Written and Oral Presentation Submission – (300 points total, 150 each)

During the final examination time each project design team will submit their final written design report along with an oral presentation of the design detailed in the written report. Submission of the final written design report includes posting to the project website hosted by the department.

Calculation of Final Course Grade-

Weekly Activity Reports.....	160 points
Draft Reports.....	100 points
Statement of Faith.....	100 points
Participation/Attendance.....	100 points
Economic Analysis	150 points
Final Design Prototype	300 points
Final Written Design Report.....	150 points
Final Oral Design Presentation.....	150 points
Total Points	1,210points

90% and above	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
59% and below	F

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<http://www.acu.edu/campusoffices/studentlife/judicialDocuments/AcademicIntegrityPolicy.pdf>.

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- a thorough understanding of Christian service and leadership as shown in their commitments to professionalism, ethics, and service and leadership within the engineering profession, the church, and society.

COURSE SCHEDULE (Instructor reserves the right to modify the course schedule as necessary)

Week	Date	Topics/Activities	Assignment Due
1	1/11/2016	Syllabus and semester scheduling	
	1/13/2016	Fabrication Practices, Procedures, and Culture of Safety	Weekly Activity Report
2	1/18/2016		
	1/20/2016	Fabrication Practices, Procedures, and Culture of Safety	Weekly Activity Report
3	1/25/2016		
	1/27/2016	Interviews	Weekly Activity Report
4	2/1/2016		Statement of Faith
	2/3/2016	Mock Interviews	Weekly Activity Report
5	2/8/2016	Engineering Ethics	
	2/10/2016	Engineering Ethics	Weekly Activity Report
6	2/15/2016	Faith and Practice	Design Economic Analysis Draft
	2/17/2016		Weekly Activity Report
7	2/22/2016	Team building exercise	Written Report Draft
	2/24/2016		Weekly Activity Report
8	2/29/2016	Presentation Practice Day	Statement of Faith
	3/2/2016	Economic Analysis Review	Weekly Activity Report
9	3/7/2016	Professional Development Guest Lecture	
	3/9/2016	Professional Licensure	Weekly Activity Report
10	3/14/2016	Spring Break	
	3/16/2016	Spring Break	Weekly Activity Report
11	3/21/2016		Economic Analysis Draft
	3/23/2016	Work Place Stress	Weekly Activity Report
12	3/28/2016	Professional Development Guest Lecture	2nd Written Report Draft
	3/30/2016	Social Media and Professional Conduct	Weekly Activity Report
13	4/4/2016	Professional Development Guest Lecture	
	4/6/2016	Social Media and Professional Conduct	Weekly Activity Report
14	4/11/2016	Professional Development Guest Lecture	
	4/13/2016	Continuing Education	Weekly Activity Report
15	4/18/2016		
	4/20/2016	Project Work Day	Weekly Activity Report
16	4/25/2016		
	4/27/2016	Project Work Day	Weekly Activity Report
17	5/2/2016	Dead Day	
	5/4/2016	Final Presentation of written and oral design report (10:00- 11:45 am)	Weekly Activity Report

Laboratory periods are scheduled for team project work, instruction during these periods will be as needed to address project challenges as they arise.