

**COLLEGE OF SCIENCE AND ENGINEERING TECHNOLOGY**  
**Department of Engineering Technology**  
***Sam Houston State University***

**COURSE SYLLABUS**  
**ETEC 3300 - Technology Innovations**  
**Spring, 2018**

<b>Course Title:</b>	Technology Innovations
<b>Course ID:</b>	ETEC 3300
<b>Credit Hours:</b>	3-hour undergraduate course
<b>Delivery:</b>	Classroom setting lecture
<b>Delivery Time:</b>	T & Th (9:30 a.m. - 10:50 a.m.)
<b>Location:</b>	Pirkle engineering Tech Ctr, Room - 210 C
<b>Instructor:</b>	Sumanth Yanamala
<b>Office:</b>	PIRKLE ENGINEERING TECH CTR, Room - 325
<b>Office hours:</b>	T & Th (11:00 a.m. - 1:00 p.m.)
<b>E-mail:</b>	SXY018@SHSU.EDU

Catalog Data:	ETEC 3300 - Technology Innovations (3 credits). This course provides a study of societal technologies and their effects on the daily lives of consumers. The course presents the pervasive nature of technology innovations and increases the awareness of the promises of uncertainty associated with the use of technology as a human enterprise.
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Prerequisites:	None
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Textbook:	Professor David Rose, Enchanted Objects: Innovation, Design, and the Future of Technology, 5th ed., Scribner, 2015
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Course objectives:	To introduce the student to Technology Innovations. To reveal the extent to which modern technological controversies grow out of distrust in public and private institutions. To show how new technologies emerge, take root, and create new institutional ecologies that favor their establishment in the marketplace. To utilize lessons from history to contextualize contemporary debates surrounding. Also, to explain the importance of shifting greater responsibility to public leaders to work with scientists, engineers, and entrepreneurs to manage
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technological change, make associated institutional adjustments, and expand public engagement on scientific and technological matters.

Topics:

- Four futures
- Six human drives
- The Design of enchantment
- Enchanted systems

Design Project:

Students work in groups of five to six to integrate technology aspects learned in class into a realistic hypothetical scenario with industrial setting. The objective is to get the students to apply the principles of Technology Innovations, learned in class, to understand their use in the real world.

Course vs. objectives:

The course supports the following outcomes in providing the students with:

- ◆ It shows that enchanted Objects is a blueprint for a better future
- ◆ It shows that enchanted objects of fairy tales and science fiction will enter real life
- ◆ It shows that efficient solutions come hand in hand with technology that delights our senses
- ◆ It shows that examples that will influence our imagination and help us move beyond our fixation on the screen.

## **WELCOME! HERE ARE THE RULES FOR ETEC 3300**

### **1. READINGS**

Prior to each class, you are required to read the material indicated in the syllabus. You are expected to go through both the text and examples.

### **2. Paper ASSIGNMENTS**

Each student is required to turn in paper assignments. The paper should be TYPED. The body (Excluding title, names, dates, or anything you type before you start assignment) of the paper (main text) should be a minimum of 500 words. The paper should include a description of the material, a list of the examples treated in the text, and your thoughts and ideas. Your paper should look similar to science magazine papers, full of scientific ideas and visual aids.

To get an excellent grade in the homework you need to tell me:

- ✚ What is your understanding and thoughts of the topic you are typing about from the textbook
- ✚ Give me new example of enchanted technology that you discovered on your own that is related to the topic you choose.
- ✚ Tell me how the technology you discovered is enchanted. i.e what are the technologies and their features that this enchanted technology has adapted
- ✚ Tell me what the enchanted technology you discovered does.
- ✚ Use many visual aids to help me identify the enchanted technology you discovered features.
- ✚ You could also submit links of the enchanted technology you discovered. Please no distasteful links.
- ✚ Paper has to be at least 500 words of your understanding of materials but remember it is your grade. Show effort and talent. These 500 words do not include your name, course name, visual aid, and/ or words inside visual aid. 500 words.
- ✚ Please submit Exam on line.

There is ABSOLUTELY no make-up for the assignments. All assignments should be turned on line. All readings assigned during a given week are due on Thursday of the following week. The deadline to turn in an assignment is before midnight.

### **3. Homework Assignments**

Each student is required to do the assigned homework. All homework assignments should be turned on line. Homework assigned during a given week is due on Sundays of the following week. The deadline to turn in an assignment is before midnight on Sundays (11:59 PM).

**4. ATTENDANCE**

You should arrive on time to receive credit for attendance.

**5. TESTS**

There will be three comprehensive tests as indicated in the syllabus. No make-up test will be given except in very exceptional circumstances (e.g., documented illness). Exam assigned during a given week is due on Sundays of the following week. The deadline to turn in an exam is before midnight on Sundays (11:59 PM).

**6. PROJECT**

You will be asked to team up with other students to do a term project. The objective of the project is to apply what you learn in class.

**7. COMMUNICATION WITH CLASS**

All my communication outside the class will be via e-mail. I tends to send a lot of e-mails to remind you that I have uploaded new reading assignments, Homework assignments, exams, exam reviews, deadlines, and recommendations for both Homework and exams. I respond to students' e-mails. I encourage you to check your e-mails frequently for updates.

**8. IF YOU HAVE A DIAGNOSED LEARNING DIFFERENCE:**

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely due to their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail [disability@shsu.edu](mailto:disability@shsu.edu)). They should then plan with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired. *The above reference is so well written, it is adopted from (Foy D. Mills, Jr., Ph.D.) syllabus*

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see <http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>

*The above reference is so well written, it is adopted from (Foy D. Mills, Jr., Ph.D.) syllabus.*

## **9. RELIGIOUS HOLIDAYS:**

University policy states that a student who is absent from class for the observance of a religious holy day shall be permitted to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who wishes to be excused for a religious holy day must present the instructor with a written statement describing the holy day(s) and the travel involved.

## **10. GRADING**

My teaching philosophy is to encourage cooperation not competition; therefore, the grades will not be curved.

You Also have many opportunities to be rewarded for your work, per the following mix:

- 10% Attendance and participation
- 40% Reading/ Paper Assignments and/or Homework
- 30% Exams (10% 1<sup>st</sup> Exam, 10% 2<sup>nd</sup> Exam, and 10% 3<sup>rd</sup> Exam)
- 20% Final project (Presentation + Power point + Project paper)

The following scale will be used to determine letter grades:

- 87 -100        A
- 70-86.99      B
- 57-69.99      C
- 40-56.99      D
- 0 - 39.99      F

You are strongly encouraged to see me in my office. The best way to contact me will be through Email. Before coming to see me, calling me, or emailing me, please think your questions through in advance, and read the corresponding text in your book or notes.

**Please, come to see me if you have any questions!**

## **SYLLABUS**

<b>Sessions</b>	<b>Topics</b>
1	INTRODUCTION: Prologue my nightmare
2	Future # 1 — Terminal world: The domination of glass slabs
3	Future # 2 — Prosthetics: The new bionic you
4	Future # 3 — Animism: Living with social robots
5	Future # 4 — Enchanting everyday objects
6	Drive # 1. Omniscience: To know all
7	Drive # 2. Telepathy: Human to human connections
8	Drive # 3. Safekeeping: Protection from all harm
9	Drive # 4. Immorality: A long and quantified life
10 & 11	Exam I Review & Exam I
12	Drive # 5. Teleportation: Friction-free travel
13	Drive # 6. Expression: The desire to create
14	The Extraordinary Capability of Human Senses
15	Technology Sensors and Enchanted Bricolage
15	1. Glanceability & 2. Gestureability
16	3. Affordability & 4. Wearability
17	5. Indestructibility & 6. Usability & 7. Lovability
18	Five Steps on the Ladder of Enchantment
20 & 21	Exam II Review & Exam II
22	Transformer Homes
23	Collaborative Workplaces
24	Human-Centered Cities
25	Six Future Fantasies
26 & 27	Exam III Review & Exam III
28 & 29	15 minutes Presentation (Final Project) <b>IDEA evaluation of this course,</b> + 1.5% Extra credit for creativity in the final project i.e. CAD, visual aid, charts, building the project, original (New) ideas, etc.

## ETEC 3300 - Technology Innovations– Final Project

Topic: Develop an innovated technology Idea tailored to your business,  
In general, cover the topics that were developed in class.

### Extra credit up for grab to whom is willing to do extra work

+1.5% Extra credit for creativity in the presentation in the final project, i.e. visual aid, charts, original (New) ideas, etc. Applied to overall presentation %, power point %, and project paper % (0.5% applied to presentation, 0.5% applied to power point, and 0.5% applied to project paper)

+Extra credit (TBD) will be given for doing extra assigned HW applied to overall HW total %

**Note: You will make the report interesting – It must keep me awake while I read it. A standard everyday report will only get you to **70 percent**. The other 30 percent is in your ability to make it interesting.**

NOTE: The courses syllabus and above Scope and Sequence or Course Schedule/Outline can change based upon the classes progress as a whole, or bad weather, etc... Pay attention to announcements and periodical changes. You will receive an announcement for any changes and they will be made here also.