

**DEPARTMENT OF** Engineering, Engineering Technology, & Surveying

Syllabus ENTC 3020 Spring Semester 2021

**3** Credit Hours

## Meeting Summary

Course will be taught online, asynchronously – you are responsible for scheduling your time January 20, 2021 – April 30, 2021 Prerequisite: English 1120

UNIVERSITY

# **Technology and Society**

How does technology impact society and daily life? Historical aspects of the development of technology focusing on the life of the immigrants to America through both Industrial Revolutions, to modern concepts. An atmosphere where group discussions struggle with some of the dilemmas of modern life.

## **Course Objectives:**

The objective of this course is to read and research topics that present views on how different technologies have impacted society and then to express your point of view in concise, properly written and presented documents.

Upon completion of the course the student will:

- 1. Describe how different technologies have impacted societies.
- 2. Be able to evaluate a variety of technologies for their effects on societies.
- 3. Author properly developed APA formatted assignments expressing the ethical impacts existing technologies had or may have society.

How does technology impact society and one's daily life? Historical aspects of the development of technology beginning with Stone Age peoples through the Industrial Revolution, to modern concepts. An atmosphere where group discussions struggle with some of the dilemmas of modern life.

This is an online course, therefore, a key requirement for success is to establish a schedule that allows for reading and comprehending the material along with on-time submission of all assignments and assessments (exams and quizzes). I rely solely on the feedback from the <u>D</u>2L system and the IT department to verify the timing and submission of assignments and the amount of time you spend working with the course materials. If you state that you submitted something via D2L, they will perform the analysis to determine if you actually did. If you miss a deadline for any assignment or assessment – you receive a zero for that grade.

### **ABET Requirements**

The course is developed around the following ABET outcomes for the program:

Each student will show an ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;

#### **Assessments and Assignments:**

During the semester, there will be about 14 quizzes and two exams, all will be posted on D2l. There will be 3 written assignments (academically formatted essays) developed using various aspects of APA formatting that will require the student to analyze the ethical aspects of a technology and it impact on society.

#### Exam information:

The exams will timed assessments (2 hours). The material to be evaluated can be found within the reading assignments, your notes, handouts and other class materials.

# Midterm Exam – Friday March 12, 2021 - 8:00 am to 8:00 PM – Schedule your jobs and meetings as required.

# Final Exam – Monday May 3, 2021 8:00 am to 8:00 PM – Schedule your jobs and meetings as required.

Weekly quizzes will consist of a variety of question types and timed at 30 minutes. They will focus on the weekly readings, homework and any previous material which needs to be reinforced. Some

questions will rely on you looking up the answer on the web. The questions are written to test your comprehension of the material – the critical application of the material you read read – therefore, they are not easy to answer if you did not prepare. Weekly quizzes will be scheduled for Fridays – between 12:00 PM and 11:00 PM Eastern Time. Arrange your schedules accordingly.

### **Course Format**

Reading the textbook, developing your notes, viewing or reading other assigned materials, homework assignments, writing original documents (not plagiarized or written by you for use in other courses), and two exams.

If you do not follow the criteria for an assignment, the associated rubric can no longer be used to evaluate your submission because you didn't follow the requirements – therefore, you will receive a very poor grade for that assignment. To avoid this – follow the directions and make an appointment to talk about your ideas during office hours, if you have any questions.

#### Summary for Success

This IS NOT an easy course, it is based on the critical analysis of the evolution of technology and how it impacted society through the last 300 years. The focus is on how technological changes – machines, processes, materials, etc., impacted people. You need to understand the basics of the operation, characteristics and differences of many different technologies and more importantly, the societal impacts that resulted from these technologies.

To be successful requires each student to spend 6 or more hours per week reading, developing their notes, performing research and submitting assignments. The quizzes and exam require critical thinking skills to achieve the correct answers and a passing grade. Although they are open book quizzes and exam, there is little chance of passing them if you do not understand the material and how the assignments build on each other throughout the semester. The critical thinking homework assignments require accuracy in its content and in the presentation of the information to achieve a passing grade. All homework assignments will have an associated rubric to indicate what I based the grad upon. Follow the rubric!

## Grading:

Grading is based on your earned percentage divided by the total of the assignments and assessments. For example, if the following tasks are assigned, your grade will be the sum of your earned points divided by 640. The actual denominator will be based on the actual tasks assigned – which may vary from this preliminary list.

- 1. Assessments 2 exams (100 points ea)
- 2. ~14 quizzes (10 points each)
- 3. Assignments ~3 written assignments (10 to 20 points each)

There are two possibilities for bonus points to improve your final grade. They are:

- 1. Class participation Make an office visit and receive 2 bonus points per week
- 2. Write your essays well and receive a bonus of 5 to 20%

	A	В	C	D	E	F	G	Н	I
1		Qty	Points Each	Sub	Your Effort without Bonus	Your Effort with Bonus	Percent per Assessment		
2	Quizzes	14	10.0	140.0	100.0	100.0	21.9%		
3	Exams	2	100.0	200.0	150.0	150.0	31.3%	53.1%	Tests
4	Essays	3	100.0	300.0	200.0	200.0	46.9%	46.9%	Assignments
5	Office Hour Visit					35.00			
6				640.0	450.0	485.0			
7				Final Grade	70.3%	75.8%	5.47%		
8									
9									
10									
11	Letter Grade	Min	Max						
12	А	93.33			The table above shows example grades and the				
13	A-	90.00	93.33		impact of accumulating bonus points. In				
14	B+	86.66	90.00		Column E, a student's effort based on the				
15	В	83.33	86.66		grades received and in Column E, the final				
16	В-	80.00	83.33		grade based on the same effort plus the				
17	C+	76.66	80.00		achievement of weekly office hour attendance.				
18	С	73.33	76.66						
19	C-	70.00	73.33						
20	D+	66.66	70.00						
21	D	63.33	66.66						
22	F	< 63.33							
23									
24									

#### **Grade Scale:**

All submissions will be through D2L – nothing will be accepted by email, paper, etc. This requirements assures that the submissions are on time. If you miss the deadline for submission – you will receive a 0 for the assignment / quiz / exam

There will be NO opportunities for extra credit throughout the semester except via Office Hour visits.

If you are have questions about an assignment, submission requirements, etc. come to my online office during the posted hours and *before* it is due so I can help you. It doesn't do much if any good to come to the office hours after receiving a grade.

# **Required Texts:**



#### "Society and Technological Change"

by: Rudi Volti

- Publisher: Worth Publishers
- eText ISBN: 9781319129729, 1319129722
- Edition: 8th
- Copyright year: 2017
- Available from VitalSource -
- https://www.vitalsource.com/referral?term=9781319129729

If you purchase this text from this source, you will be able to share my highlights, notes and comments by adding this link (<u>https://bookshelf.vitalsource.com/home/subscribe/horantj%40etsu.edu</u>) to your <Managed Sharing> <Sharing With> box within the <Notebook> tab. My highlights are color coded: yellow – general highlight of important information, purple highlights represent thing you need to ponder to develop you critical thinking skills in preparation for tests and assignments, and red highlights identify material that can be read quickly – but there is no need to focus on that material.

If you purchase the text from another source, you will have to manually enter the highlights if you want them.

## **Policies:**

- If a student cannot take test or exam for any reasons, an email notice must be given to the instructor *in advance* of the exam time. The instructor will consider the student's excuse (such as a physician's note or a University's permission slip) and keep the right to allow a makeup. There will only be one makeup permitted for a student per semester.
- All assignments must be submitted on time. The deadline of each submission will be specified by the instructor through D2L and the Dropbox will close at the stated time.
- It is the student's responsibility to check D2L for any course updates. No late submissions will be accepted.
- All papers will be submitted through D2l and will include Turnitin to be evaluated for grammar, mechanics, plagiarism, spelling errors, etc. The analysis results will determine part of your grade according to the published rubric. The rest of the grade will be based on your ability to accurately develop the material in the paper and your ability to critically analyze the impact of the technology on society. Papers with extensive use of cited material, material from other authors, written on topics outside of those posted for the assignment and poor quality will receive failing grades.
- Cheating in any format or method is unacceptable. Do your best, applying sufficient effort and you will be able to do well in all of the assignments.

This is a challenging online course so the scheduling of your reading and other assignments is an important responsibility. Expect to spend at least six hours per week for reading and multimedia assignments and several more hours preparing and writing your papers and studying for your quizzes and exams. Develop outlines for the assignments and weekly reading to help you during the quizzes and exams.

Come to my office as soon as you have a question or do not understand an assignment – students that stop in the office generally do much better than those who don't make the effort.

# **College Rubrics**

The College of Business requires students of this course to be evaluated on the following three rubrics. These rubrics are evaluated via your written assignments. I'll develop a rubric for each of these essays that will incorporate these criteria. When you submit your assignments via Turnitin, I'll grade them against the rubric assigned to the essay.

	Does Not Meet Expectations 0	Meets Expectations	Exceeds Expectations 2	Rating
	Student does not effectively introduce and/or address/explain significance of topic.	Student introduces and addresses/explains significance of topic.	Student introduces and addresses/explains significance of topic in a manner that motivates reader interest.	
	Student does not identify or employ appropriate sources or fails to extract relevant information from them.	Student identifies and employs appropriate sources and extracts useful information from them.	Student identifies and employs high quality sources and extracts insightful information from them.	
Content and Analysis	Student's conclusion is not supported by a logical sequence of ideas/facts.	Student's conclusion is supported by a logical sequence of ideas/facts.	Student's conclusion is supported by an insightful and/or persuasive logical sequence of ideas/facts.	
	Student's objective (exposition, description, persuasion, narrative, analysis, synthesis) is not achieved.	Student's objective (exposition, description, persuasion, narrative, analysis, synthesis) is achieved.	Student's objective (exposition, description, persuasion, narrative, analysis, synthesis) is achieved in superior fashion.	
Mechanics and Grammar	Paper contains significant grammar, punctuation, word choice, and/or sentence structure errors that detract from the presentation.	Paper contains minor grammar, punctuation, word choice, and/or sentence structure errors that do not detract from the presentation.	Paper is free from grammar, punctuation, word choice, and/or sentence structure errors.	
Mechanics and Grammar	Paper does not use clear, appropriate writing style.	Paper is clear and features an appropriate writing style.	Paper is clear and features a writing style that facilitates maximum reader interest and/or understanding.	
	Paper does not correctly cite sources.	Paper cites most sources correctly.	Paper cites all sources correctly.	
Formatting and	Paper does not have an appropriate structure or layout	Paper has an appropriate structure and layout.	Paper has a creative structure and layout (if appropriate to assignment) that enhances the content.	
Presentation	Paper does not effectively use visuals.	Paper uses visuals appropriately.	Paper features exceptional visuals which enhance the reader's understanding of the content.	
(			Total	

#### CBAT Undergraduate Written Communication Rubric

	Does Not Meet Expectations 0	Meets Expectations 1	Exceeds Expectations 2	Rating
	Student does not understand, or vaguely understands the problem and its component parts. Exhibits difficulty in identifying and summarizing the problem.	Student has a fundamental/rudimentary understanding of the problem and its component parts and adequately summarizes the problem.	Student substantially understands, identifies and summarizes the problem and its component parts.	
Problem Identification and Definition	Student uses very few/no tools and resources (e.g., concepts, software, models).	Student uses tools and references adequately.	Student uses extensive tools and references.	
	Student is unsure if additional information/data is necessary to resolve the stated problem (where appropriate).	Student is aware that additional information/data is necessary to resolve the stated problem (where appropriate).	Student is aware that additional information/data is necessary to resolve the stated problem and can identify what information is required (where appropriate).	
Problem Analysis and Decomposition	Student inadequately breaks down and identifies logical connections between components of the problem.	Student adequately breaks down and identifies logical connections between components of the problem and demonstrates creative thinking where appropriate.	Student thoroughly breaks down and identifies logical connections between components of the problem and demonstrates creative thinking where appropriate, actively seeking alternative points of view and solutions.	
	Solution doesn't clearly state assumptions.	Solution clearly states most assumptions.	Solution clearly states all assumptions.	
	Solution is non-testable.	Solution is mostly testable.	Solution is fully testable.	
	A minimal part or none of the solution can be replicated.	An adequate part of the solution can be replicated.	A substantial part of the solution can be replicated.	
Problem Solving and Solution Generation	Solution is incorrect or partially correct.	Solution is correct and viable but lacks originality and creativity.	Solution is correct, viable, original, and creative	
	Solution is not well-documented and explained.	Solution is adequately documented and explained.	Solution is well-documented and explained.	
	Student does not consider the broader impact of solution (i.e., on the "bigger picture").	Student considers the broader impact of solution (i.e., on the "bigger picture").	Student considers and substantiates the broader impact of solution (i.e., on the "bigger picture").	

#### CBAT Undergraduate Critical Thinking Rubric

Total

	Does Not Meet Expectations 0	Meets Expectations 1	Exceeds Expectations 2	Rating
Identifies Dilemma	Student cannot recognize an obvious ethical dilemma or stakeholders.	Student can recognize an obvious ethical dilemma and primary stakeholders.	Student can recognize a complex ethical dilemma affecting various stakeholders.	
Analyzes Alternatives	Student cannot determine alternatives to deal with an ethical dilemma.	Student can determine obvious alternatives to deal with an ethical dilemma.	Student can differentiate and develop alternative resolutions to a complex ethical dilemma.	
Evaluates Consequences	Student cannot state consequences of various ethical decisions on stakeholders.	Student can state obvious consequences of various ethical decisions on primary stakeholders.	Student can state consequences of various ethical decisions on all stakeholders.	
Selects and Justifies Solution	Student cannot select an appropriate solution to an ethical dilemma.	Student can select a solution to an ethical dilemma and can minimally justify it.	Student can select or create a solution to an ethical dilemma and thoroughly justify an appropriate solution.	
Mitigates Recurrence	Student cannot suggest strategies to prevent future ethical dilemmas.	Student can suggest strategies to prevent future ethical dilemmas.	Student can suggest optimal strategies to prevent future ethical dilemmas.	
			Total	

#### **CBAT Undergraduate Ethics Rubric**

These rubrics are also posted on D2l in the syllabus section.