



Republic of the Philippines  
**CEBU TECHNOLOGICAL UNIVERSITY**  
Province of Cebu

Website: <http://www.ctu.edu.ph>

Email: [thepresident@ctu.edu.ph](mailto:thepresident@ctu.edu.ph)

Phone: +6332 402 4060 loc. 1137



**COURSE SYLLABUS**  
in  
**GEC-ST5**  
(Course Code)  
**SCIENCE, TECHNOLOGY, AND SOCIETY**  
(Descriptive Title)  
**1<sup>st</sup>Semester, A.Y. 2021-2022**

INS Form 1  
September 2021  
Revision: 4  
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**Department/Area** : Pure Sciences  
**Curriculum** : All programs  
**Curriculum Year** : First year/Second Year  
**No. of Hours/Sem.** : 54 Hours  
**Credit Unit(s)** : 3  
**Prerequisite(s)** : NONE

**Vision of the University** : A premier multidisciplinary-technological university

**Mission of the University** : The University shall primarily provide advanced professional and technical instruction for special purposes advanced studies in industrial trade, agriculture, fishery, forestry aeronautics and land-based program, arts and sciences, health sciences, information technology and other relevant fields of study. It shall also undertake research and extension services, and provide progressive leadership in its areas of specialization.

**Goal of the University** : The University shall produce scientifically and technologically oriented human capital equipped with appropriate knowledge, skills, and attitudes. It shall likewise pursue relevant research, strengthen linkages with the industry, community and other institutions and maintain sustainable technology for the preservation of the environment.

**Core Values** : Commitment, Transparency, Unity, Patriotism, Integrity, Excellence, Spirituality (CTU PIES)

<b>Program Outcomes</b>	: Common to all Programs <b>PO1</b> Articulation of the latest developments in the specific field of practice. <b>PO2</b> Effective communication through oral and written forms using both English and Filipino. <b>PO3</b> Competence to work effectively and independently in multi-disciplinary and multi-cultural teams. <b>PO4</b> Recognition of professional, social, and ethical responsibilities.
<b>Course Description</b>	: The course deals with interactions between science and technology and social, cultural, political, and economic contexts that shape and are shaped by them.  This interdisciplinary course engages students to confront the realities brought about by science and technology in society. Such realities pervade the personal, the public, and the global aspects of our living and are integral to human development. Scientific knowledge and technological development happen in the context of society with all its socio-political, cultural, economic, and philosophical underpinnings at play. This course seeks to instill reflective knowledge in the students that they are able to live the good life and display ethical decision making in the face of scientific and technological advancement.  This course includes mandatory topics on climate change and environmental awareness.
<b>Course Learning Outcomes</b>	At the end of the course, the students would be able to:  <b>CLO1</b> Articulate the impacts of science and technology on society <b>CLO2</b> Imbibe the importance of science and technology in the preservation of the environment and the development of the Filipino nation <b>CLO3</b> Examine shared concerns that make up the good life in order to come up with innovative and creative solutions to contemporary issues guided by ethical standards

Course Content :

INTENDED LEARNING OUTCOMES (TIME ALLOCATION)	ASSESSMENT TASKS	TEACHING-LEARNING ACTIVITIES	CONTENTS	LEARNING RESOURCES	REMARKS
<p><i>Within the semester the learners are expected to:</i></p> <p>explain the relevance of the vision, mission, and goals of CTU in meeting lifelong challenges of the society (CLO's 2 and 3), (3 hours)</p>	<p>Create a video presentation demonstrating their understanding of how to apply the CTU's VMGO to their student journey.</p>	<p>Interactive Lecture-Discussion</p> <p>Video Presentation of CTU milestones</p> <p>Readings from the Student Manual and Course Syllabus</p>	<p><b>I. Orientation</b></p> <ol style="list-style-type: none"> <li>1. CTU's Vision, Mission, and Goals</li> <li>2. School Policies</li> <li>3. Course Outline and Requirements</li> </ol>	<p>Student Manual <a href="http://www.ctu.edu.ph">www.ctu.edu.ph</a></p> <p>Course Syllabus</p> <p>CTU history and promotional videos</p> <p>Teacher's slide presentation</p> <p>Zoom/GoogleMeet/Google Classroom</p>	
<p>articulate ways by which society is transformed by science and technology (CLO !), (12 hours)</p>	<p>Design an e-concept map highlighting the history and contributions of each Intellectual revolution that made significant impact globally and present in class</p> <p>Written insights/reaction from the video</p> <p>-Individual recitation</p> <p>-Quiz</p>	<p>Video film Watching</p> <p>Group-Individual Oral Presentation</p> <p>Note making from video materials</p> <p>Discussion Board</p> <p>Chat share dynamics</p> <p>Digital media-based assignments</p> <p>Live Discussion</p>	<p><b>II. Historical Development of STS</b></p> <ol style="list-style-type: none"> <li>1. Historical Background of STS             <ol style="list-style-type: none"> <li>a. in the World: Ancient, Middle and Modern Ages, and</li> <li>b. in the Philippines</li> </ol> </li> <li>2. Intellectual revolutions that defined society             <ol style="list-style-type: none"> <li>a. Copernican</li> <li>b. Darwinian</li> <li>c. Freudian</li> <li>d. Information</li> <li>e. Meso-American</li> <li>f. Asian</li> <li>g. Middle East</li> <li>h. African</li> </ol> </li> <li>3. Science and Technology and Nation Building</li> </ol>	<p>Copernican <a href="https://tinyurl.com/9x5c8mzk">https://tinyurl.com/9x5c8mzk</a></p> <p>Darwinian <a href="https://tinyurl.com/bjr4xymm">https://tinyurl.com/bjr4xymm</a> <a href="https://tinyurl.com/z6c3mbw">https://tinyurl.com/z6c3mbw</a> <a href="https://tinyurl.com/4fwtbsdk">https://tinyurl.com/4fwtbsdk</a> <a href="https://tinyurl.com/367vzdb">https://tinyurl.com/367vzdb</a></p> <p>Freudian <a href="https://tinyurl.com/ezxst6ca">https://tinyurl.com/ezxst6ca</a></p> <p>Information <a href="https://tinyurl.com/u9hvhf9">https://tinyurl.com/u9hvhf9</a> <a href="https://tinyurl.com/exk9ywm">https://tinyurl.com/exk9ywm</a></p> <p>World's Greatest Inventions <a href="https://tinyurl.com/2zx78kmk">https://tinyurl.com/2zx78kmk</a></p> <p>Philippine Great Inventions <a href="https://tinyurl.com/a348h5b5">https://tinyurl.com/a348h5b5</a></p> <p>European Intellectual Movement <a href="https://tinyurl.com/ythwe29x">https://tinyurl.com/ythwe29x</a></p> <p>What Is A Paradigm? <a href="https://tinyurl.com/hvr6euz">https://tinyurl.com/hvr6euz</a></p> <p>Mesoamerican <a href="https://tinyurl.com/245vd2ps">https://tinyurl.com/245vd2ps</a> <a href="https://tinyurl.com/9h385rsw">https://tinyurl.com/9h385rsw</a></p> <p>Asian <a href="https://tinyurl.com/rd3xhsm">https://tinyurl.com/rd3xhsm</a> <a href="https://tinyurl.com/z5vye8ab">https://tinyurl.com/z5vye8ab</a></p>	

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<b>PRELIM EXAM (1.5 hours)</b>					
<p>evaluate the human condition in pursuit of the good life within the context of science and technology(CLO's 2 and 3), (9 hour)s</p>	<p>Presentation of a digital collage that reflects student's view on how technology influences the attainment of a good life</p> <p><b>Video presentation discussing how they view "The Good Life"</b></p> <p>Unit Quiz</p>	<p>Content reading</p> <p>Interactive Lecture-Discussion</p> <p>Viewing video clips for reflection</p> <p>Group Activity comparing ways of doing something (technologically sophisticated vs simple way) and discuss the consequences.</p>	<p><b>III. STS and The Human Condition</b></p> <ol style="list-style-type: none"> <li>1. Human Flourishing</li> <li>2. Technology as a Way of Revealing</li> <li>3. The Good Life</li> </ol>	<p>Videos and reading materials:</p> <p>Film segment: Akiro Kurosawa's Dreams "Village of the Watermills"  <a href="https://tinyurl.com/rt9utwa2">https://tinyurl.com/rt9utwa2</a></p> <p>The Question Concerning Technology by Martin Heidegger  <a href="https://tinyurl.com/eha5u4tk">https://tinyurl.com/eha5u4tk</a>  <a href="https://tinyurl.com/4x5jdchp">https://tinyurl.com/4x5jdchp</a></p> <p>The Concept Of The Public Good:A View From A Filipino Philosopher  <a href="https://tinyurl.com/5dsw2z6f">https://tinyurl.com/5dsw2z6f</a></p> <p>Slide presentation</p>	
<b>MIDTERM EXAM (1.5 hours)</b>					
<p>examine human experiences and government policies involved in the upholding of human rights amid technological ethical dilemmas (CLO's 2 and 3), (9 hours)</p>	<p>Review of local and international government policies (and suggest new ones) that protect the well being of the person in the face of new</p>	<p>Debate</p> <p>Interactive Lecture Discussion</p> <p>Reflective essay</p> <p>Word cloud</p>	<p><b>IV. Technology and Humanity</b></p> <ol style="list-style-type: none"> <li>1. When Technology And Humanity Cross</li> <li>2. Why does the future not need us?</li> </ol>	<p>"Why the Future Does Not Need Humanity"  <a href="https://tinyurl.com/4kjp9c9w">https://tinyurl.com/4kjp9c9w</a></p> <p>The ethical dilemmas of robotics  <a href="https://tinyurl.com/3zcczdhf">https://tinyurl.com/3zcczdhf</a></p> <p>Is Google Making Us Stupid? 2008. Nicholas Carr  <a href="https://tinyurl.com/rdk6dr">https://tinyurl.com/rdk6dr</a></p>	

	technologies				
	Summary of important concepts using the word cloud				

**PRE-FINAL EXAM (1.5 hours)**

discuss the ethics and implications of the different issues in STS and their possible impacts, (CLO's 1, 2 and 3)(15 hours)	<p>Online quiz through google forms, quizziz.com, kahoot, etc.</p> <p>Reaction paper on the different issues in STS</p> <p>Making of concept maps on the benefits and detriments of certain issues</p> <p>Oral recitation/Online quiz proctored by the subject instructor</p>	<p>Pre-recorded lectures</p> <p>Video presentations</p> <p>Interactive online discussion (synchronous)</p> <p>Group dynamics through breakout sessions using Zoom/Google Meet</p>	<p><b>V. Specific Issues in STS</b></p> <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Biodiversity and The Healthy Society</li> <li>3. Genetically Modified Organisms: Science Health and Society</li> <li>4. The Nano World</li> <li>5. The Aspects of Gene Therapy</li> <li>6. Climate Change and the Energy Crisis</li> <li>7. Environmental Awareness</li> </ol> <p>Other Topics: Alternative Energy Resources (e.g. O-tech Ocean Thermal Energy Conversion)</p>	<p>Teacher-made or adapted ppt</p> <p>Adapted video clipping or presentations</p> <p>Learning module or Course packs</p> <p>Learning activities</p>	
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**FINAL EXAM (1.5 hours)**

**References:**

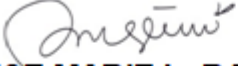
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- Starr, C. et al. (2009) Biology: The Unity and Diversity of Life 12<sup>th</sup> ed., Brooks/Cole. USA
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- Fiske, Shirley J. et al. Changing the Atmosphere: Anthropology and Climate Change (NCAR)
- [https://www.youtube.com/watch?v=ESW\\_S8ZHS80](https://www.youtube.com/watch?v=ESW_S8ZHS80)


**Course Requirements:** Term Examinations, Online Quizzes, Online Presentations, Reflection Papers


**Evaluation Procedure:**


<b>Major Exams</b>		<b>40%</b>
<b>Class Standing</b>		<b>60%</b>
Quizzes	30%	
Graded Oral Presentation	20%	
Projects/Assignments/Final Reports	10%	
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	<b>TOTAL</b>	<b>100%</b>

Prepared by:


  
**LOUISE-MARIE L. BAÑADOS**  
Faculty, CTU-Argao  
[louisemarie.banados@ctu.edu.ph](mailto:louisemarie.banados@ctu.edu.ph)


  
**NANCY G. LARGADO**  
Faculty, CTU-CCMSC  
[nancy.largado@ctu.edu.ph](mailto:nancy.largado@ctu.edu.ph)

  
**JUANITA Z. SAYSON**  
Faculty, CTU-Main  
[juanita.sayson@ctu.edu.ph](mailto:juanita.sayson@ctu.edu.ph)

  
**VALERIE H. BUGTAI**  
Faculty, CTU-Main  
[valerie.bugtai@ctu.edu.ph](mailto:valerie.bugtai@ctu.edu.ph)

  
**ARLENE FE R. LETRONDO**  
Faculty, CTU-Main  
[arlenefe.letrondo@ctu.edu.ph](mailto:arlenefe.letrondo@ctu.edu.ph)

  
**JULIETA B. GECAIN**  
Faculty, CTU-Tuburan  
[julieta.gecain@ctu.edu.ph](mailto:julieta.gecain@ctu.edu.ph)

  
**CECILE A. SADILI**  
Faculty, CTU-Main  
[cecile.sadili@ctu.edu.ph](mailto:cecile.sadili@ctu.edu.ph)

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Utilized by: SHEILA MAE B. MAMALIAS

Consultation Hours: Thursday, 1:00 – 4:00PM

Contact Details:

Upon Recommendation of the Curriculum Committee:



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**ALMA D. AGERO, Ed.D.**  
CTU – Main Campus



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**CRISTINA B. RAMAS, MAEd**  
CTU – Main Campus



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**SYLVESTER T. CORTES, Ph.D.**  
CTU – Main Campus

Approved by:

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**LYNNETTE MATEA S. CAMELLO, D.A.Lit-Com**  
Cluster Facilitator for General Education Courses