



Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
Ibalian, Sultan Kudarat
College of Industrial Technology
S.Y. 2024-2025



GEC 003

SCIENCE, TECHNOLOGY AND SOCIETY

Syllabus

2nd Semester
A.Y 2024 – 2025



Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
Isulan, Sultan Kudarat
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2nd Semester S.Y. 2024-2025



GEC 003 - SCIENCE, TECHNOLOGY AND SOCIETY

UNIVERSITY VISION

A leading University in advancing scholarly innovation, multi-cultural convergence, and responsive public service in a borderless Region.

UNIVERSITY MISSION

The University shall primarily provide advance instruction and professional training in science and technology, agriculture, fisheries, education and other related field of study. It shall undertake research and extension services, and provide progressive leadership in its area of specialization.

UNIVERSITY GOAL

To produce graduates with excellence and dignity in arts, science and technology.

UNIVERSITY OBJECTIVES

- a. Enhance competency development, commitment, professionalism, unity and true spirit of service for public accountability, transparency and delivery of quality services;
- b. Provide relevant programs and professional trainings that will respond to the development needs of the region;
- c. Strengthen local and international collaborations and partnerships for borderless programs;
- d. Develop a research culture among faculty and students;
- e. Develop and promote environmentally-sound and market-driven knowledge and technologies at par with international standards;
- f. Promote research-based information and technologies for sustainable development;
- g. Enhance resource generation and mobilization to sustain financial viability of the university.

Program Objectives and its Relationship to University Objectives

PROGRAM OBJECTIVES	UNIVERSITY OBJECTIVES						
	a	b	c	d	e	f	g
A graduate of Bachelor of Science in Information Technology can;							
A. Innovative technological concepts and ideas underpinning desired IT solutions;	I	I			I		I
B. Administer competently the computer networks, system development, software applications, hardware and maintenance;	I	I	I	I	I	I	I
C. Design industry-based applications, infrastructures and technologies that will promote the advancement and development of the community;	I	I	I	I	I	I	I
D. Adopt to various national and international industries standards in the practice of the profession; and;	I	I	I	I	I	I	I
E. Demonstrate professionalism in the social, environmental and legal aspects of information technology.	I	I	I	I	I	I	I

1. Course Code : GEC 003
 2. Course Title : Science, Technology and Society
 3. Pre – Requisite : -
 4. Credits : 3 units
 5. Course Description :

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.

Course Learning Outcomes and Relationships to Program Objectives

Course Learning Outcomes				Program Objectives			
				a	b	c	d
At the end of the semester, the students can:							
a.	Demonstrate sensitivity and responsiveness towards responsible citizenship and global partnership.			/	/	/	/
b.	Demonstrate sensitivity towards the ethical dimensions of different aspects of the content of this course.			/	/	/	/
c.	Demonstrate competencies actualizing the value of unity despite diversity.			/	/	/	/
d.	Demonstrate appreciation on the role of schools in social transformation through unity and collaboration.			/	/	/	/

6. Course Content

Course Objectives, Topics, Time Allotment	Desired Student Learning Outcomes	Outcomes – Based Assessment (OBA) Activities	Evidence of Outcomes	Course Learning Outcomes	Program Objectives	Values Integration
Topic: SKSU VMGO, Classroom Policies, Course Overview, Course Requirements, Grading System (2 hours)						
1.1. Discuss the VMGO of the University, classroom policies, and overview of the course, course requirements, and grading system.	1.1 The students can internalize, appreciate and be aware of the University VMGO, classroom policies, course overview, requirements and grading system.	Individual and group participation in class discussion.	Individual and group discussions		a, b, c, d	Value of appreciation and commitment
Topic: GENERAL CONCEPTS AND STS HISTORICAL DEVELOPMENTS (16 hours)						
2.1. Historical antecedents in which social considerations changed the course of science and technology a. In the World: Ancient, Middle and Modern Ages	2.1. Discuss the interactions between S&T and society throughout history	Student's participation in question and answer activity facilitated by the teacher.	Evaluation through quizzes/graded recitation.	a, b	a, b, c	Value of participation

b. In the Philippines	2.2 Discuss how scientific and technological developments affect society and the environment 2.3 Identify the paradigm shifts in history	Lecture and discussion Lecture and discussion	Group presentation				Value of participation Value of participation
3.1. Intellectual revolutions that defined society a. Copernican b. Darwinian c. Freudian d. Information e. Meso- American f. Asian g. Middle East h. African	3.1. Articulate ways by which society is transformed by science and technology	Student's participation through lecture and class discussion	Quiz, graded activity, and graded recitation	c	a, b, c, d		Value of participation
4.1. Science and technology and nation building a. The Philippine Government S&T Agenda b. Major development programs and personalities in S&T in the Philippines c. Science Education in the Philippines d. Selected indigenous science and technologies	4.1 Discuss the role of Science and Technology in Philippine nation building Evaluate government policies pertaining to science and technology in terms of their contributions to Nation building. Identify actual science and technology policies of the government and appraise their impact on the development of the Filipino nation	Small Group Activity Discussion	Group Project presentation	d	a, b, c, d		Value of Participation
Topic: STS AND THE HUMAN CONDITION (16 hours)							
5.1.The Human Person flourishing in terms of science and technology	5.1. Analyze the human condition in order to deeply reflect and express philosophical ramifications.	Reflection, Discussion	Graded evaluation of student's participation	e	a, b, c, d		Value of Participation and Cooperation

2 Human flourishing	5.2 Critique human flourishing and the progress of science and technology so that the student can define the meaning of the good life	Discussion	Group Presentation on how technology reveals nature and the human's role in it	e	a, b, c, d	Value of Participation and Cooperation
5.3 The Good Life	5.3 Examine shared concerns that make up the good life in order to come up with innovative, creative solutions to contemporary issues guided by ethical standards	Lecture and Discussion	Case Study: Production and Consumption of sugars	a	a, b, c, d	Value of Participation and Cooperation
5.4 When technology and humanity cross	5.4 Examine human rights in order to uphold such rights in technological ethical dilemmas	Reflection and Discussion	Graded Recitation	e	a, b, c, d	Value of Participation and Cooperation
5.5 Why the future does not need us	5.5 Evaluate contemporary human experience in order to strengthen and enlighten the human person functioning in society	Reflection and Discussion	Graded Recitation	d	a, b, c, d	Value of Participation
Topic: SPECIFIC ISSUES IN SCIENCE, TECHNOLOGY & SOCIETY (16 hours)						
6.1 The Information Age (Gutenberg to Social media)	6.1 Link learned concepts to the development of the information age and its impact on society and illustrate how the social media and the information age have Impacted our lives.	Presentation and Discussion	Book Report Activity Report: A day without Technology	d	a, b, c, d	Value of Participation
6.2 Biodiversity and the healthy society Genetically Modified Organisms: Science, Health, and Politics	Determine the interrelatedness of society, environment, and health Discuss the ethics and implications of GMOs and potential future impacts	Presentation and Discussion	Graded recitation	a, b	a, b, c	Value of Participation
6.3 The Nano world	Discuss the impacts of nanotechnology on society Analyze the issue through the conceptual STS lenses	Presentation and Discussion		d	a, b, c, d	Value of Participation

<p>Gene therapy, Culminating Activity Mandated Topics: 1. Climate Change and the Energy Crisis 2. Environmental Awareness Other Topics: Alternative Energy Resources (ex. O-tech Ocean Thermal Energy Conversion)</p>	<p>6.4 Describe gene therapy and its various forms Assess the issue's potential benefits and detriments to global health, and</p> <ul style="list-style-type: none"> • Identify the causes of climate change • Assess the various impacts of climate change including economic, geopolitical, biological, meteorological, etc. • Apply STS concepts to the issue of climate change. • Research, present, and make a stand on S&T issues that currently affect Philippine society. 	<p>Presentation, Discussion, group work</p>	<p>Group presentation and discussion Learning application</p>	<p>e</p>	<p>a, b, c, d</p>	<p>Value of Participation and Cooperation</p>
<p>Number of Hours</p>	<p>50 hours Lecture 2 hours Midterm Examination 2 hours Final Examination</p>					
<p>Total No. of Hours</p>	<p><u>54 hours</u></p>					

1. Course Evaluation:

Course Requirement:	Quizzes Participation Assignment Reporting Written Examination (Midterm and Final)	
Course Policies	All students must adhere to the virtual guidelines: act respectfully, responsibly and with maturity; arrive on time and be ready for instruction; put cell phones on silent mode and must be kept- in case of virtual class, it is advise that students upon entry or joining in the classroom shall shut off the audio/mic and open always the camera; contribute to an orderly learning environment; must not hesitate to consult the professor when there are important concerns; establish good rapport with professors; maintain silence during oral reports/ presentations; cooperate in classroom activities and in in-class performance	
Grading System	Assignment/Activities 10% Quizzes 20% Attendance 20% Reporting 20% Written Examination (Midterm& Final term) <u>30%</u> <u>100%</u>	Class Schedule: MWF 10:00-11:00 AM Schedule of Examination : Room 409

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- Martin Heidegger, The Question Concerning Technology
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- Youtube: World's Greatest Inventions (3 minutes)
- Youtube: Science Friction: Stem Cell Research
- TED Talk: Juan Enriquez on "The Next Species of Human"
- TEDTalk: Julian Assange on "Why the World Needs Wikileaks"
- TED Talk: Ray Kurzweil on "How Technology Will Transform Us"
- TEDTalk: Susan Lim on "Transplant Cells Not Organs"

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