



OPOL COMMUNITY COLLEGE

Bachelor of Business Administration (BSBA)

Gen Ed 7 (Science, Technology, and Society)

SY 2021-2022

VISION

Opol Community College is a self-reliant higher educational institution providing affordable quality education to produce pro-active and highly competitive graduates.

MISSION

The College aims to produce graduates with competitive skills by providing competent instructors, adequate learning resources and scholarship grants and link them to employment opportunities. Further, being a local government owned institution, it supports the programs and projects of the government.

Program Educational Objectives

Profile of an OCC BSBA Graduate

1.	A graduate who can demonstrate ability to lead projects across all areas of business
2.	A graduate who can become adept at fostering professional communications and o
3.	A graduate who is willing to seek for professional growth like graduate studies and
4.	A graduate who manifest commitment in participating activities related to the profes
5.	A graduate who shows interest in conducting research to generate new knowledge

PROGRAM OUTCOMES

Common to all programs in all types of school (Sec.6.1-6.2, CMO 17, s. 2017):

A graduate of a business or management degrees should be able to:

1.	Articulate the latest developments in the specific field of practice
2.	Effectively communication in English and Filipino, both orally and in writing
3.	Work effectively and collaboratively with a substantial degree of independence in multi-cultural teams

4.	Act in recognition of professional, social and ethical responsibility
5.	Preserve and promote “Filipino historical and cultural heritage”
6.	Perform the basic function of management such as planning, organizing, leading and
7.	Apply the basic concepts that underlie each of the functional areas of business (ma human resources management, production and operations management, information strategic management) and employ these concepts in various business situations.
8.	Select the proper decision making tools to critically, analytically and creatively solve pr results;
9.	Express oneself clearly and communicate effectively with stakeholders both in oral and
10.	Apply information and communication technology (ICT) skills as required by the busine
11.	Work effectively with other stakeholders and management conflict in the workplace
12.	Plan and implement business related activities.
13.	Demonstrate corporate citizenship and social responsibility.
14.	Exercise high personal moral and ethical standards.

Outcome Based Teaching Learning Plan

Course Title/Number	Gen. Ed 7 SCIENCE, TECHNOLOGY, and SOCIETY
Course Description	The course deals with interactions between science and technology and social, cultural that shape and are shaped by them. (CMO No. 20, series of 2013). This interdisciplinary the realities brought about by science and technology in society. Such realities perva global aspects of our living and are integral to human development. Scientific knowle happens in the context of society with all its socio-political, cultural, economic, and ph This course seeks to instill reflective knowledge in the students that they are able to l decision making in the face of scientific and technological advancement. This course includes mandatory topics on climate change and environmental awaren
Course Credit	3
Contact Hours	54 hours
Pre-requisite	None
Instructor	ANNIE P. JACALAN, PhD

Consultation Time	4:00-5:00 pm WTH Faculty Room for face to face. For NON-FACE TO FACE is anytime
Program Specialization Outcomes	<p>(Based on CMO No. 74 s. 2017-Policies, Standards and Guidelines for the Bachelor of Elementary Education program 6.3 specific to the Bachelor of Elementary Education program)</p> <ul style="list-style-type: none"> a. Demonstrate in-depth understanding of the diversity of learners in various b. Manifest meaningful and comprehensive pedagogical content knowledge c. Utilize appropriate assessment and evaluation tools to measure learning d. Manifest skills in communication, higher order thinking and use of tools and e. Demonstrate positive attributes of a model teacher, both as an individual f. Manifest a desire to continuously pursue personal and professional development
Course Learning Outcomes	<p>Knowledge</p> <ul style="list-style-type: none"> 1. Articulate the impacts of science and technology on society, specifically Philippines 2. Explain how science and technology affect society and the environment and 3. Analyze the human condition in order to deeply reflect and express philosophical <p>the student as a part of society</p> <ul style="list-style-type: none"> 4. Define and demonstrate the impact of social media on the students' life and <p>Values</p> <ul style="list-style-type: none"> 1. Imbibe the importance of science and technology in the preservation of the 2. Critique human flourishing vis-à-vis the progress of science and technology 3. Foster the value of a healthy lifestyle toward the holistic and sustainable development <p>Skills</p> <ul style="list-style-type: none"> 1. Creatively present the importance and contributions of science and technology 2. Examine shared concerns that make up the good life in order to come up with 3. Illustrate how the social media and information age impact their lives and their

Learning Plan

FLEXIBLE LEARNING STRATEGIES IN THIS PANDEMIC

NAME OF STRATEGIES	MECHANICS
Learning Activity Package	Each student is required to download this module. They are required to answer the activities required in this package. Students must have internet connections
Synchronous class	Use of google meet to have the virtual lesson
Power point presentation	Use during virtual classes
Break out session	Students were divided into groups and create their FB or me... and be back to the virtual room for presentation of their discussion
Video presentation	Students were group to make a video on their assigned topic and must have a visual aid.
Chat room	Students were allowed to chat while having oral recitation if t...
Individualized tutorial	Use of email and mobile phone to communicate between ins...
Google forms	Mode of delivery for online exams with time limiter

Midterm Period				
Time Allotment (Week)	Course Topic	Expected Learning Outcomes/Performance Indicators (At the end of the lesson, students will be able to:)	Teaching Learning Activities	Value Integration
1 – 9	Vision, Mission, Goals Classroom policies and learning contract Course syllabus and requirements	Relate the Vision, Mission and Goals with the course Identify and comply with the learning contract	Class Activity: Sway your Name and description of Self Group dynamics: Learning Contract Class Discussion:	Respect Obedience Responsibility

			On the requirements of the course and expectations	
	<p>1.CONCEPTS OF SCIENCE AND TECHNOLOGY Importance of Science and Technology</p> <p>2.HISTORICAL ANTECEDENTS IN WHICH SOCIAL CONSIDERATIONS CHANGED THE COURSE OF SCIENCE AND TECHNOLOGY</p> <p>a.) In the World: Ancient, Middle and Modern Ages</p> <p>b.) In the Philippines b.1.Pre-Spanish Period b.2. Spanish Colonial Period b.3. American Period and Post-Commonwealth Era b.4. Marcos Era b.5 Fifth Republic</p>	<p>•Discuss how scientific and technological developments affect society and the environment</p> <p>•Identify the paradigm shifts in history</p>	<p>Lecture- discussion</p> <p>Students will be divided into groups to bring and discuss the pictures of inventions and/or inventors in the world during the:</p> <p>a.) ancient period b.) Medieval Period c.) Renaissance Period d.) Industrial Revolution e.) In 19th Century f.) In 20th Century Philippines</p>	<p>Lo Patr Res</p>

	<p>3. INTELLECTUAL REVOLUTIONS THAT DEFINED SOCIETY</p> <ol style="list-style-type: none"> a. Copernican b. Darwinian c. Freudian d. Information e. Meso-American f. Asian g. Middle East h. African 	<ul style="list-style-type: none"> • Articulate ways by which society is transformed by science and technology 	<p>Lecture and discussion</p>	<p>Res Cou</p>
	<p>4. Science and Technology and Nation Building</p> <ol style="list-style-type: none"> 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 	<ul style="list-style-type: none"> • 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 	<p>Small group discussion on: How do you describe a life based on the aspirations of Ambisyon Natin 2040? “Matatag, maginhawa, at panatag na buhay?” Create a digital collage showing your perception on the role of science and technology in nation building</p>	<p>Loyalty Obed Alleg</p>

	science and technologies			
	<p>5. THE HUMAN PERSON FLOURISHING IN TERMS OF SCIENCE AND TECHNOLOGY</p> <p>a. Essence of technology from view of Aristotelianism, Technological Pessimism, Technological Optimism, MARTIN HEIDEGGER</p> <p>b. Enframing</p> <p>c. Dangers of nonstop revealing</p> <p>d. concept of human being and flourishing</p> <p>e. View of happiness by Aristotle, EPICURUS, NIETZCHE</p> <p>f. EUDAIMONIA or Eudaemonism</p>	Analyze the human condition in order to deeply reflect and express philosophical ramifications that are meaningful to the individual.	Group Presentation	Opti Cou
	<p>6. GOOD LIFE</p> <p>a. Concept of good life according to</p>	Critique human flourishing vis-à-vis the progress of science and technology so	Group dynamics: Students will be grouped and each student must share his/her reflection	Cou Temp Pruc

	<p>Aristotle's view, and the ethical view.</p> <p>b. Meaning of good life based from Aristotle and Heidegger's views</p> <p>c. Conditions that constitute the good life through modern science.</p>	<p>to define the meaning of good life</p> <p>*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</p>	<p>on the meaning of good life</p>	
	<p>7 ETHICAL DILEMMAS</p> <p>a. Advantages and disadvantages of technology</p> <p>b. Factors on limitations of technology to humanity</p> <p>c. Concept of humanity</p> <p>d. Give examples of ethical dilemmas</p>	<p>Discuss issues on ethical dilemmas and cite examples</p>	<p>Debate on: Ethical Issues:</p> <p>1. What kind of neuro security to protect individuals from accidental shared information or removed from their brains by hackers?</p> <p>2. If two individuals share an idea who is entitled to claim ownership?</p>	<p>T Self- Unself</p>

Final Period				
10 - 18	<p>8. THE HUMAN PERSON FUNCTIONING IN SOCIETY</p> <p>a. Concept of technology, examples of the positive and negative views of technology</p> <p>b. "Why the Future Doesn't Need Us"</p> <p>c. Societal collapse and causes</p> <p>d. New inventions that transform human experience</p> <p>e. Future scenarios for the Humanity and Technology</p> <p>f. Post humanity theory</p>	<p>Evaluate contemporary human experience in order to strengthen and enlighten the human person functioning in society</p>	<p>Group discussion on: "Why the future doesn't need us"</p>	<p>Unself Res Self-d</p>
	<p>9. INFORMATION AGE</p> <p>The information Age) (Gutenberg to Social media)</p> <p>a. Pre-Gutenberg world</p>	<ul style="list-style-type: none"> Link learned concepts to the development of the information age and its impact on society 	<p>Group activity on: Opinions on how social media changed the world</p>	<p>Prud Self- d</p>

	<p>b.Gutenberg revolution</p> <p>c.Post-Gutenberg world .</p> <p>d.Information age</p> <p>e.Major expansions of the development of internet</p> <p>f.Historical period of information technology revolution</p> <p>g.Social media and its impact to the society</p>		Lecture-discussion	
	<p>10. BIODIVERSITY AND THE HEALTHY SOCIETY</p> <p>a. Kinds of BIODIVERSITY</p> <p>b. Importance of biodiversity</p> <p>c. Threats to biodiversity</p> <p>d. Criteria to qualify as biodiversity hotspot</p>	Determine the interrelatedness of society, environment, and health	<p>Lecture-discussion</p> <p>Group Report</p>	<p>Res</p> <p>Obe</p> <p>Ecoo</p> <p>atti</p>

	<p>11. GENETICALLY MODIFIED ORGANISMS: SCIENCE, HEALTH, AND POLITICS</p> <p>a. Examples of GMO Foods</p> <p>b. Scientific Methods of GMO Production</p> <p>c. Advantages of GMO</p> <p>d. Effect of GMO to biodiversity and environment</p>	<ul style="list-style-type: none"> • Discuss the ethics and implications of GMOs and potential future impacts 	<p>Debate on "Is it safe to use GMO foods"</p>	<p>Respons Justice Courage Health c</p>
	<p>12. THE NANO WORLD</p> <p>a. Development of nanotechnology from ancient Egypt, ancient Rome, middle ages in Europe and Philippines</p> <p>b. Nanotech Facilities and Equipment in the Phil.</p>	<ul style="list-style-type: none"> • Discuss the major impacts (both potential and realized} of nanotechnology on society • Analyze the issue through the conceptual STS lenses • Critique the issue on its costs and benefits to 	<p>Lecture -discussion</p> <p>Group dynamics to discuss evidences on the existence of nanotechnology products in the Phil.</p>	<p>Health c Respo</p>

	<p>c. Examples of major environmental application of nanotechnology in the Phil</p> <p>d. Solutions to address the nanotechnology issues in the Phil.</p>	<p>society</p>		
	<p>13. GENE THERAPY (STEM CELLS)</p> <p>a. Classification of genetic disorders.</p> <p>b. Examples of gene therapy.</p> <p>c. Types of gene therapy</p> <p>d. Methods of gene therapy</p> <p>e. Success in gene therapy</p> <p>f. Risks of gene therapy</p> <p>g. Benefits and disadvantages of gene therapy</p>	<ul style="list-style-type: none"> • Describe gene therapy and its various forms • Assess the issue's potential benefits and detriments to global health 	<p>Group discussion on whether is it moral to use human embryos for scientific purposes</p>	<p>Respe Jus Cou</p>

	<p>14. CLIMATE CHANGE AND THE ENERGY CRISIS</p> <p>a. Examples and sources of greenhouse gases</p> <p>b. Earth's natural greenhouse effect and enhanced greenhouse effect</p> <p>c. Impacts of enhanced global warming</p> <p>d. Ways to reduce and manage global warming and climate change</p> <p>e. Sources of renewable and non-renewable energy.</p> <p>f. Causes of energy crisis</p> <p>g. Types of OTEC systems</p> <p>h. Advantages and disadvantages of OTEC technology</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 <ul style="list-style-type: none"> • Discuss the provision of RA 9729 and RA 9512 	<p>Interview PAG ASA PERSONNEL</p> <p>Lecture-discussion</p> <p>Group Presentation</p>	<p>Res Respo Cou</p>
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	I. RA NO. 9729																							
	ENVIRONMENTAL AWARENESS Issues on the environmental crisis	Enumerate the best solution to address the current environmental crisis	Group discussion Lecture -discussion	Respo Hor Dete Cou																				
Suggested Learning Resources	Bautista, Denzyl, et al. (2018). Science, Technology, and Society. Philippines: Max Mosteiro, Arnaldo P. (1st ed). Science, Technology and Society. Manila: Education Serafica, J. et al.(2018). Science, Technology, and Society. Philippines: Rex Book																							
Grading System	<table border="1"> <thead> <tr> <th colspan="2">Midterm</th> <th colspan="2">Final Term</th> <th>Final Grade</th> </tr> </thead> <tbody> <tr> <td>(Assignment Quizzes Oral Recitation Project)</td> <td>70%</td> <td>(Assignment Quizzes Oral Recitation Project)</td> <td>70%</td> <td><u>Midterm gra</u></td> </tr> <tr> <td>Term Exam.</td> <td>30%</td> <td>Term Exam.</td> <td>30%</td> <td></td> </tr> <tr> <td>Total</td> <td>100%</td> <td>Total</td> <td>100%</td> <td></td> </tr> </tbody> </table>		Midterm		Final Term		Final Grade	(Assignment Quizzes Oral Recitation Project)	70%	(Assignment Quizzes Oral Recitation Project)	70%	<u>Midterm gra</u>	Term Exam.	30%	Term Exam.	30%		Total	100%	Total	100%			
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Total	100%	Total	100%																					
Course Policy and Standards	<p>1. Students are expected to be prepared for every class. Being prepared means re assignments given.</p> <p>2. Students are given an allotted number of absences per semester. Once there are automatically DROPPED.</p>																							

	<p>3. Classes start ON TIME and students are expected to attend class sessions on t</p> <p>4. Students must take all scheduled and unscheduled examinations. No special ex Examinations provided with a Valid Reason.</p> <p>5. Failure to submit assignments, term papers and other projects on or before the</p> <p>6. Cheating will not be tolerated.</p> <p>7. Students are required to pass the subject according to their respective Department</p> <hr/> <p>Tardiness. A student is considered “late” if he/she is not in the classroom 15 minu</p> <p>Cheating. Any student who committed any form of academic dishonesty shall b provided in the OCC Student’s Handbook and subject to the Department Heads.</p> <p>Common Courtesies:</p> <ol style="list-style-type: none"> 1. Respect your teachers enough to listen - and not spend the entire period tal 2. Cell phones should be turned off while inside the classroom. Do not answer class. Using laptops, smartphones, and tablets shall be prohibited unless the instru request. 3. Keep silent inside the classroom as classes are going on and minimize voic 4. Observe good manners and right conduct as an OCC student 		
Course Title	AY/Effective Term	Prepared by:	Checked by:
Science, Technology, and Society	1 ST Semester AY 2021-2022		TERESA AMOR G. MARIANO Program Head Teacher Education Department