

DOCUMENT: <b>SYLLABUS</b>	COURSE CODE: <b>GELITE01X</b>	COPIES ISSUED TO: <b>College of Education, Arts and Sciences Learning Resource Center Quality Management Office</b>
EFFECTIVITY: <b>AY 2024 - 2025</b>	COURSE TITLE: <b>LIVING IN THE IT ERA</b>	

**VISION**

We are National University, a dynamic private institution committed to nation-building, recognized internationally in education and research.

**MISSION**

Guided by the core values and characterized by our cultural heritage of Dynamic Filipinism, National University is committed to providing relevant, innovative, and accessible quality education and other development programs.

We are committed to our:

**STUDENTS**, by molding them into life-long learners, ethical and spiritual citizens, and self-directed agents of change.

**FACULTY and EMPLOYEES**, by enhancing their competencies, stimulating their passions, cultivating their commitment, and providing a just and fulfilling work environment.

**ALUMNI**, by strengthening their sense of pride through engagement, loyalty, and love for their alma mater.

**INDUSTRY PARTNERS and EMPLOYERS**, through active collaborations, providing them Nationalians who will contribute to their growth and development.

**COMMUNITY**, by contributing to the improvement of life's conditions and well-being of its members.

**CORE VALUES**

1. Integrity 2. Compassion 3. Innovation 4. Resilience 5. Patriotism

GRADUATE ATTRIBUTES INTENDED FOR NATIONALIANS (GAINS)	INSTITUTIONAL LEARNING OUTCOMES (ILO)
1. Leadership and Teamwork	a. Exhibit moral, ethical, and competent leadership.
2. Responsible Citizenship	b. Collaborate effectively in teams of different cultures.
3. Innovative, Creative, and Critical Thinking	c. Participate actively in community-oriented advocacies that contribute to nation-building.
4. Academic and Professional Competence	d. Develop an entrepreneurial mindset.
5. Effective Communication	e. Provide solutions to challenges in various fields of specialization and society in general.
6. Whole Person Character	f. Demonstrate mastery of foundational skills and specific areas of specialization.
7. Life and Career Skills Orientation	g. Express ideas meaningfully, accurately, and appropriately in multicultural and multidisciplinary contexts.
8. Technological Literacy	h. Practice NU Core Values in personal and professional life.
	i. Engage in continuing personal and professional development.
	j. Exemplify the capacity for self-reflection.
	k. Demonstrate adaptability, flexibility, productivity, and accountability in diverse settings.
	l. Exhibit mastery in navigating various technological tools and techniques.

**General Education Outcomes (GEO)**

At the time of graduation, the student must be able to:

	ILO											
	a	b	c	d	e	f	g	h	i	j	k	l
1. identify and engage practices that constructively influence the common good while demonstrating leadership and teamwork;	✓											
2. immerse themselves clearly and appropriately in various social, academic, and professional contexts;		✓										
3. contribute their knowledge and skills to innovate their own areas of expertise, communities and the society;			✓									
4. develop new ideas, products, solutions or improvements aligned to 21st century milieu;				✓								
5. explore unique solutions and provide new perspectives in addressing various issues especially in their respective field;					✓							
6. demonstrate skills, knowledge, and values necessary in academic, personal, and professional setting;						✓						
7. articulate themselves clearly and appropriately in cross-cultural contexts;							✓					
8. exhibit principles and acts consistent with the core values of National University;								✓				

9. observe moral and ethical standards for academic, personal, and professional advancement / Explore novel perspectives and approaches for a wide range of contexts and everyday situations / Observe moral and ethical standards for a wide range of contexts and everyday situations;									✓			
10. engage in self-reflection of their personal values and the extent to which their ethical values and behaviors are congruent;										✓		
11. develop skills in gathering, organizing, refining, analyzing, and evaluating information and ideas necessary for solving a variety of issues;											✓	
12. showcase proficiency in using technology pertinent to contexts and its efficiency.												✓

## COURSE DESCRIPTION

This course offers a comprehensive introduction to information technology (IT), emphasizing its significant influence in modern society. Students will delve into core information technology concepts, including the various types of hardware, software, and networking systems. Additionally, the course will explore the ethical, social, and legal challenges posed by information technology, equipping students with the knowledge to effectively engage with the digital world.

## PRE-REQUISITE(S)

NONE

## COURSE OUTCOMES (CO)

At the end of the course, the student must be able to:	General Education Outcomes (GEO)											
	1	2	3	4	5	6	7	8	9	10	11	12
1. develop a comprehensive understanding of information technology concepts, principles, and practices;	✓	✓							✓	✓		
2. analyze and apply information technology theories to solve real-world problems;			✓	✓		✓						✓
3. demonstrate 21 <sup>st</sup> century skills in the application of information technology to various human endeavors;				✓		✓		✓	✓			
4. cultivate a positive attitude towards the use and impact of information technology in the modern society;				✓							✓	✓
5. appreciate the ethical considerations and societal implications of technology;									✓	✓		
6. share learned insights and appreciation on information technology in everyday life;			✓	✓		✓		✓				✓
7. show increased awareness and responsibility in digital interactions;						✓					✓	✓
8. acquire practical skills in utilizing various information technology tools and platforms;			✓		✓						✓	
9. demonstrate proficiency in handling software and hardware;			✓									✓
10. perform tasks effectively and efficiently with peers;	✓	✓						✓				
11. perform tasks requiring both precision and efficiency, enhancing technical capabilities.		✓	✓	✓	✓						✓	✓

## CREDIT

3 Units (Lecture)

## TIME ALLOTMENT

4 hours of lecture (weekly)

13.5 weeks

## COURSE REQUIREMENTS

1. Students should obtain a total passing score in performance tasks.
2. Students are required to take/submit the midterm exam and final exam.

## CLASS POLICIES

1. A student should be prepared for online learning. Each student should secure an internet connection and a device (e.g., cellphone, computer) to connect to the internet.
2. A student is required to join the MS Team created for the class. Each student must visit the teams every scheduled meeting, be informed of the tasks and announcements for the week. A Student must ensure that their NU account is verified and accessible all the time.
3. This class is purely online and will be conducted in synchronous sessions. Synchronous class starts and ends on time. There will be a 5-minute health break every thirty minutes or whenever necessary.
4. All class materials are accessible in the files section of our MS Team. Use these materials conscientiously. Moreover, be responsible in taking screenshots of contents that may violate rights on data privacy or may lead to copyright infringement.
5. A student should be responsible for any missed lessons, performance tasks, or major exams. Students are expected to communicate with the faculty regarding issues and concerns on the course.
6. A student must be on time during assessments. Major exams will be conducted face-to-face.
7. All class requirements must be submitted on time. Work submitted late will be penalized. The instructor will set specific schedules for non-acceptance of submission to give ample time to record the grades through NUIS (NU Information System).
8. Take the exams as scheduled. Major exams are to be taken onsite. Special exams are only given to those with valid reasons e.g., urgent events with proof/evidence. Note also that special exams are harder than the original exams.
9. Cheating or any act of academic dishonesty is a MAJOR offense with corresponding sanction as provided in the NU student handbook.

## GRADING SYSTEM

1. A 60% passing score with base 0% shall be implemented for all types of assessments.
2. There will be two grading periods for a regular term, midterm period and final period.
3. Assessments will be in two forms: (a) *performance tasks* and (b) *major exams* (midterm and final).
4. The midterm grade shall comprise learning activities (30%), performance tasks (40%) and midterm oral exam (30%). The final grade on the other hand shall comprise accumulated performance tasks (40%) and learning tasks (30%), midterm exam (15%), and final exam (15%).
5. The percentage for each grade component in computing the final grade is shown in the first table below. The computed midterm and final percentage grades will then be re-transmuted into point-grade equivalents and codes using the second table and third tables.

Grade Component	Final Grade	Grade	Equivalent	Grade	Equivalent
-----------------	-------------	-------	------------	-------	------------

		LEC					
	Learning Activities	30%					
	Performance Tasks	40%		4.00	96% - 100%	1.00	60% - 65%
				3.50	90% - 95%	R	59% - 0%
Major Performance Task/Test	Midterm Exam	15%		3.00	84% - 89%	0.00	Cheating, Excessive Absences
	Final Exam	15%		2.50	78% - 83%		
				2.00	72% - 77%	Dr	Officially Dropped
				1.50	66% - 71%		

## COURSE CONTENTS / COURSE OUTLINE

WEEK	COURSE OUTCOMES	TOPIC OUTCOMES	TOPICS	METHODOLOGY	RESOURCES	ASSESSMENT
1			Orientation on National University VMGs, Core Values, GAINs and Class Policies			
2	CO1 CO2 CO3 CO4 CO6	» use the various roles of information technology in addressing real world problems  » articulate the importance of	<b><u>CHAPTER 1</u></b>  <b><u>SECTION 1:</u></b> <b><u>INTRODUCTION TO INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)</u></b>  <b>1.1.A. Overview of ICT</b> - ICT Overview - Understanding IT and its role in modern society - Definition of IT and ICT  <b>1.1.B. Computer Systems and Components</b>	» History Exploration, Group Discussion, & Video Watching	» Video  » Resources:  » PowerPoint slides	» Completed Worksheet & Group Presentation

WEEK	COURSE OUTCOMES	TOPIC OUTCOMES	TOPICS	METHODOLOGY	RESOURCES	ASSESSMENT
		<p>information technology in one's life</p> <p>» argue about concept of information and communication technology, what it is and how it is used</p> <p>» identify the different technologies and its improvement through the years</p>	<ul style="list-style-type: none"> <li>- History of computers and the basic computing periods.</li> <li>- Computer hardware which includes the types of computers, internal components, and the peripheral devices</li> <li>- Computer software which includes system software (operating systems), application software (productivity tools, media players)</li> </ul>		(Others: Pens, Laptop, Projector, Speaker)	
3-4	CO1 CO4 CO6 CO8 CO9 CO10 CO11	<p>» apply the concepts of web and internet to real-life situations</p>	<p><b>SECTION 2: THE WEB AND THE INTERNET</b></p> <p><b>1.2.A. The Web</b></p> <ul style="list-style-type: none"> <li>- Major Protocol Accessible on the Web</li> <li>- Anatomy of URL</li> <li>- Types of Browsers</li> <li>- How to use web browser</li> </ul> <p><b>1.2.B. The Internet</b></p> <ul style="list-style-type: none"> <li>- What is the internet?</li> <li>- Components of Internet</li> </ul>	<p>» Lecture Discussion/Demonstration</p> <p>» Small Group Exercises Small group sharing of ideas and experience</p>	<p>» Worksheets Resource PowerPoint Slides</p> <p>(Others: Pens, Laptop, Projector, Speaker)</p>	<p>» Completed Worksheets</p> <p>» Tiktok Video Group Presentation</p>

WEEK	COURSE OUTCOMES	TOPIC OUTCOMES	TOPICS	METHODOLOGY	RESOURCES	ASSESSMENT
		» argue the importance of online communication and collaboration to the world » apply office productivity tools to various human endeavors	<b>1.2.C. Online Communication and Collaboration</b> - Email, instant messaging, and social media - Online collaboration tools (Google Workspace, Microsoft Teams) - Office Productivity Tools (Word processing, spreadsheets, and presentations), its advanced features and best practices			
5	CO1 CO2 CO3 CO4 CO5 CO7 CO8 CO9	» apply various current trends to make sound decisions and make recommendations of real-life phenomena	<b>CHAPTER 2: DIGITAL TECHNOLOGY AND SOCIAL CHANGE</b>  <b>2.A. Current Trends</b> - Hyper automation - Mult experience - Democratization - Human Augmentation - Data Policing - Machine Learning - Robotic Process - Block Chain - Voice Search - Analytics	» Guided Discussion & Group Exercises  » Small-group Case Study	» Worksheets, PowerPoint Slides, Resource Worksheets, PowerPoint Slides,  » Sample Cases  (Others: Pens, Laptop, Projector, Speaker)	» Completed Worksheets  » Case study

WEEK	COURSE OUTCOMES	TOPIC OUTCOMES	TOPICS	METHODOLOGY	RESOURCES	ASSESSMENT
		» articulate the complex issues and dynamics that people encounter every day in the internet world  » assess the positive and negative effects of the internet  » argue the ethical dilemmas, the risks to internet privacy and the basics of being a responsible netizen	<b>2.B. The Netiquette and the Computer Ethics</b> - Netiquette - Cybercrimes - Internet Threats - Ethical dilemmas and decision-making in IT - Privacy issues and data protection			
6-7	CO1-CO9	MIDTERM EXAMINATION				
8-12	CO3 CO8 CO10 CO11	» use the concepts of artificial intelligence in one's life	<b>CHAPTER 3: PRACTICAL IT SKILLS</b>  <b>4A. Artificial Intelligence (AI)</b> - Introduction to AI (Historical development and milestones, types of AI) - Core Concepts of AI (Machine Learning, Deep Learning, Natural Language Processing and Robotics) - Applications of AI	» Lecture Discussion/Demonstration  » Computer Simulation of Procedures	» Worksheets Resource PowerPoint slides Computer  » Recording Materials Camera (Others: Pens, Laptop, Projector, Speaker)	» Quiz  » Group Vlog Project/Group Programming Project

WEEK	COURSE OUTCOMES	TOPIC OUTCOMES	TOPICS	METHODOLOGY	RESOURCES	ASSESSMENT
		<ul style="list-style-type: none"> <li>» advocate the use of multimedia and web development concepts/procedures in making graphic and web design</li> <li>» propose a graphic and web design scheme for editing</li> <li>» create a vlog</li> </ul> <ul style="list-style-type: none"> <li>» apply concepts/procedures in basic programming tools to real life problems</li> <li>» advocate the use of basic programming tools in real-life problems</li> <li>» Create projects and/or any applications using a programming tool</li> </ul>	<ul style="list-style-type: none"> <li>- Challenges and Limitations</li> <li>- Future of AI</li> </ul> <b>4B. Multimedia and Web Development</b> <ul style="list-style-type: none"> <li>- Basic graphic design and video editing for vlog</li> <li>- Introduction to web design and development</li> </ul> <b>4D. Basic Programming Tools</b> <ul style="list-style-type: none"> <li>- Minecraft Education</li> <li>- Python for creating games and calculators</li> <li>- LaTeX for creating thesis, articles, and books</li> </ul>			



WEEK	COURSE OUTCOMES	TOPIC OUTCOMES	TOPICS	METHODOLOGY	RESOURCES	ASSESSMENT
13.5	CO1-CO11	FINALS WEEK				

## RESOURCES

### LEARNING RESOURCE CENTER

- [1] Caoili-Tayuan, R. R. (2019). Living in the information technology era. Philippines: C & E Publishing, Inc.
- [2] Laudon, K. C. (2018). E-commerce 2017: business, technology, society. England: Pearson.
- [3] Lucci, S. (2016). Artificial intelligence in the 21<sup>st</sup> century. Virginia: Mercury Learning and Information.
- [4] Lushkovska, S. (2016). ICT Innovations 2015: emerging technologies for better living. USA: Springer International Publishing.
- [5] Revano Jr., T. F. (2019). Living in the information technology era. Philippines: Mindshapers Co, Inc.

### REFERENCES

[6]

### RECOMMENDED RESOURCES

[7]

PREPARED:	CHECKED:	RECOMMENDED FOR APPROVAL:	APPROVED:
<b>MATHEMATICS FACULTY (SCIENCE AND MATHEMATICS CLUSTER)</b> Faculty Member	<b>JEOJILYN G. NABOR</b> University Librarian	<b>JENNIFER D. REGALA</b> Coordinator, Science and Mathematics Cluster	<b>JEMMA M. GONZALES</b> Associate Dean, Institute of General Education