COURSE SYLLABUS IN ITP 312- IT RESEARCH METHODS

Course Title: ITP 312 – IT RESEARCH METHODS	**Instructor:** GLENDA P. BINAY, *MBC* EPIE F. CUSTODIO, *MCC* JOHN EDGAR S. ANTHONY, *MMC*
Prerequisite: ITP 222 Quantitative Methods	**Class Schedule:** MBC - III – F1| Tue 8:00 AM – 10:00 AM | Fri 2:00 PM – 3:00 PM MBC - III – F2| Tue 10:00 AM – 11:00 AM | Fri 1:00 PM – 2:00 PM MCC - III – F1 | Mon 10:00 AM – 1:00 PM MCC - III – F2 | Thu 12:00 PM – 3:00 PM MCC - III – F3 | Fri 10:00 AM – 1:00 PM MMC - III – F1| Tue 8:00 AM – 10:00 AM | Fri 8:00 AM– 9:00 AM MMC - III – F2| Tue 10:00 AM- 12:00AM | Fri 9:00 AM– 10:00 AM
Credit Units: 3	**Consultation Hours:** GLENDA P. BINAY – Wednesday 1:00 PM – 5:00 PM EPIE F. CUSTODIO – Monday 1:00 PM – 4:00 PM JOHN EDGAR S. ANTHONY – Monday 8:00 AM – 12:00 PM
Number of Hours: 3 hours/week - 54 hours	**Term:** First Semester 2024-2025

COLLEGE OF COMPUTER STUDIES VMGO

VISION

The College of Computer Studies is a center of excellence in computer studies and a dependable and reliable choice in producing competent, responsible, skilled, and morally upright individuals that conform to the scientific, technological, and professional demands and requirements of the business, industries, and communities.

MISSION

The College of Computer Studies is committed to provide accessible, responsive, efficient, and quality pedagogy in computer studies that promotes holistic development of the students imbued with the core values – resilience, integrity, commitment and excellence. Moreover, the College prepares the students to be creative, innovative, and globally competitive individuals equipped with the skills, virtues, and academic development in information technology education programs and related disciplines.

BSIT PROGRAM GOAL

Generally, the goal of the Bachelor of Science in Information Technology program is to produce graduates who are globally competitive in the field of information technology and are equipped with proper values, skills, and attitudes of true professionals.

BSIT PROGRAM OBJECTIVES

Specifically, the program has the following objectives:

1. Provide practical knowledge and skills in the operation, installation, management, and administration of information technology system;
2. Promote lifelong learning and the competencies learned leads to the development of the full potential of the students;
3. Produce competent, responsive, and IT-skilled graduates capable of conducting advanced studies and research in the field of information technology; and
4. Build a capacity of personal, social values, and self-reliance in the service areas of information technology education.

CORE VALUES

Resilience, Integrity, Commitment Excellence

PROGRAM OUTCOMES:

1. Apply knowledge of computing science, and mathematics appropriate to the discipline.
2. Understand best practices and standards and their applications.
3. Analyze complex problems and identify and define the computing requirements appropriate to its solution.
4. Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
5. Design, implement, and evaluate computer- based systems, processes, components, or programs to meet desired needs and requirements under various constraints.
6. Integrate IT-based solutions in the user environment effectively.
7. Apply knowledge through the use of current techniques, skills, tools and practices necessary for the IT profession.
8. Function effectively as a member or leader of a development team recognizing the different roles within a team to accomplish a common goal.
9. Assist in the creation of an effective IT project plan.
10. Communicate effectively with the computing community and with society at large about complex computing activities through logical writing, presentations, and clear instructions.
11. Analyze the local and global impact of computing information technology on individuals, organizations and society.
12. Understand professional, ethical, legal, security and social issues and responsibilities in the utilization of information technology.
13. Recognize the need for an engage in planning self-learning and improving performance as a foundation for continuing professional development.
14. Applies the principle and concepts of entrepreneurial management in IT business.
15. Shares ideas, concepts, and principles and skills relevant to the computing industry

COURSE DESCRIPTION:

Research is a methodical investigation process utilized to augment or amend current knowledge in order to discover new facts and attain new conclusions. It comprises cautious, diligent and comprehensive investigation by scientific study of a subject or by a course. The research plays to gather the evidence and to learn something addressing solutions or answers in the real-world issues, problems, or systems.

The course concentrates in the different languages of research, ethical principles, challenges and elements of the research process within quantitative, qualitative and mixed methods approaches involved in Information Technology Education research.

COURSE OUTCOMES:

At the end of the semester, the students must be:

1. Display moral as well as appropriate behaviors of a researchers or developers.
2. Manage, control, and lead the group to come-up with effective Capstone Project proposal to improve the quality of life.
3. Advocate IT-based alternatives solutions which will improve organization's operations to be able to achieve the Philippine Sustainable Development Goals.
4. Utilize various methods or procedures of research in the development of the proposed Research Project or Capstone Project.
5. Gather, formulate, and deliver innovative and original Capstone Project.
6. Implement publishable research projects that is free from plagiarism.
7. Conversant of the different approaches or techniques in doing, writing, and presenting comprehensive Information Technology Capstone Project Proposal.

LINK TO PROGRAM OUTCOMES:

COURSE OUTCOMES:	PROGRAM OUTCOMES														
After completing this course, the students must have:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CO1. Display moral as well as appropriate behaviors of a researchers or developers.		I		I			I					D			
CO2. Manage, control and lead the group to come-up with effective Capstone Project proposal in order to improve the quality of life.		I						I	I	D					D
CO3. Advocate IT-based alternatives solutions which will improve organization's operations to be able to achieve the Philippine Sustainable Development Goals.	D	D	E	E	E		E		I	D			D		
CO4. Utilize various methods or procedures of research in the development of the propose Research Project or Capstone Project.	E	E	E	I	I		D								
CO5. Gather, formulate and deliver innovative and original Capstone Project.					E	E									
CO6. Implement publishable research projects that is free from plagiarism.											E		D	D	D
CO7. Conversant of the different approaches or techniques in doing, writing, and presenting comprehensive Information Technology Capstone Project Proposal.		I		E	D	D	D		E					D	D

Legend: **I** – Introductory Course, **E** – Enabling Course, **D** – Demonstrating Course

COURSE OUTLINE:

Week	Course Outcomes	Topics	Teaching/ Learning Activities	Assessment
Week 1 (1 hour)	At the end of the semester, the students must have: • explained the Vision, Mission and core values of the institution • exemplified the VM and core values • applied the core values • reflected on the value of institution's academic policies • internalized the VMGO, core values of the college as well as the academic policies	**Introduction** 1. MinSU Vision, Mission, and Policies 2. Classroom management 3. Grading system and requirements 4. Course Syllabus 5. Course Projects	• Mentor's discussion • Presentation of MinSU Vision, Mission, Polices, Rules and Regulation including the classroom management set-up • Setting the course requirements • Inquiry and class interaction	• Recitation • Short Quiz • Individual assignment

Week	Course Outcomes	Topics	Teaching/ Learning Activities	Assessment
Week 1 (2 hours)	At the end of the topic, the students must have: **CO1** • depicted the purpose of Methods of Research Course • familiarity with the Capstone Project format and College Research Agenda	**Course Overview** 1. Rationale, Focus and Outcome of Methods of Research Course 2. MinSU Information Technology Capstone Project Format and Research Agenda	• Mentor's discussion • Inquiry and class interaction • Review of approved research project title	• Recitation • Approved research project title
Week 2 (3 hours)	At the end of the topic, the students must have: **CO1, CO2** • classified, differentiated or demonstrated the purposes, types and characteristics of research designs and methodologies.	**Module 1 - Research and Design** 1. The Meaning of Research 2. Purpose of Research 3. Characteristics of a Good Research 4. Characteristics and Qualities of a Good Researches 5. Types of Research 6. The Meaning of Design 7. Research Designs 8. Research Methods	• Mentor's discussion and presentation • Group Case Study	• Quiz • Individual • Recitation • Case Presentation
Week 3-4 (6 hours)	At the end of the topic, the students must have: **CO2, CO3** • identified the features of clear written communication • formulated research project topic and objectives through gathered relevant information. • developed notes and visual aids to support the presentation.	**Module 2 - Choosing Research Project** 1. Identifying Research Project Topics 2. Defining the Research Project Projects 3. Setting Research Objectives 4. Gathering Relevant Information	• Mentor's discussion and presentation • Group work	• Revised research project proposal
Week 5-6 (6 hours)	At the end of the topic, the students must have: **CO3** • familiarity with the Capstone Project format	**Module 3 – Creating Concept Paper** 1. Creating Propose topic Rationale 2. Literature Mapping as Basis for Topic Formulation	• Mentor's discussion and presentation • Library visit • Group Case Study	• Recitation • Quiz • In Class Group Work • Case Presentation
Week 7-9 (8 hours)	At the end of the topic, the students must have: **CO4** • write a good introduction; formulate the project context; compose the objectives; recognize the	**Module 4 - Writing Chapter 1: Introduction** 1. Difference of Thesis and Capstone Project 2. Writing a Good Introduction	• Mentor's discussion and presentation • Group work	• Chapter 1 Final Draft • Individual Recitation

Week	Course Outcomes	Topics	Teaching/ Learning Activities	Assessment
	scope and limitation; and define terminologies.	3. Formulating the Project Context 4. Composing the Project Purpose 5. Setting the Objectives of the Research Project 6. Recognizing the Scope and Limitation 7. Defining the Research Project Terminologies. 8. Writing Significance of the Study.		• Case Presentation
MIDTERM EXAMINATION - WEEK 9 ***(1 hour) – Topic Proposal Defense***				
Week 10 (3 hours)	At the end of the topic, the students must have: **CO4, CO5** • known the objectives of citing related literatures and studies; recognized the guidelines in citing related literatures and studies; determine the instances when to quote or paraphrase sources; avoid plagiarism; and compile an appropriate related literatures and studies.	**Module 5 - Writing Chapter 2: Review of Related Literatures and Studies** 1. Exact Copy 2. Quoting or Paraphrasing 3. Words for Introduction of Quotations 4. Proper Citations 5. Citing Sources 6. Plagiarism 7. Copyright Infringement 8. Topical Review of Literatures 9. Creating of Existing System Table Comparison 10. Synthesis	• Mentor's discussion and presentation • Library work • Group work • Group Case Study • Team Teaching	• Chapter 2 Final Draft • Individual Recitation • Case Presentation
Week 11-12 (6 hours)	At the end of the topic, the students must have: **CO4, CO5** • applied the appropriate methods, determined the project design and formulated testing or evaluation procedure and statistical tools.	**Module 6 - Chapter 3: Methodology** 1. Project Design 2. Project Procedures 3. System Architectures 4. Software Development Methodologies 5. Project Testing and Evaluation 6. Statistical Analysis and Tools	• Mentor's discussion and presentation • Library work • Group work • Group Case Study • Team Teaching	• Chapter 3 Final Draft • Individual Recitation • Case Presentation
Week 13 (3 hours)	At the end of the topic the students must have: **CO6** • apprehended the reasons of publishing research work as well determine the call	**Module 7 – Introduction to Research Project Output Publication** 1. Reasons of publishing research work	• Mentor's discussion and presentation • Group work • Team teaching	• Capstone Project Colloquium • Mock Defense

Week	Course Outcomes	Topics	Teaching/ Learning Activities	Assessment
	for paper presentation illustrating ethical or proper acts of a researcher.	2. Call for Paper Publication or Presentation Process 3. Research Publication / Presentation Code of Ethics 4. Illustration of Common Unethical or Improper Acts of Researcher		
Week 14 (3 hours)	At the end of the topic, the students must have: **CO6** • prepared or packaged the Capstone Project Proposal.	**Module 8 - Packaging Capstone Project Proposal (Chapter 1 – 3 Documentation)** 1. Presentation of Chapter 1, Chapter 2 and Chapter 3 2. Writing the Preliminaries 3. Preparing the Bibliography 4. Completing the Appendices 5. Packaging the Capstone Project Proposal 6. Revising and Proofreading the Final Draft	• Mentor's discussion and presentation • Group work • Group Case Study • Project Presentation	• Revised, proofread and packaged Capstone Project Proposal • Project Presentation and Documentation • Rubric for Project Documentation
Week 15-18 (11 hours)	At the end of the topic, the students must have: **C07** • designed and developed a real-world database project.	Capstone Project Presentation	Oral Defense	Rubrics
FINAL EXAMINATION—WEEK 18 (1 hour) – *Proposal Defense*				

COURSE POLICIES:

1. Students are expected to comply with all the requirements of the course.
2. A student will be dropped from the class if his or her absences exceeded 20% of the total class hours.
3. Student shall abide the instructor/professor's policy on the submission of learning outputs based on the metrics and deadlines given.
4. Submission of requirements, activities and written outputs should only be made on or before the deadline.
5. Academic dishonesty like cheating in any examination, plagiarism and the like will be penalized as stipulated in the MinSU Student Handbook.
6. Always visit our Facebook Group Chat and Google Classroom for Course announcements and updates.

COURSE REQUIREMENTS

- Exercises
- Oral and Written Output
- Projects
- Class Attendance
- Class Participation
- Suggested Research Work/Assigned Reports
- Concept Paper /Proposal
- Oral Defense
- Documentation
- Webinar/Seminar

GRADING SYSTEM

Written output (assignments, quizzes, and others)	=	30%
Performance Tasks (Research paper, Laboratory exercises if applicable, portfolio, and others)	=	40%
Major Assessment (Midterm and Final Exam)	=	30%
Total Grade	=	100%

Total grade for Midterm 100%
Total grade for Final Term 100%
Final Grade = (Midterm Grade + Tentative Final Grade)/2

LEARNING RESOURCES

Books

1. Balahadia, F., Abante, M., Anthony, J.E.(2020). Practical Guide for Writing Information Technology Education Research Project. Unlimited Books Library Services & Publishing Inc.
2. Bryman, A. and Bell, E. (2011). Business Research Methods. United Kingdom: Oxford University Press.
3. Garino, N. (2014). Research Project Planning and Development. Manila, Philippines: TUP-Manila.
4. Laviña, C., Mañabo, R., Hernandez, G., Hablanida, F., Lacorte, A. and Gaza-Ebron, J. (2016). Outcomes-based Practical Guide to Thesis and Capstone Project. Manila, Philippines: Mindshapers Co., Inc.
5. Pickard, A. (2013). Research Methods in Information. London: Facet Publishing.
6. Sappleton, N. (2013). Advancing Research Methods with New Technologies. USA: IGI Global.
7. Vaishnavi, V. and Kuechler, W. (2015). Design Science Research Methods and Patterns: Innovating Information and Communication Technology. United States: Taylor and Francis Group.
8. Yin, R. (2013). Case Study Research: Design and Methods. Sage Publications.

Electronic References / Websites:

1. https://www.reference.com/education/role-purpose-research-4d8633ec861313e1#. Retrieved January 2017.
2. http://www.tru.ca/distance/courses/rsmt3501.html. Retrieved January 2017.
3. http://grimesinf1240.blogspot.com/p/course-outline.html. Retrieved January 2017.

Prepared:

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