IT 3204N
Orientation

Research Methods in Computing

Course Information

Course No.	: IT 3204N
Course Title	: Research Methods in Computing
Course Credit	: 3 units lecture
Course Equivalent(s)	: None
Course Pre-Requisite(s)	: CIS 2201
Course Co-Requisite(s)	: None

Teacher Information

CHRISTINE D. BANDALAN

- cdbandalan@usc.edu.ph
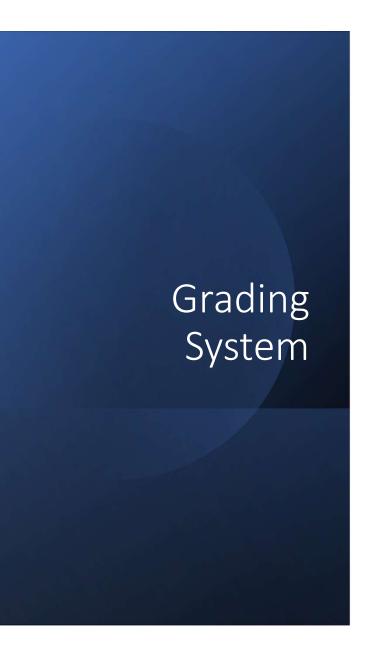
Class Schedule

- 12:00 – 01:30PM MW LB484TC

Consultation Time

- 02:00 – 03:00PM MW

Course Outcomes

- Formulate the research objectives, scope and limitations, and evaluation metric for a chosen topic.

- Collect and compare related literature related to the chosen topic

- Propose an ethical and feasible software solution to the identified research problem that employs new designs, tools, and methodologies, as well as unique and useful enhancements, with creating a prototype software system in mind or with demonstrating that a certain theory or algorithm or design might work through exploratory, experimental or theoretical research.

- Perform ethical responsibility in using resources needed in gathering information related to the research project.

Grading System

50% - Requirements/Deliverables

    30% - Class Activities

    20% - Progress reports

40% - Thesis Proposal Defense Rating

    20% - Oral Presentation

    20% - Document

10% - Approved Thesis Proposal Document

Topics

PHASE I DECIDING WHAT TO RESEARCH

Step I Formulating a research problem

    1. Reviewing the Literature

    2. Formulating a Research Problem

    3. Identifying Variables

    4. Constructing Hypotheses

PHASE II PLANNING A RESEARCH STUDY

Step II Conceptualizing a research design

    5. The Research Design

    6. Selecting a Study Design

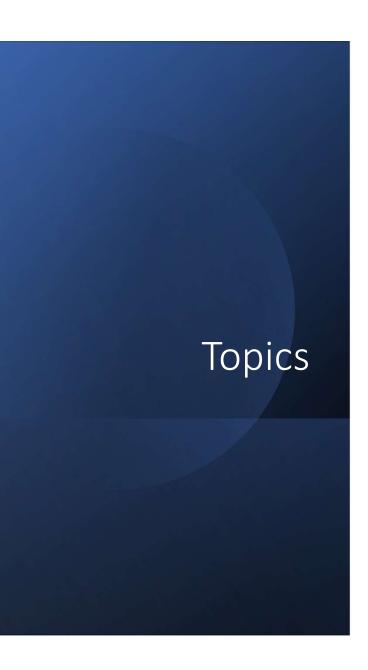Step III Constructing an instrument for data collection

    7. Selecting a Method of Data Collection

Step IV Selecting a sample

    8. Selecting a sample

Step V Writing a research proposal

    9. How to Write a Research Proposal

Topics

PHASE III CONDUCTING A RESEARCH STUDY

Step VI Collecting data

    10. Considering Ethical Issues in Data Collection

Step VII Processing and displaying data

    11. Processing Data

    12. Displaying Data

Step VIII Writing a research report

    13. Writing a Research Report

    14. Research Methodology and Practice Evaluation