CC 102 – FUNDAMENTALS OF PROGRAMMING

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Faculty – In – Charge

TOPIC: COURSE SYLLABUS

TOPIC OUTLINE

- Vision & Mission
- Institutional Outcomes
- Class Schedule
- Learning Plan
- Grading System
- Class Policies
- Class Requirements
- Resources

VISION AND MISSION

- **VISION**
  - To become an ASEAN premier state university in 2020.
- **MISSION**
  - The Pangasinan State University, through instruction, research, extension and production commits to develop highly principled morally upright, innovative and globally competent individuals capable of meeting the needs of industry, public service and civil society.

INSTITUTIONAL OUTCOMES

- **INSTITUTIONAL OUTCOMES**
- The Pangasinan State University Institutional Learning Outcomes (PSU ILO) are the qualities that PSUnians mustpossess. These outcomes are anchored on the core values- ACCESS.
  - **A**ccountability and Transparency
  - **C**redibility and Integrity
  - **C**ompetence and Commitment to Achieve
  - **E**xcellence in Service Delivery
  - **S**ocial and Environmental Responsiveness
  - **S**pirituality

CLASS SCHEDULE

- MWF / 09:00 – 11:00 (IT 1 – 1)
- TTH / 09:00 – 12:00 (IT 1 – 2)
- T / 6:30PM – 9:30PM, S / 1:00PM – 3:00PM (IT 1 – 3)

LEARNING PLAN

- Problem Solving Process
- Program Structure I/O Statements
- Identifiers and Keywords, Data Types Declarations and Symbolic constants
- Variable Declaration
- Arithmetic Expressions
- Sequential Control Structure Coding Guidelines
- Logical Operators
- Simple if statement
- Switch-case
- Multiple If statements
- Testing and Debugging Techniques
- Loops/Iteration
  - While loop
  - Do while loop
  - For loop
- Declaring, Initializing, Accessing Array Elements
- One Dimensional Arrays
- Built-in Functions for Math and String
- Function Definition Parameter Passing
- Review Activity for previous Topics

GRADING SYSTEM

- **Grading System:**
- Midterm & Final Exam - 40%
- Quizzes - 30%
- Participation - 30%
- Total - 100%
- **Final Rating Computation**
- FG = 33% of MT Grade + 67% of Final Term Grade

CLASS POLICIES

- Attendance in the class signifies readiness to participate in class discussions and activities.
- A student is responsible for his/her absence; no make-up projects will be given.
- A student will be automatically marked DP (Dropped) after eight (8) consecutive absences.
- Requirements must be submitted within the designated date of submission.
- Others (agreed upon by the class):

COURSE REQUIREMENT

- **Written Outputs**
- Solution Documentation - Document the solution that could be performed for specific computing problems. Through analysis, translate the solution into an appropriate algorithm through pseudocode or flowchart.
- **Performance Outputs**
- Machine Project - The machine project will involve a real life computing case which will assess how the student will make judicious choices of programming constructs to use to address requirements needed to solve the computing problem.

REFERENCES

- Bronson, Gary J. C++ Programming: Principles and Practices for Scientists and Engineers. Cengage Learning, 2013.
- Forouzan, Behrouz A. Foundations of C Programming. Cengage Learning, 2011.
- Malik, D.S. C++ Programming: Problem Analysis to Program Design. Cengage Learning, 2011.
- Scholl, T., Nugent, G. C++ Programming Problem Analysis to Program Design. Cengage Learning, 2011
- Zak, D., Introduction to Programming with C++. Cengage Learning, 2011
- Savitch, W. Absolute C++ Programming. Addison – Wesley