CSC/CPE 123 – Introduction to Computing

1. CSC/CPE 123, Introduction to Computing

2. **credit units** 4  **contact hours** 6

3. **Course Coordinator**: Michael Haungs

4. **Textbook (or other required material)**: Determined by topic

5. a. **Course Description**:

   Use of a supportive software development environment to design, develop, and test applications in a selected topic domain that demonstrates the potential of careers in computing. An introduction to computing and to the selected topic domain. The Schedule of Classes will list topic selected. No programming experience required. Not for students with credit in CPE/CSC 103 or CPE/CSC 203. 3 lectures, 1 laboratory. Crosslisted as CPE/CSC 123.

   b. **Prerequisite**: Basic computer literacy

   c. **Required/Elective/Selective Elective for CPE, CSC, EE, SE**

      | Required | CSC | CPE | SE |
      |----------|-----|-----|----|
      | Elective | X   | X   | X  |
      | Selective Elective | | |

6. a. **Course Learning Objectives**

   The student will be able to:
   - Explain the key elements necessary for a successful application appropriate to the topic domain.
   - Explain the topic domain specific design principles and be able to apply this knowledge to the creation of or critique of a simple topic domain application.
   - Discuss the process of software development.
   - Create basic topic domain applications in an environment appropriate to the domain.
   - Participate on a development team.
   - Write small programs and utilize the following basic programming concepts: control flow, looping, functions, and data structures.

   b. **Level at which Student Outcomes are addressed**

   ("B" = Basic level, "I" = Intermediate level, "A" = Advanced level)

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7. **Major Topics Covered: (number of lecture hours per)**
   - Introduction to Topic Domain (7.5)
   - Computer Science Overview (1.5)
   - Introduction to Programming (1.5)
   - Program Development Cycle (1)
   - Topic Domain Instruction (4.5)
   - Teamwork (1.5)
   - Presentation/Communication (4.5)
   - Topic Domain Project Requirements (4.5)
   - Topic Domain Programming Skills (1.5)