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:(and/or other required material)

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. 3 lectures, 1 laboratory. Crosslisted as CPE/CSC 123.

b. Prerequisite: Basic computer literacy.

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

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6. a. Course Goals/Outcomes
The student will be able to:
- Understand the key elements necessary for a successful application appropriate to the topic domain.
- Understand 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.
- Gain a working knowledge of software development.
- Create basic topic domain applications in an environment appropriate to the domain.
- Gain experience working in teams.
- Write small programs and understand the following basic programming concepts: control flow, looping, functions, and data structures.

b. How Student Outcomes addressed
(“B” = Basic level, “I” = Intermediate level, “A” = Advanced level)

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7. **Major Topics Covered: (number of lecture hours each)**
   - 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)