CSC 406 – Senior Project - Software Deployment

1. CSC 406 – Senior Project - Software Deployment

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

3. **Course Coordinator:** David Janzen

4. **Textbook (or other required material):**
   Feathers, Working Effectively with Legacy Code, Prentice Hall, 2005
   
   **a. References:** Andrews & Whittaker, How to Break Web Software, Addison Wesley, 2006

5. **a. Course Description:**
   Deployment of a sizeable software product by a student team. Software maintenance and deployment economic issues. Management of deployed software: version control, defect tracking and technical support. 3 lectures, 1 laboratory.
   
   **b. Prerequisite:** CSC 405.
   
   **c. Required/Elective/Selective Elective for CPE, CSC, EE, SE**

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6. **a. Course Learning Objectives**
   The student will be able to:
   - Deploy, maintain, and enhance a high-quality software product
   - Articulate and execute principles and concepts of software deployment
   - Articulate and execute principles and concepts of software maintenance
   - Articulate and execute principles and concepts of software quality assurance
   - Work effectively as a member of a team to meet project milestones
   - Describe and apply a software process
   - Describe and apply software metrics
   - Estimate software project work
   - Effectively write and speak about software engineering
   - Explain software marketing principles
   - Explain software licensing and vendor partnership issues
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)**
   - Deployment issues (6 hours)
     - Fundamental principles and processes
     - Marketing
     - Licensing
   - Software systems testing (6 hours)
     - Software metrics
     - Quality attribute testing
     - Usability testing
     - Coverage testing
     - Acceptance testing
   - Software evolution (3 hours)
     - Release management principles
     - Defect tracking
   - Software maintenance (3 hours)
   - Software deployment (6 hours)
     - Installation
     - Media
     - Configuration parameters
     - Economics