Course Outline

Course Title: Systems Analysis & Design
Submitted By: Ron Booth
Semester Course Prefix and Number: CSCI 2455
Old Quarter Course Prefix and Number: 
Approval Date: January 2003
Revision Date: October 2002

Number of Credits: 3
Number of Lecture Credits: 3
Number of Lab Credits: None
Number of Lab Hours: None
Number of Studio/Demonstration/Internship Credits: None

Semester(s) Offered: Spr
Negotiated Class Size: 

Course Purpose Code:

0 – Developmental Courses
1 – Non-transferable, General Education
2 – Technical course related to career programs
X 4 – Other college course not considered a part of general education (MNTC) e.g. computer science, health, physical education
5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements.
9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:
This course is a survey of methods for investigating and designing computer information systems. Students will develop application programs from scenarios presented by the instructor or gathered by the student. Topics include the discussion, analysis, and actual design of a system using a five phase approach consisting of initiation, detailed investigation, system design, system development and implementation and evaluation.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s): Two programming courses or consent of instructor
Reading Prerequisite: None
Composition Prerequisite: None
Mathematics Prerequisite: None

Career Programs and Transfer Majors Accessing this Course:
CSCI Majors
Computer programming

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable: Notes: No more than two goals may be met by any one course. (Curriculum Committee review and the Chief Academic Officer's approval are required).

0. X None
1. Communications
2. Critical Thinking
3. Natural Sciences
4. Mathematical/Logical Reasoning
5. History and the Social and Behavioral Sciences
6. The Humanities and Fine Arts
7. Human Diversity
8. Global Perspectives
9. Ethical and Civic Responsibility
10. People and the Environment
Learning outcomes, including any relevant competencies listed in the Minnesota Transfer Curriculum:

The student will:

1. Demonstrate knowledge of the system analysis process.
2. Demonstrate knowledge of the system design process.
3. Demonstrate knowledge of the system engineering and implementation process.
4. Demonstrate knowledge of the upkeep of an existing system.
5. Participate in the creation of an actual system of programs suggested by the instructor or the student.

Student assessment methods:

Chapter exercises and chapter quizzes and tests.

Use of instructional technology (includes software, interactive video and other instructional technologies):

A computer with the language(s) needed to complete the project. These are provided in the school lab.

Outline of the major course content:

- Systems Analysis Fundamentals
- Information Requirements Analysis
- The Analysis Process
- The Essentials of Design
- Software Engineering and Implementation

Additional special information (special fees, directives on hazardous materials, etc.)

Transfer Information: (Please list colleges/majors that accept this course in transfer.)

Approvals:

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<tr>
<th>Body</th>
<th>Representative Signatures</th>
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<tbody>
<tr>
<td>Curriculum Committee</td>
<td>Dr. Bonnie K. Edwards</td>
<td>October 10, 2002</td>
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<tr>
<td>Faculty Association</td>
<td>Georgia Suoja</td>
<td>December 16, 2002</td>
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<tr>
<td>Meet and Confer</td>
<td>Jill Peterson</td>
<td>January 25, 2003</td>
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<tr>
<td>Chief Academic Officer</td>
<td>Jill Peterson</td>
<td>January 25, 2003</td>
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