

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

Course Outline

Course Title: Systems Analysis & Design
Semester Course Prefix and Number: CSCI 2455
Old Quarter Course Prefix and Number:

Submitted By: Ron Booth
Approval Date: January 2003
Revision Date: October 2002

Number of Credits: 3 Number of Lecture Credits: 3
Semester(s) Offered: Spr Number of Lab Credits: Number of Lab Hours:
Negotiated Class Size: Number of Studio/Demonstration/Internship Credits:

Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 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. 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:

Body	Representative Signatures	Date
Curriculum Committee	Dr. Bonnie K. Edwards	October 10, 2002
Faculty Association	Georgia Suoja	December 16, 2002
Meet and Confer	Jill Peterson	January 25, 2003
Chief Academic Officer	Jill Peterson	January 25, 2003

Distribution: Original – Administrative Office, Library, Learning Center, Records, Student Services, Curriculum Committee Chair