

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

Course Outline

Course Title: Introduction to Programming – Fortran
Semester Course Prefix and Number: CSCI 1466
Old Quarter Course Prefix and Number: CSCI 102

Submitted By: B. Phillips
Approval Date:
Revision Date: Feb. 2002

Number of Credits: 3 Number of Lecture Credits: 2
Semester(s) Offered: Number of Lab Credits: 1 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 introduces program structure and statements, logical and arithmetic operators, elements of structured programming, transfer of control, formatted and unformatted input/output, DO loops, multi-dimensional arrays, function and subroutine sub-programs, input/output to external files.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): None
Reading Prerequisite: None
Composition Prerequisite: None
Mathematics Prerequisite: None

Career Programs and Transfer Majors Accessing this Course:

CSCI majors, Engineering majors, Computer Programming AAS, Diploma, and Certificate students

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).

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| 0. <input checked="" type="checkbox"/> None | 6. <input type="checkbox"/> The Humanities and Fine Arts |
| 1. <input type="checkbox"/> Communications | 7. <input type="checkbox"/> Human Diversity |
| 2. <input type="checkbox"/> Critical Thinking | 8. <input type="checkbox"/> Global Perspectives |
| 3. <input type="checkbox"/> Natural Sciences | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning | 10. <input type="checkbox"/> People and the Environment |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences | |

Learning outcomes, including any relevant competencies listed in the Minnesota Transfer Curriculum:

The student will design, code, document and implement computer programs using the Fortran programming language.

Student assessment methods:

Unit test, Lab exercises

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

Computers with FORTRAN computer software required

Outline of the major course content:

Program structure and statements, logical and arithmetic operators, elements of structured programming, transfer of control, formatted and unformatted input/output, DO loops, multi-dimensional arrays, function and subroutine sub-programs, input/output to external files.

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		
Faculty Association		
Meet and Confer		
Chief Academic Officer		

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