MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

Course Outline

Course Title:	**Introduction to Programming – Fortran**	**Submitted By:**	**B. Phillips**
Semester Course Prefix and Number:	**CSCI 1466**	**Approval Date:**	
Old Quarter Course Prefix and Number:	**CSCI 102**	**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)
__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 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).

0. **X** None
6. _____ The Humanities and Fine Arts

1. _____ Communications
2. _____ Critical Thinking
3. _____ Natural Sciences
4. _____ Mathematical/Logical Reasoning
5. _____ History and the Social and Behavioral Sciences
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 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		

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