

# MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

## Course Outline

**Course Title:** Introduction to Computer-aided Drafting  
**Semester Course Prefix and Number:** DRFT 1356  
**Old Quarter Course Prefix and Number:** DRFT 113

**Submitted By:** Ray Bennick  
**Approval Date:** March 2002  
**Revision Date:** Feb. 2002

**Number of Credits:** 2  
**Semester(s) Offered:**  
**Negotiated Class Size:**

**Number of Lecture Credits:** 1  
**Number of Lab Credits:** 1 **Number of Lab Hours:** 2  
**Number of Studio/Demonstration/Internship Credits:**

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### 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:

Students enrolled in this course need no previous drafting experience. The course is designed for those seeking an introduction to the diverse and complex field of computer-aided drafting (CAD), but limited to affordable hardware and software.

### Prerequisites and/or recommended entry skills/knowledge:

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

### Career Programs and Transfer Majors Accessing this Course:

Engineering, architectural

**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:

- Properly use AutoCAD LT 98 software currently installed on the lab computers.
- Apply the use of AutoCAD LT 98 to the exercises and problems in the textbook used.
- Manipulate AutoCAD LT 98 to produce macros, change menus, and create icons.
- Save all assignments onto a diskette or network space and retrieve the same for editing.
- Plot and/or print assignments and drawings as determined by the instructor.

**Student assessment methods:**

- Drawings and assignments will be graded on accuracy, solution, difficulty and appearance
- Drawings and assignments will constitute 50% of final grade, weekly quizzes and midterm examination will constitute 25% of final grade and final examination will constitute 25% of final grade.
- Letter grades will be used based on points accumulated on drawings, quizzes and tests

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

Students will use a computer aided drafting software package (AutoCAD 98 LT) to draw some of the assignments

**Outline of the major course content:**

- Pre-test to determine students' status
- Learning the basics
- Setting up for drawing
- Controlling drawing accuracy
- Getting around the drawing area
- Common graphic entities
- The power commands
- Blocks, selections and groups
- Drawing commands
- Advanced two-dimensional editing
- Input/output files, display, plots and points
- Enhancing your drawing
- Dimensioning and text
- Attributes, material lists and other utilities
- Macros, icons and menus
- Review
- Review all of the above; final examination

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

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

**Approvals:**

<b>Body</b>	<b>Representative Signatures</b>	<b>Date</b>
Curriculum Committee	Kim Giermann	Feb. 20, 2002
Faculty Association	Georgia Suoja	March 4, 2002
Meet and Confer	Dr. Jill Peterson	March 15, 2002
Chief Academic Officer	Dr. Jill Peterson	March 15, 2002

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