

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Computer Aided Design
Semester Course Prefix and Number: PAS 2295
Old Quarter Course Prefix and Number:

Submitted By: Scott Norcia
Approval Date:
Revision Date: 11/23/11

Number of Credits: 2
Semester(s) Offered: Spring
Class Size: 24
Negotiated by AASC on: (date)

Number of Lecture Credits: 0
Number of Lab Credits: 2 Number of Lab Hours: 4
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 or intended for transfer.
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:

This course covers the fundamentals of computer-aided design. Basic drawing commands are covered and understanding is reinforced through hands on drawing exercises. The content will be focused on drawing electronic, electrical, loop sheets and P&ID diagrams. The proper procedures for file management and printing/plotting of completed work are also covered.

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:

Process Automation Systems Diploma
Process Automation Systems AAS

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. <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)

Following the completion of this course the student will be able to demonstrate the ability to:

- 1.) Utilize the AutoCAD user interface.
- 2.) Utilize the basic AutoCAD drawing commands.
- 3.) Create two dimensional electrical diagrams.
- 4.) Manage AutoCAD drawing files.
- 5.) Layout and Plot AutoCAD drawings.

Student Assessment Methods:

Lab assignments, worksheets, papers, and tests.

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

Power Point Software and AutoCAD LT2004

Outline or Statement of Major Course Content:

See "Learning Outcomes" above.

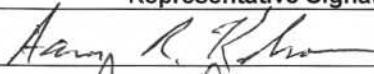
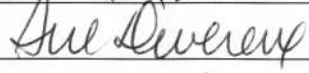

Additional Special Information: (special fees, directives on hazardous materials, etc.)

Laptop Computer Lease

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

None

Approvals:

| Body | Representative Signatures | Date |
|--------------------------------------|--|----------|
| Curriculum Committee |  | 11-29-11 |
| Faculty Association |  | 12-5-11 |
| Academic Affairs Standards Committee |  | 11-29-11 |
| Chief Academic Officer | | |

Distribution: Original – Administrative Office
Copies: Curriculum Committee Chair, AASC Chair, Transfer Specialist, Originating Faculty Member, Scheduler, Records, Student Services, Learning Center, Library
Revised: October 2006