

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title:	Pumps	Submitted:	Waldorf, Parker, Hill
Semester Course Prefix and Number:	IMT 2225	Approval Date:	
Old Quarter Course Prefix and Number:		Revision Date:	11-30-11
Number of Credits:	2	Number of Lecture Credits:	1
Semester(s) Offered:		Number of Lab Credits:	1
Class Size: 35		Number of Lab Hours:	2
Negotiated by AASC on:		Number of Studio/Demonstration/Internship Credits:	
(date)			

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 describes the types of pumps and explains their operation and maintenance. It also tells about the packing, sealing, and lubrication, all of which are essential to good pump operation.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): MTMX I courses or equivalent experience

Reading Prerequisite:

Composition Prerequisite:

Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:

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)

Upon completion of this course, the student will be able to:

- Explain pump terminology
- Disassemble centrifugal pumps
- Identify, disassemble, reassemble and troubleshoot different style pumps such as: axil-flow, mixed flow, turbine, external gear, internal gear, vane reciprocating, metering, peristaltic, and slurry
- Replace packing – Emphasis on safety: LOCKOUT

Student Assessment Methods:

Tests, hands on performance

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

Videos

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		
Academic Affairs Standards Committee		
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: June 2009