

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

Course Outline

Course Title: Special Topics in Chemistry
Semester Course Prefix and Number: CHEM 2435
Old Quarter Course Prefix and Number:

Submitted By: Martin Maresch
Approval Date: Sept. 2004
Revision Date:

Number of Credits: 1-3 Number of Lecture Credits: 1-3
Semester(s) Offered: Number of Lab Credits: Number of Lab Hours:
Class Size: 20 Number of Studio/Demonstration/Internship Credits:
Negotiated by AASC on
(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)
- 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 is a study of special topics pertaining to student interest in chemistry and its relationship to allied health, anthropology, biochemistry, biology, biotechnology, criminology, and environmental science fields. Topics of interest may include one or more issues on healthcare, environment, biotechnology, criminology, pharmacology or industrial manufacturing.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): CHEM 1511, BIOL 1551, or Instructor's consent
Reading Prerequisite: ENGL 1511, or equivalent coursework
Composition Prerequisite:
Mathematics Prerequisite: MATH 0093, or equivalent coursework

Career Programs and Transfer Majors Accessing this Course:

Allied Health, Anthropology, Biology, Chemistry, Criminology, Life Science, Environmental Science, Industrial Technology, Law, Medicine, Medical Technology, Mortuary Science, or Pharmacy.

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

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

The student will:

- Develop an advanced understanding towards the relationship of chemical principles and their association to specific topics.
- Demonstrate understanding of the scientific method as it pertains to investigating various materials
- Communicate their experimental analyses and interpretations in writing

Student assessment methods:

The course may be evaluated by:

- Experimental Reports
- Objective Examinations
- Quizzes
- Special Presentations
- CATS

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

Spectroscopic equipment and instruments, computer software databases, internet database sites and searches.

Outline of the major course content:

The specific topics for each class offering will be determined by student interest and may include forensics, industrial or environmental topics. The scientific method will be applied to various topics, such as fibers, paints, glasses, explosives, biological materials (hair, blood, seminal fluid), soils, toxic compounds and drugs. Studies may include the identity of sample materials, sample integrity, and application of analytical data, using current methods and/or applications. By studying these current topics, students will expand their knowledge in the basic sciences and learn the terminology necessary in their field of study.

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

Topic specific syllabus to be submitted to Curriculum committee for approval each time a new topic is offered.

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

Most universities and colleges have special topics courses and would accept this course as an elective.

Approvals:

Body	Representative Signatures	Date
Curriculum Committee	Donnie Gordon	April 5, 2004
Faculty Association	Roger Hoffman	April 6, 2004
Academic Affairs Standards Committee		
Chief Academic Officer	Dr. Tina Royer	September 8, 2004

Distribution: Original – Administrative Office

Copies: Curriculum Committee Chair, Learning Center, Library, Originating Faculty Member, Records, Student Services, Scheduler, Transfer Specialist

Revised February 10, 2004