A. COURSE DESCRIPTION

Credits: 1
Lecture Hours/Week: *.*
Lab Hours/Week: *.*
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None
This course will introduce the student to the basic operation and associated functions related to selected laboratory instruments and equipment.
Prerequisite: Admission to MLT Program

B. COURSE EFFECTIVE DATES: 08/27/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. See Course Description and Course Outcomes

D. LEARNING OUTCOMES (General)

1. Identify the basic functional and electronic units of analytical instruments. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELO 1)
2. Discuss laboratory safety precautions concerning laboratory instrumentation. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2)
3. Discuss the basic construction and operating principles of spectrophotometers and ion selective electrodes. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2)
4. Discuss laboratory quality control statistics and evaluate results. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELOs 1, 2)
5. Explain basic care and maintenance procedures on select laboratory instruments. (MLT Program goals C, D, F, G, H, I, J, M 1 & 4; NHCC ELO 1)

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

1. Knowledge of Human Cultures and the Physical and Natural World--Through study in the sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.
2. Intellectual and Practical Skills--Including: Inquiry and analysis; Critical and creative thinking; Written and oral communication; Quantitative literacy; Information literacy; Teamwork and problem solving.