COURSE ABBREVIATION: ASTR 1020L

CREDIT HOURS: 1

COURSE TITLE: Stellar and Galactic Astronomy Laboratory

PREREQUISITE: Exit or exemption from Learning Support mathematics and exit or exemption from Learning Support reading or ENSL 0090 with a "C" or better

COREQUISITE: ASTR 1020

CATALOG DESCRIPTION
Laboratory to accompany ASTR 1020.

EXPECTED EDUCATIONAL RESULTS
As a result of completing this course, the student will be able to:
1. Perform basic measurements as are deemed appropriate by the experiments performed;
2. Analyze pictures and/or graphical information and answer questions about them;
3. Discuss the theoretical basis of the performed experiments in the terms described by the corresponding complementary lecture

GENERAL EDUCATION OUTCOMES
This course has primary responsibility for general education outcome number six:
Recognize and apply scientific inquiry in a variety of settings.

It is intended that the course meet this objective in the following way:
This is a laboratory course. This course directly involves the use of scientific inquiry in the quest to understand astronomy. The performance of the weekly experiments will provide experience in applying scientific inquiry.
COURSE CONTENT
The course shall meet at least 13 times per semester. Among the sessions there should be: one Mathematical review, one Mid-term Exam or study session, at least 10 laboratory exercises, and one comprehensive final exam.

The following lab experiments are available for the students to perform. The instructor should select ten of the experiments to perform, in keeping with the course and the available equipment.

The Sun
Light and Spectra
Classification of Stellar Spectra
Parallax
The Hertzsprung-Russell Diagram and the Properties of Stars
Stars and Nebulae
Distance to a Star Cluster
Galactic Rotation
Galaxies
The Expansion of the Universe

ASSESSMENT OF EXPECTED EDUCATIONAL RESULTS

The college believes in the academic value of giving final exams that are comprehensive in nature; however, the college also values the discretion of the faculty member to determine appropriate assessment methods. The departments on each campus and/or individual instructors will construct a detailed syllabus based on the Common Course Outline for implementation in each class.

Revised: March 1998
May 1998 for semester conversion
March 2001- revised to reflect current catalogue
March 2002- course name and number changed
September 2003 – assessment statement from Faculty handbook adopted