

CURRICULUM PROPOSAL FORM 1999-2000

NON-GENERAL EDUCATION PROCESS A

*DEADLINES: Deadline dates for 1999/2000 submissions: Regular proposals: October 22, 1999 to be implemented in Fall 2000; Short-Term proposals: December 10, 1999 to be implemented in Fall, 2000; Regular proposals February 18, 2000 to be implemented in Spring, 2001; March 24, 2000 for short-term courses to be implemented in Spring 2001.

PROPOSAL TITLE: Change in Common Core for the Physical Science Major

SPONSOR(S): Eddie Guerra

DEPARTMENT: Chemistry & Physics

COLLEGE: LAS

IF LAS CHECK ONE: History/Humanities Math/Sciences Social/Behavioral Sciences

Check one: Undergraduate Graduate

THE ATTACHED *NON-GEN-ED* PROPOSAL IS BEST DESCRIBED BY THE ITEM(S) CHECKED.

New non-gen-ed course

Short-term non-gen-ed course

Minor curricular changes (fewer than three) to:

existing non-gen-ed course

non-gen-ed degree requirements

major

minor, specialization, concentration, track, certificate program

DEPARTMENT

(Signature indicates approval)

Charles W. Schultz 2-8-01

Dept. Curriculum Chair / Date

Robert Newland 2/9/01

Dept. Chairperson / Date

ACADEMIC DEAN

Approved

Not Approved

Comments:

Dean's Signature/Date

Jim Hump 5-29-01

COLLEGE CURRICULUM COMMITTEE

Date of open hearing (if necessary) NA Approved Not Approved

Comments:

Signature of College Chair/Date: [Signature] April 23, 2001

UNIVERSITY CURRICULUM COMMITTEE

Date Received/Processed 5-8-01

Comments:

Curriculum Chair Signature [Signature] Date Announced At Senate 5-8-01

EXECUTIVE VICE PRESIDENT/PROVOST

Approved Not Approved If no, reasons are as follows:

Student Credit Hours _____ Faculty Load Hours _____ Equalized Credit Hours _____

Official Copy & Approval Sheet Filed (Date): _____ Executive VP/Provost Signature/Date [Signature] 5/30/01

REGISTRAR

Date Approved Course Description Received 6/4/01 Hegis Taxonomy & Course Number Assigned _____

Registrar Signature/Date [Signature]

NOTIFICATION FORWARD

____ Senate Curriculum Committee Chairperson _____ Academic Dean(s)
____ Department Chairpersons _____ Registrar _____ Sponsor(s)

Minor Curricular Change

Change in the Common Core for the Physical Science Major

1. Details:

- a. Change Requested in the common core major requirements for physical science majors.

From: A. Common Core 31-32 s.h.
1906.100 Chemistry I OR 1906.105 Advanced Chemistry I
1906.101 Chemistry II OR 1906.106 Advanced Chemistry II
1902.200 Physics I (w/Calc)
1902.201 Physics II (w/Calc)
1907.200 Organic Chemistry I
1909.350 Quantitative Analysis
1701.131 Calculus II
1911.120 Intro to Astronomy OR 1913.101 Meteorology

To: A. Common Core 32 s.h.
1906.100 Chemistry I OR 1906.105 Advanced Chemistry I
1906.101 Chemistry II OR 1906.106 Advanced Chemistry II
1902.200 Physics I (w/Calc)
1902.201 Physics II (w/Calc)
1907.200 Organic Chemistry I
1909.350 Quantitative Analysis
1701.131 Calculus II
1911.215 Astronomy & Astrophysics

- b. Sponsor: E. J. Guerra, Department of Chemistry and Physics

2. Rationale:

- a. Need:

Current faculty expertise in the Department of Chemistry & Physics does not cover 1913.101 Meteorology. There are no plans to offer Meteorology on a regular basis in the foreseeable future. In effect, 1911.120 Intro to Astronomy is currently a core requirement for the physical science major.

Intro to Astronomy is a popular choice by “non-science” students for the General Education LAB science requirement. Because of this, Intro to Astronomy is taught with an emphasis on concepts instead of computation. Note that the typical approach to Intro to Astronomy includes time spent dealing with “math anxiety” among certain students. Also, Intro to Astronomy is typically oversubscribed.

A new course was designed for students with stronger mathematical backgrounds with a more physical and computational approach. The course 1911.215 Astronomy and Astrophysics was designed primarily for students in the natural science, mathematics, and engineering. The course was approved as of Fall 2000.

The course Astronomy & Astrophysics was designed with physical science majors and similar students in mind. Physical science majors should have the appropriate mathematical background after their freshman year to benefit from the more rigorous approach of Astronomy & Astrophysics. Physical science majors would spend too much time in Intro to Astronomy on what for them is “remedial” material. It is necessary that the major requirements for the physical science major be changed to take advantage of the new and more appropriate 1911.215 Astronomy & Astrophysics.

- b. Curricular Effect:

Meteorology is removed from common core of the physical science major. Note: If Meteorology is offered in the future, students specializing in general science Physical Science still have the option of using Meteorology as part of their major requirements.

3. Consultation:

Not necessary; does not impact other programs.