

UNIVERSITY CURRICULUM COMMITTEE

DATE OF OPEN HEARING (if necessary) 10/19/98

APPROVED

NOT APPROVED

COMMENTS:

Janette Reeves 10/20/98
SIGNATURE DATE

SENATE

Date announced at Senate 10/20/98

Voted upon at Senate: Approved Not Approved Date:

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): _____

DATE/SIGNATURE EXECUTIVE VICE PRESIDENT/PROVOST _____

REGISTRAR

DATE APPROVED COURSE DESCRIPTION RECEIVED 11/19/98

HEGIS TAXONOMY & COURSE NUMBER ASSIGNED _____

DATE/SIGNATURE OF REGISTRAR Robert J. Seibert 11/20/98

NOTIFICATION FORWARD:

SENATE CURRICULUM COMMITTEE CHAIRPERSON

DEPARTMENT CHAIRPERSONS

ACADEMIC DEAN(S)

REGISTRAR

SPONSOR(S)

Transmitted 1/11/99

SENATE CURRICULUM COMMITTEE MINOR CURRICULAR CHANGE FORM

PROPOSAL TITLE: Minor Change Math/Science Specialization of Liberal Studies

UNDERGRADUATE GRADUATE CREDIT HOURS

SPONSOR(S): K. Myer-Sauer + Math/Sci Advisory Board
 DEPARTMENT: Chem + Phys
 TELEPHONE: 609-3552

- CHECK:
- CHANGES IN APPROVED MINORS, SPECIALIZATIONS, CONCENTRATIONS
 - CATALOG DESCRIPTIONS, TITLES, AND/OR PREREQUISITES
 - SMALL CHANGES IN COURSE CONTENT OF EXISTING COURSES WHICH DO NOT SUBSTANTIALLY VARY THE CURRICULUM
 - CHANGES IN HEGIS NUMBER

STEP #1 (DEPARTMENT)	STEP #2 (COLLEGE)	STEP #3 (ACADEMIC DEAN)
Date Approved: <u>4/6/98</u> Date NOT Approved: _____ <u>K. P. Myer-Sauer</u> 4/6/98 Dept. Curriculum Chairperson signature/date FOR KMS <u>Diane Ashton</u> 4/6/98 Dept. Chairperson signature/date	Recommend To Approve/date: <u>4/27/98</u> Recommend NOT To Approve/date: _____ Comments: _____ <u>K. P. Myer-Sauer</u> College Curriculum Chairperson Signature /date	Recommended: <input checked="" type="checkbox"/> NOT Recommended: <input type="checkbox"/> <u>McDermott</u> 4/8/98 Dean of College Signature/date

STEP #4 (CURRICULUM COMMITTEE)	STEP #5 EXECUTIVE VP/PROVOST
SCC# <u>9798-327</u> APPROVED: _____ NOT APPROVED: _____ Curriculum Committee Chairperson Signature/date <div style="text-align: right; font-size: small;"> <i>Rec'd 4/14/98</i> <i>Chairman page 1/2/98</i> </div>	Approved: _____ NOT Approved: _____ Signature /Date

REGISTRAR'S SIGNATURE/DATE: _____

Minor Curricular Change

1. Details:

a. Change Requested:

Course equivalency for major course requirements within the Math/Science Specialization of the Liberal Studies Degree.

b. Sponsors: K. Magee-Sauer, D. Ashton, J. Caldwell, P. Mosto, R. Newland, D. Stone (Math/Science Specialization Advisory Panel)

2. Rationale:

a. Statement of Need

Many students are transferring into this specialization with significant previous course work which does not exactly match the required specified courses. However, some courses and combination of courses meet or exceed the objectives and goals of the currently required courses. Furthermore, in some instances, students may have future graduate work plans that require a year of chemistry or biology for admission. We propose to allow students to substitute more rigorous course selections when appropriate for their career directions.

The Exploration of the Solar System course satisfies the same objective as the Astronomy course. It is actually a better choice for elementary education coordinate majors since the NJ Science Standards for astronomy are in fact dominated by solar system topics. Astronomy is heavily taxed as a "lab science" course so letting students opt to take the Solar System class reduces the burden on Astronomy as well.

b. Curricular effect:

Essentials of Biology	or	Biology I AND II
Physics of Everyday Life	or	Physics I AND II (with or without calc)
Chemistry of Everyday Life	or	Chemistry I AND II
Astronomy	or	Exploration of the Solar System

Students opting to take a full year sequence of the discipline rather than the one semester requirement will count the extra hours in their free elective category since this is an optional choice for the student to help prepare for future graduate work, or for course work previously completed before declaring a Math/Sci specialization of the B.A. in Liberal Studies degree. Students taking the Solar System course will reduce the hours required in General Education Math/Science Bank from 15 hours to 14 hours.

This option is relevant to very few of our majors, but we feel we need an accepted policy for the students who do. Currently we have 17 majors of which 15 are elementary education coordinate majors. This is the first year of the program.

3. Results of Consultation: Liberal Studies Math/Science Panel has approved the above policy. P. Bartelt, D. Kapel, G. Itzkowitz, S. Bergmann, E. Moore have been sent this proposal and asked to send comments if they have any directly to the Senate Office.

LIBERAL STUDIES MAJOR: Math/Science Specialization

GENERAL EDUCATION REQUIREMENTS

General Education requirements outlined below are for those students admitted to Rowan University September 1997 or after.

Communications Bank					9 s.h.
_____	_____	_____	_____	Composition I (1501.111)	
_____	_____	_____	_____	Composition II (1501.112)	
_____	_____	_____	_____	Public Speaking (1506.202)	
Math/Science Bank					14 s.h.
_____	_____	_____	_____	Physics of Everyday Life (1902.150)	
_____	_____	_____	_____	Chemistry of Everyday Life (1905.102)	
_____	_____	_____	_____	Statistics I (1702.260)	
_____	_____	_____	_____	Structures of Mathematics (1701.201)	
Humanities, History, and Languages Bank*					12 s.h.
_____	_____	_____	_____	Philosophy of Science-Writing Intensive (1509.368)	
_____	_____	_____	_____	Logic of Everyday Reasoning (1509.110)	
_____	_____	_____	_____	HHL Elective	
_____	_____	_____	_____	HHL Elective	
Social and Behavioral Sciences Bank*					12 s.h.
_____	_____	_____	_____	SBS elective	
_____	_____	_____	_____	SBS elective	
_____	_____	_____	_____	SBS elective	
_____	_____	_____	_____	SBS elective	
Arts Bank					3 s.h.
_____	_____	_____	_____	Arts elective	
General Education Electives ⁺					14 s.h.
_____	_____	_____	_____	Computer Literacy	
_____	_____	_____	_____	Gen Ed elective	
_____	_____	_____	_____	Gen Ed elective	
_____	_____	_____	_____	Gen Ed elective	

⁺ General Education Electives include those courses designated as "General Education" courses on the General Education Guide sheet, all courses within Liberal Arts and Sciences, and Health & Wellness.

Important: Elementary Education coordinate majors should choose their electives within General Education to meet NJ State Certification Standards.

NOTE: All students must have at least one course designated as Multicultural/Global (M/G), Literature (LIT), Writing Intensive (WI), and a Laboratory Science. The Math/Science Specialization specifies the writing intensive section of Philosophy of Science which must be taken at Rowan University. Students should consult the University's list of General Education courses to select courses which satisfy the M/G and LIT requirements.

Requirements in the Major: 33-34 semester hours

In addition to the General Education (pre-major) requirements, beginning, intermediate, and upper-level courses have been selected or developed so that knowledge and skills are introduced and acquired in a logical order.

1. Lower-Level Major Courses: 16 - 17 s.h.

(100 and 200 level courses)

The required lower-level courses are:

Principles of Earth Science	3 s.h.
Essentials of Biology	4 s.h.
Introduction to Programming	3 s.h.
Discrete Mathematics	3 s.h.
Astronomy or Solar System	4 - 3 s.h.

2. Upper-level Major Courses 17 s.h.

(300 and 400 level courses)

A total of 17 semester hours, in addition to the General Education and lower-level courses listed above are required for the major. The required upper-level courses are:

Chemistry of the Environment	3 s.h.
Principles of Ecology	4 s.h.
Patterns in Nature I: Visual Geometry	3 s.h.
Patterns in Nature II: Projects in Calculus and Physics	4 s.h.
Senior Seminar	3 s.h.

Requirements for Graduation: 120 semester hours

General Education:	64 s.h.
Lower Level:	16-17 s.h.
Upper Level:	17 s.h.
Free Electives*:	23-22 s.h.

*Recommended Free Electives or General Education Electives:

Pre-Calculus (if needed - prerequisite for Statistics I and Discrete Math)	4 s.h.
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