LSC Use Only:
Number: _____
Submission Date: _____
Action Date: _____

UWUCC Use Only: 00-38e
Number: _____
Submission Date: _____
Action Date: UWUCC App 12/19/00
Senate App 1/30/01

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. CONTACT

Contact Person Keith Putirka Phone x5627
Department Geoscience

II. PROPOSAL TYPE (Check All Appropriate Lines)

X **COURSE** Physical Geology Lab
Suggested 20 character title

_____ New Course* _____
Course Number and Full Title

X Course Revision GEOS 122, Physical Geology Lab
Course Number and Full Title

_____ Liberal Studies Approval for new or existing course _____
Course Number and Full Title

_____ Course Deletion _____
Course Number and Full Title

_____ Number and/or Title Change _____
Old Number and/or Full Old Title

_____
New Number and/or Full New Title

X Course or Catalog Description Change _____
Course Number and Full Title

_____ PROGRAM: _____ Major _____ Minor _Track

_____ New Program* _____
Program Name

_____ Program Revision _____
Program Name

_____ Program Deletion* _____
Program Name

_____ Title Change _____
Old Program Name

_____
New Program Name

III. Approvals (signatures and date)

D Richard
Department Curriculum Committee

D Richard
Department Chair

College Curriculum Committee

John D Eck
College Dean

Mary Lou Soulen 11-29-00
Director of Liberal Studies (where applicable)

*Provost (where applicable)

Part II

1. Description of the Curriculum Change

A. Catalog Description

GEOS 122: Physical Geology Lab — 0 lecture hours, 3 lab hours, 1 credit (0c-3l-1sh)

Corequisite: Enrollment in GEOS 121

Selected problems in rock and mineral identification, topographic and geologic mapping techniques, geologic landforms and deformation structures. Designed to prepare students for upper-level course work in geology, physical geography and anthropology. Includes field trips.

2. Summary of Proposed Revisions

A. Comparison of Catalog Descriptions

Current Catalog Description:

GEOS 122: Physical Geology Lab — 0 lecture hours, 3 lab hours, 1 credit (0c-3l-1sh)

Prerequisites: Prerequisites: Geoscience majors/minors, science or science education majors/minors, Anthropology/Geography/Regional Planning majors, or permission of instructor.
Corequisite: Enrollment in GEOS 121

Selected problems in rock and mineral identification, topographic and geologic mapping techniques, geologic landforms and deformation structures. Designed to prepare students for upper-level geology classes. Includes field trips.

Proposed Catalog Description:

GEOS 122: Physical Geology Lab — 0 lecture hours, 3 lab hours, 1 credit (0c-3l-1sh)

Corequisite: Enrollment in GEOS 121

Selected problems in rock and mineral identification, topographic and geologic mapping techniques, geologic landforms and deformation structures. Designed to prepare students

for upper-level course work in geology, physical geography and anthropology. Includes field trips.

B. Summary of revisions

The prerequisites for GEOS 122 have been changed.

3. Justification for Revision:

By deletion of the enrollment restriction, non-majors may enroll in the course; this change makes GEOS 122 consistent with its sister course, GEOS 121, which has recently been opened to non-majors.

4. Old Syllabus of record (same as new syllabus of record)
Attached

GS 122 Physical Geology Lab

I. **Catalog Description:**

GS 122 Physical Geology Lab — 1 credit, 3 lab hours (0c-3l-1sh)

Prerequisites: Geoscience majors/minors, any science or science education majors/minors, Anthropology/Geography/Regional Planning major, or permission of instructor
Co-requisite: Enrollment in GS 121

Selected problems in rock and mineral identification, topographic and geologic mapping techniques, geologic landforms and deformation structures. Designed to prepare students for upper-level geology classes. Includes field trips.

II. **Course Objectives**

1. Students will learn to identify basic rock-forming minerals and rocks.
2. Students will discover how geologic data is represented in maps and cross-sections.
3. Students will apply their map and sample identification skills to reconstruct ancient earth environments and to determine the evolution of tectonic events.
4. Students will gain enough knowledge and understanding of rocks, minerals and maps to prepare them for upper-level geology and environmental geoscience lab-work.

III. **Course Outline**

A. Minerals: the building blocks of rocks (2 labs)
   - Techniques of mineral identification
   - Common rock-forming minerals

B Identification of common rocks (3 labs)
   - Igneous rocks
   - Sedimentary rock
   - Metamorphic rocks

C. Field trip & skill synthesis (1 lab)
   - Torrance coal measures

D. Midterm Exam (1 lab)

E. Mapping skills (4 labs)
   - Topographic maps I: basic skills
   - Geologic maps I: simple structures
   - Geologic maps II: complex structures
   - Topographic maps II: landscape

F. Field trips and skill synthesis (2 labs)
   - Young Township Park
   - Altoona Valley & Ridge

G. Final Exam (1 lab)

IV. Evaluation Methods

Your grade for GS 122 will be determined from an average of eight 10-point quizzes and two 100-point lab exams. Exams will be adjusted to a mean of 75% so that 90-100%=A; 80-89%=B; 70-79%=C; 60-69%=D; and below 60%=F.

V. Required Textbook, Supplemental Book and Readings

IUP Physical Geology Lab Manual. This lab manual was locally developed to take advantage of the unique local geology of the Indiana area. Several nationally published lab manuals were consulted during the development process to ensure quality, parity and relevance to national trends.

VI. Special Resource Requirements: None

VII. Bibliography:

Jones, N.W., 1995, LABORATORY MANUAL FOR PHYSICAL GEOLOGY. Dubuque: Wm. C. Brown Publishers.292 p.

McKinney, M.L. and Tolliver, R.L., 1994, CURRENT ISSUES IN GEOLOGY: SELECTED READINGS. New York: West Publishing Company, 254 p.

Plummer, C.C. and McGeary, D., 1993, PHYSICAL GEOLOGY (6th ed). Dubuque, William Brown Publishers, 537 p.

Press, F. and Siever, R., EARTH (4th Ed.). New York: W.H. Freeman and Company, 656 p.

Skinner, B.J. and Porter, S.C., 1989, THE DYNAMIC EARTH. New York: John Wiley & Sons, 541 p.

Old syllabi (appended)

Letters of Support (appended)

Anthropology - requested

Geography & Regional Planning - received

Liberal Studies Office
110 Gordon Hall Ext. 7-5715

Dr. Mary E. Sadler
email: msadler

Date: December 8, 2000

To: Dr. Keith Putirka

From: Dr. Mary E. Sadler

Subject: Liberal Studies approvals

At the November 16, 200 meeting of the Liberal Studies Committee the following proposals were reviewed and approved:

GEOS 121Physical Geology – catalog description and prerequisite change approved,

GEOS 122 Physical Geology Lab - catalog description and prerequisite change approved.

A copy of this memo is forwarded to the UWUCC so it is available as they review these proposals. Please don't hesitate to ask if you have any questions about the review process.

CC: Dr. Darlene Richardson, Chair
Dr. John Eck, Dean
UWUCC