

INDIANA UNIVERSITY - PURDUE UNIVERSITY  
AT FORT WAYNE

School of Business & Management Sciences

Management and Marketing Department

**TO:** The Senate

**FROM:** Curriculum Review Subcommittee  
Sherry Hockemeyer, Chair *sh*

**DATE:** February 12, 1993

**SUBJECT:** Environmental Geology Option in Geology B.S. Degree  
Supervisory Leadership Certificate in Department of Organizational  
Leadership

The Curriculum Review Subcommittee has examined the attached proposals. They have our unanimous approval. We recommend these proposals to the Senate and see no need for further review by the Senate.

**APPENDIX I: PROPOSED GEOSCIENCE DEGREE OPTIONS****GEOLOGY B.S. DEGREE**

To earn the B.S. degree in Geology, majors must fulfill the requirements of IPFW (see Part 4) and the following requirements of the School of Arts and Sciences.

- A. **English Writing:** ENG W131 (3 cr.) and ENG W233 (3 cr.).
- B. **Speech Communication:** COM 114 (3 cr.).
- C. **Foreign Language:** Two courses at the first-year level (or equivalent proficiency) in one language (8 cr. total).
- D. **Distribution:**
  - 1. **Science and Mathematics:** Major satisfies requirement.
  - 2. **Social and Behavioral Sciences:** 12 credits from at least two different disciplines.
  - 3. **Humanities:** 4 credits (foreign language courses satisfy additional requirements).

In addition, majors must complete the following core courses and the courses in one of the following two options. Grades of C or higher must be earned in all courses in geology, outside sciences, mathematics, computer sciences and statistics.

**CORE COURSES (required of all B.S. Geology Majors)****Geology Requirements**

<u>Credits</u>	<u>Courses</u>
4-3	GEOL G100 General Geology, with lab (4 cr.), or GEOL G103 Earth Science: Materials and Processes (3 cr.)
3	GEOL G104 Earth Science: Evolution of the Earth (or equivalent)
3	GEOL G211 Introduction to Paleobiology
3	GEOL G221 Introductory Mineralogy
3	GEOL G222 Introduction to Petrology
2	GEOL G319 Elementary Field Geology
3	GEOL G323 Structural Geology
3	GEOL G334 Principles of Sedimentology and Stratigraphy

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24-23 subtotal

**Other Sciences and Mathematics**

<u>Credits</u>	<u>Courses</u>
4	BIOL 121-122 Biology I: Diversity, Ecology, and Behavior, with Laboratory
8	CHM 115-116 General Chemistry
3	CS 210 Computer Programming Fundamentals
10	PHYS 201-202 General Physics I-II, or PHYS 152 Mechanics + PHYS 251 Heat, Electricity, and Optics
3	STAT 301 Elementary Statistical Methods I

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28 subtotal

**School of Arts and Sciences and Graduation Requirements**

<u>Credits</u>	<u>Courses</u>
3	COM 114 Fundamentals of Speech Communication
3	ENG W131 Elementary Composition I
3	ENG W233 Intermediate Expository Writing
8	One of the following: FREN F111-112 Elementary French I-II GER G111-112 Elementary German I-II SPAN S111-112 Elementary Spanish I-II SLAV R111-112 Elementary Russian I-II
12	Social and Behavioral Sciences
4	Humanities
8-9	Electives (to satisfy graduation minimum of 124 credits)
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41-42	subtotal

**GEOLOGY OPTION.** This is the traditional option in geology. It will help you prepare for advanced studies in geology and for work as a professional geologist in the areas of petroleum geology, exploration geology, mining geology, structural geology, geophysics, and teaching.

<u>Credits</u>	<u>Courses</u>
2	GEOL G401 Optical Mineralogy
3	GEOL G411 Invertebrate Paleontology, or GEOL G412 Introduction to Vertebrate Paleontology
3	GEOL G413 Introduction to Earth Physics
7	GEOL G429 Field Geology in the Rocky Mountains
6	Additional credits in 400-level geology courses (G410, G420, and G499 excepted)
10	MA 163-164 Integrated Calculus and Analytic Geometry I-II
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31	subtotal

**ENVIRONMENTAL GEOLOGY OPTION.** This option will help you prepare for advanced studies in environmental geology and for work as a professional geologist in the areas of water supply, waste management, geological hazards, geological resources, engineering geology, and teaching.

<u>Credits</u>	<u>Courses</u>
3	GEOL G300 Environmental and Urban Geology
3	GEOL G336 Principles of Engineering Geology
3	GEOL G406 Introduction to Geochemistry
3	GEOL G415 Geomorphology
3	GEOL G416 Economic Geology
3	GEOL G423 Methods in Applied Geophysics
3	GEOL G451 Principles of Hydrogeology
3	BIOL 445 Aquatic Biology
7	MA 227-228 Calculus for Technology I-II
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31	subtotal

APPENDIX II: SUGGESTED SEMESTER SCHEDULES FOR GEOSCIENCE DEGREE  
OPTIONSSuggested Semester Schedules for Geology OptionFall Semester 1 (14 cr.)

4 GEOL G100  
3 COM 114  
3 ENG W131  
4 CHM 115

Spring Semester 2 (13 cr.)

3 GEOL G104  
3 GEOL G221  
3 ENG W233  
4 CHM 116

Fall Semester 3 (15 cr.)

3 GEOL G211  
3 GEOL G222  
5 MA 163  
4 BIOL 121-122

Spring Semester 4 (16 cr.)

2 GEOL G319  
3 GEOL G334  
5 MA 164  
3 CS 210  
3 STAT 301

Fall Semester 5 (14 cr.)

2 GEOL G401  
5 PHYS 201  
4 MFL 111  
3 Social or Behavioral Science

Spring Semester 6 (15 cr.)

3 GEOL G323  
5 PHYS 202  
4 MFL 112  
3 Social or Behavioral Science

Summer Session (7 cr.)

7 GEOL G429 (Montana)

Fall Semester 7 (15 cr.)

3 GEOL G411  
3 GEOL (400 level)  
3 Elective  
3 Humanities  
3 Social or Behavioral Science

Spring Semester 8 (15 cr.)

3 GEOL G413  
3 GEOL (400 level)  
3 Elective  
3 Humanities  
3 Social or Behavioral Science

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Total credits: 124

Suggested Semester Schedules for Environmental Geology OptionFall Semester 1 (14 cr.)

4 GEOL G100  
 3 COM 114  
 3 ENG W131  
 4 CHM 115

Spring Semester 2 (16 cr.)

3 GEOL G104  
 3 GEOL G221  
 3 ENG W233  
 4 CHM 115  
 3 CS 210

Fall Semester 3 (17 cr.)

3 GEOL G211  
 3 GEOL G222  
 4 BIOL 121-122  
 4 MA 227  
 3 Social or Behavioral Science

Spring Semester 4 (17 cr.)

2 GEOL G319  
 3 GEOL G334  
 3 Elective  
 3 MA 228  
 3 Social or Behavioral Science  
 3 STAT 301

Fall Semester 5 (15 cr.)

3 GEOL G300  
 3 GEOL G406  
 5 PHYS 201  
 4 MFL 111

Spring Semester 6 (15 cr.)

3 GEOL G323  
 3 GEOL G416  
 5 PHYS 202  
 4 MFL 112

Fall Semester 7 (15 cr.)

3 GEOL G336  
 3 GEOL G415  
 3 BIOL 445  
 3 Humanities  
 3 Social or Behavioral Science

Spring Semester 8 (15 cr.)

3 GEOL G423  
 3 GEOL G451  
 3 Elective  
 3 Humanities  
 3 Social or Behavioral Science

Total credits: 124

**Geology Offerings, 2-year repeat schedule**

Fall, year 1 & 3

G100-S  
G211-F  
G222-A  
G300-I  
G401-A  
G406-A

Spring, year 1 & 3

G100-S  
G104-F  
G221-A  
G323-C  
G416-S

Fall, year 2 & 4

G100-S  
G211-F  
G222-A  
G336-C  
G411-F  
G415-I  
G4xx

Spring, year 2 & 4

G100-S  
G104-F  
G221-A  
G319-S  
G334-S  
G413-C  
G423-C  
G451-I  
G4xx



**APPLICATION FORM FOR CERTIFICATE PROGRAM IN  
SUPERVISORY LEADERSHIP**

**I. Campus:** Fort Wayne

**II. Proposed Degree:** Certificate in Supervisory Leadership

Current literature draws a strong distinction between being a manager (supervisor) and being a leader. A manager "does things right" (follows directions effectively) and a leader "does the right thing" (involves initiative and decision-making). This certificate program will focus training the supervisor to be a leader.

The Department of Organizational Leadership designed this certificate program in response to a request received by the Director of Credit Programs of IPFW's Continuing Education. This request was made by Eagle Pitcher, Inc. at Grabill, Indiana. They want to provide appropriate educational opportunities for their workers, but they want those opportunities to be transferable to degree programs.

**III. Projected Date of Implementation:** Fall 1992

**IV. List the major objectives of the proposed Area Certificate and describe its chief features briefly.**

The primary objective of this certificate program is to provide the basic skills necessary for supervisory leadership and to enhance individuals' job related competencies. The certificate is based on courses currently offered by the Department of Organizational Leadership and Supervision and one course offered by the English Department on the Fort Wayne campus. Should a student decide to pursue an associate's and/or bachelor's degree in Organizational Leadership and Supervision, all of the courses from this certificate could be applied to the degree.

**V. Why is the certificate needed?**

Businesses are faced with increasingly complex work, more global competition, and a diverse workforce. As a result, area businesses recognize the need for trained supervisors. Many area businesses do not have the resources to offer educational opportunities within their organizations, hence they have requested a certificate program in supervisory leadership. This program will assist supervisors in obtaining the leadership skills needed to be more effective in their organizations. For example, students will learn how to effectively work with teams, train employees, handle organizational change, supervise a department, and understand the legal issues involved in supervising people.



The Department of Organizational Leadership and Supervision has an advisory committee representing a cross-section of businesses in Northeast Indiana. This committee provides input regarding curriculum issues and has expressed an interest in this type of a program. In addition, businesses such as Eagle Pitcher, DePuy, Borg Warner, and Target have contacted the Director of Credit Programs of Continuing Education and have indicated a desire to offer this certificate program to their supervisors.

**VI. Describe the student population to be served.**

1. This certificate program will be directed toward individuals employed in organizations and businesses in Northeast Indiana who wish to broaden their supervisory skills for employment or promotions but are not interested in pursuing a college degree.
2. IPFW will offer these courses, by request, at local businesses who may choose to provide this educational opportunity for their workers. IPFW will maintain control of the courses, their content and the determination of who is qualified to teach the courses.
3. The Department of Organizational Leadership and Supervision believes the certificate program will increase the number of degree-seeking majors in that many individuals successfully completing the certificate program will choose to continue their college education. While degree-seeking students can complete the program, the certificate will not be marketed to incoming OLS students as an alternative to a degree program.
4. All students enrolled in this program will have high school diplomas (or GED) and will complete the English Placement Test and, if necessary, finish ENG 130 in preparation for ENG 131.

**VII. How does this certificate complement the campus or departmental mission?**

IPFW's Mission Statement concludes by stating that the campus ". . . seeks additional opportunities to make itself a vital resource for business, industry, public and private education, and government in Northeast Indiana. Retraining of the workforce and response to changes in the economy will be important priorities in years to come . . ." The proposed Certificate in Supervisory Leadership assists the campus in carrying out this part of the mission of IPFW.

The departmental mission of Organizational Leadership and Supervision is to: "Provide educational programs for students seeking degrees, concentrations, minors or certificates in the areas of supervisory management, human resource development, employee training and development, operations management, office administration, and hospitality management." Obviously the proposed certificate helps the department accomplish its mission as well.

**VIII. Describe any relationship to existing degree programs within the Purdue system.**

The proposed certificate program is intended to be self-contained, serving businesses and individuals in Northeast Indiana.

**IX. List and indicate the sources of any new resources required to implement the proposed program.**

No additional resources will be necessary for implementation. The program includes selected courses offered from the department's regular schedule. If several companies desire in-house programs, more associate faculty monies will need to be made available. However, this cost will be absorbed by the company paying for the program.

**X. Describe any innovative features of the program.**

This certificate is intended to respond to the needs of local businesses and industry in Northeast Indiana. Close cooperation between the Department of Organizational Leadership and Supervision and the Office of Credit Programs will be needed since it is anticipated that the Office of Credit Programs will receive several requests from businesses to conduct in-house courses so employees may earn the Certificate in Supervisory Leadership.

CERTIFICATE PROGRAM

**SUPERVISORY LEADERSHIP CERTIFICATE**

Eng W131	Elementary Composition I (or equivalent)
SPV 252	Human Relations in Supervision
SPV 262	Supervised Work Experience
SPV 268	Elements of Law
SPV 374	Essentials of Supervisory Leadership
SPV 375	Basic Methods of Training for Supervisors

