

**CLARION UNIVERSITY OF PENNSYLVANIA**  
**College of Arts and Sciences**

**DEGREE: B.S. Environmental Geoscience**

Name \_\_\_\_\_  
 Clarion ID \_\_\_\_\_  
 Entrance Date \_\_\_\_\_  
 Program Entry Date \_\_\_\_\_  
 Advisor \_\_\_\_\_

Transfer:\* \_\_\_\_\_  
 \*\* \_\_\_\_\_  
 CUP: \_\_\_\_\_  
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**GENERAL EDUCATION REQUIREMENTS - 48 CREDITS**

- I. **LIBERAL EDUCATION SKILLS - 12 CREDITS** CR. GR.
- A. English Composition (3-6 credits)  
 Eng 111: Writing II \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 (**See back of checksheet**)
- B. Mathematics Requirement (3 credits)  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_
- C. Freshman Inquiry Seminar (3 credits)  
 INQ \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_
- D. Credits to total 15 in Category I, selected from at least two of the following: Academic Enrichment, COM 140 or 340, Computer Information Science, Elementary Foreign Language, English Composition, HON 128, Mathematics, PHIL 111 or 311, COM 113 or 214  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- II. **LIBERAL KNOWLEDGE - 27 CREDITS**
- A. **Physical & Biological Science** (9 credits) selected from at least two of the following: Biology, Chemistry, Earth Sci., ENVR275, GS411, HON230, Mathematics, NSCI 150 or 151, Phys. Sci. & Physics.  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_
- B. **Social & Behavioral Science** (9 credits) selected from at least two of the following: Anthropology, Economics, Geography, GS 140, History, HON 240, NURS 320, Psychology, Social Work, Sociology, and Women & Gender Studies  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_
- C. **Arts & Humanities** (9 credits) selected from at least two of the following: ART, COM, English Language and Literature, HON 130/131, Intermediate Foreign Language and Cultures, Music, Philosophy, Speech and Theater  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- III. **HEALTH AND PERSONAL PERFORMANCE - 3 CREDITS**
- A. **Health and Wellness (2 credits)**  
 \_\_\_\_\_ : \_\_\_\_\_ : 2 \_\_\_\_\_
- B. **Personal Performance (1 course and 1 credit)**  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- IV. **GEN. ED. ELECTIVES - CREDITS TO TOTAL 48 FROM GEN. ED.** excluding credits from Biology and no more than 1 credit from area III.B.  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

FLAGS - Record below:  
 \_\_\_\_\_ First Year Values (V)  
 \_\_\_\_\_ Quantitative Reasoning (Q)  
 \_\_\_\_\_ Second Values (S)  
 \_\_\_\_\_ Information Literacy (I)

FREE ELECTIVES IN MAJOR:  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- V. **REQUIREMENTS IN MAJOR: 54-60 CREDITS** CR. GR.
- I. **Required in Core Courses (all concentrations) (23 credits)**
- ES 150: Physical Geology w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 ES 260: Environmental Geology \_\_\_\_\_ 4 \_\_\_\_\_  
 ES/GEOG 385: Climatology \_\_\_\_\_ 3 \_\_\_\_\_  
 ES/GEOG 400: Intro. Remote Sensing w/Lab \_\_\_\_\_ 3 \_\_\_\_\_  
 ES/GEOG470: Intro to Geog. Info. Sys. w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 ES 455/555: Field Methods in Geoscience \_\_\_\_\_ 5 \_\_\_\_\_
- GIS CONCENTRATION (19 credits)**
- ES/GEOG 210: Fund. Digital Mapping \_\_\_\_\_ 3 \_\_\_\_\_  
 ES/GEOG 425: Adv. Remote Sensing w/Lab \_\_\_\_\_ 3 \_\_\_\_\_  
 ES/GEOG 460: Geospatial Data \_\_\_\_\_ 3 \_\_\_\_\_  
 ES/GEOG 481: Spatial Analysis Mod \_\_\_\_\_ 4 \_\_\_\_\_  
 ES/GEOG 490: Adv. Geog. Info. Sys. w/Lab \_\_\_\_\_ 3 \_\_\_\_\_  
 CIS 202: Intro to Program/Algorithms \_\_\_\_\_ 3 \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
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- GEOSCIENCE CONCENTRATION (16 credits)**
- ES 255: Geomorphology w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 ES 330: Hydrogeology w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 CHEM 153: Gen Chemistry I \_\_\_\_\_ 3 \_\_\_\_\_  
 CHEM 163: Gen Chemistry I (Lab) \_\_\_\_\_ 1 \_\_\_\_\_  
 CHEM 154: Gen Chemistry II \_\_\_\_\_ 3 \_\_\_\_\_  
 CHEM 164: Gen Chemistry II (Lab) \_\_\_\_\_ 1 \_\_\_\_\_  
 ES \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 ES \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 BIOL \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_  
 MATH \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- MINERAL RESOURCES EXPLORATION CONCENTRATION (24 cr)**
- ES 350: Structural Geology w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 ES 360: Mineralogy w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 ES 370: Petrology w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 ES 390: Strat. & Sed. Petrology w/Lab \_\_\_\_\_ 4 \_\_\_\_\_  
 CHEM 153: Gen Chemistry I \_\_\_\_\_ 3 \_\_\_\_\_  
 CHEM 163: Gen Chemistry I (Lab) \_\_\_\_\_ 1 \_\_\_\_\_  
 CHEM 154: Gen Chemistry II \_\_\_\_\_ 3 \_\_\_\_\_  
 CHEM 164: Gen Chemistry II (Lab) \_\_\_\_\_ 1 \_\_\_\_\_  
 MATH \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

- ATMOSPHERIC/OCEANIC SCIENCE CONCENTRATION (21-22 cr.)**
- ES 140: Natural Disasters \_\_\_\_\_ 3 \_\_\_\_\_  
 ES 270: Oceanography \_\_\_\_\_ 3 \_\_\_\_\_  
 ES 280: Meteorology \_\_\_\_\_ 3 \_\_\_\_\_  
 PH 251: Gen. Physics I \_\_\_\_\_ 4 \_\_\_\_\_  
 PH 252: Gen. Physics II \_\_\_\_\_ 4 \_\_\_\_\_  
 MATH \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

**No changes since Fall 2020**

# University Policies Relating to Academic Requirements

- A student is obligated by those requirements which are in effect at the time of his/her matriculation, but if he/she changes majors he/she is obligated by the requirements in effect at the time of the change. If a student has been out of school for more than two years and is readmitted, he/she is treated as a new student for requirement purposes.
- A minimum of 120 credits must be presented for graduation, of which at least 30 of the last 60 credits must have been earned in residence.
- No more than 2 credits of Personal Performance (III.B) may be counted for graduation.
- Upon presentation of DD 214, the university grants a maximum of 4 credits in Health and Physical Education for active military service of 6 months or more. Credit is normally given for NFSS 111 (2 credits) and 2 activity hours of 1 credit each.
- Maximum loads: Students with a GPA of 3.0, 21 hours; students in good standing\*, 18 hours; students on probation, 15 hours.
  - \* To be in good standing, undergraduate students must maintain a minimum cumulative grade point average of 2.0.
- After a student has earned a minimum of 30 semester hours of credit and if he/she is in good academic standing, he/she may schedule a maximum of six courses of 18 credit hours for Credit-No Record. One such course may be taken each semester. Courses in the student's major may not be taken on a Credit/No Record basis.
- Course credits not to exceed 18 semester hours may be earned by departmental examination at Clarion.
- All candidates for an undergraduate degree must be in good academic standing (i.e., have a cumulative GPA of 2.0).
- A second major may be pursued (a) after the completion of a baccalaureate degree and (b) in the same degree area as the first major. It does not lead to a second degree awarded unless the student completes an additional 30 credits. If the student completes an additional 30 credits, a second degree is awarded. Students must successfully complete all requirements for the second major.
- Students may simultaneously earn two degrees from Clarion University from a different college of the university or different degree (B.S., B.A., or B.F.A.) within the same college by completing all coursework for those degrees. In this case, the student will receive two diplomas. Students who have earned their first baccalaureate degree from another institution are responsible for satisfying Clarion University's residence requirement.

## Post-Baccalaureate Students Returning for a Second Undergraduate Degree:

- Students need to complete an additional 30 credits (regardless of number of earned credits of the first degree) and complete degree requirements in effect at the time of matriculation for second undergraduate degree.
- Students may obtain teacher certification in conjunction with many degrees by completing the required course work in professional education. For more information, contact the Dean of the College of Arts, Education and Sciences, or the Director of Education. With careful course selection, ordinarily no more than 120 credits will be required.

Academic Policy information can be found on the Registrar's web page at the following link:

<http://www.clarion.edu/academics/registrars-office/academic-policies/index.html>

## NOTES:

1. A. **(GIS CONCENTRATION)**  
Students must select ONE course from the following: CIS 301 (CIS 202 pre-requisite) or ES/GEOG 345  
AND select SIX credits from the following: BIOL 202, CIS 206, CIS 270, CIS 306, CIS 330, CIS 370, CIS 402, MATH 225
  - B. **(GEOSCIENCE CONCENTRATION)**  
Students must choose up to EIGHT credits from the following Earth Science Electives: ES 350, ES 390, ES 360, ES 370  
AND a Biology elective (3-4 credits) – fills Gen. Ed. Requirement
  - C. **(MINERAL RESOURCES EXPLORATION CONCENTRATION)**  
Students must choose MATH 260 or MATH 270 – fills Gen. Ed. Requirement
  - D. **(ATMOSPHERIC/OCEANIC SCIENCE CONCENTRATION)**  
Students must choose MATH 221 or MATH 260 – fills Gen. Ed. Requirement
2. A total of 9 credits may be used in Phy/Biol Sci. MATH 221 may be used in I.C.