# B.S. Geoscience Major, Earth Systems Concentration (120 Credits)

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<thead>
<tr>
<th>Name:</th>
<th>Major Declared Date:</th>
<th>Planned Grad Date:</th>
<th>Credits</th>
<th>Course</th>
<th>Semester</th>
<th>Grade</th>
<th>Rep/W*</th>
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## General Education Requirements (36 Credits)

- **WRT120**: 3
- **WRT200, or 204, or 205, or 206, or 208, or 220**: 3
- **SPK 208 or 230**: 3
- **Diverse Communities “J” Course**: 3

**Interdisciplinary “I” Course (ESS/SCB/ENV 102 or SCB 210)**: FULFILLED BELOW

## Behavior & Social Sci.

(6 Credits from Two of the Following Areas: ANT SOC PSY ECO GEO PSC)

- **WRT200, or 204, or 205, or 206, or 208, or 220**: 3
- **PET 208 or 230**: 3

## Humanities (6 Credits from Two of the Following Areas: LIT CLS HIS PHI)

- **WRT200, or 204, or 205, or 206, or 208, or 220**: 3
- **PET 208 or 230**: 3

## Arts (Art, Cinematography, Music, Photography, Theatre)

- **PET 200, or 204, or 205, or 206, or 208, or 220**: 3

**Student Electives (9 Credits)**

- **PET 200, or 204, or 205, or 206, or 208, or 220**: 3
- **PET 200, or 204, or 205, or 206, or 208, or 220**: 3

## Math (6 Credits)

- **MAT 115 — Algebra & Trigonometry or MAT 131 — Pre-calculus**: 3
- **MAT 121 — Statistics I**: 3

## Science Cognates (11 Credits)

- **BIO 110 — General Biology**: 3
- **CHE 103 — General Chemistry I**: 3
- **CRL 103 — Experimental General Chemistry I**: 1
- **Recommend CHE 104 — General Chemistry II**: 3
- **Recommend CRL 104 — Experimental General Chemistry II**: 3
- **PHY 130 — General Physics I or PHY 170 — Physics I**: 4
- **Recommend PHY 140 — General Physics II or PHY 180 — Physics II**: 3

## Core Requirements (30 Credits) — And When Offered

- **ESS 101 — Introduction to Geology — both semesters**: 3
- **ESS 204 — Historical Geology (W) — both semesters**: 3
- **ESS 201 — Field Geology (W) — both semesters**: 3
- **ESS 301 — Environmental Geochemistry — spring**: 3
- **ESS 302 — Mineralogy — fall (spring as needed)**: 3
- **ESS 331 — Paleontology (W) — spring (fall as needed)**: 3
- **ESS 343 — Geomorphology — spring (fall as needed)**: 3
- **ESS 405 — Igneous and Metamorphic Petrology — spring**: 3
- **ESS 420 — Structural Geology — spring**: 3
- **ESS 450 — Sedimentology and Stratigraphy — fall**: 3

## Additional Requirements (14 Credits)

- **ESS/SCB/ENV 102 — Humans & the Environment, or SCB 210 (I)**: 3
- **ESS 311 — Introduction to Astronomy — fall**: 3
- **ESS 330 — Introduction to Oceanography — both semesters**: 3
- **ESS 370 — Introduction to Meteorology — fall**: 3
- **ESS 347 — Seminar — fall**: 1
- **ESS 447 — Seminar — fall**: 1

## Elective Courses — Any 200 - 400 Level ESS Courses (Minimum 6 Credits); Other Electives to 120 Credits Total

- **ESS elective at 200-400 level**: 3
- **ESS elective at 200-400 level**: 3
- **Other electives to achieve 120 credits**: 17

- **3 classes above must be “W” emphasis.**
- **“I” course cannot be applied as a distributive requirement (Science, Humanities, or Behavioral & Social Science)**
### B.S. Geoscience, Earth Systems Concentration – SUGGESTED sequence

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>1</td>
<td>ESS 101 (3)</td>
<td>MAT 121 or 115 (3)</td>
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<td>MAT 115 or 121 (3)</td>
<td>WRT 204 205 206 208 or 220 (3)</td>
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<td>WRT 120 (3)</td>
<td>BIO 110 (3)</td>
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<td>Gen Ed Soc/Behav (3)</td>
<td>Gen Ed Soc/Behav (3)</td>
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<td>Gen Ed Elective (3)</td>
<td>ESS 204 or 201 Gen Ed “W” course (3)</td>
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<td>ESS 201 or 204 Gen Ed “W” (3)</td>
<td>ESS 102 or SCB 210 “I” course (3)</td>
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<td>CHE CRL 103 (4)</td>
<td>ESS 301 (3)</td>
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<td>ESS 480 (1)</td>
<td>ESS 302 (3)</td>
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<td>Gen Ed Hum (3)</td>
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<td>Gen Ed “J” course (3)</td>
<td>Elective Recommend CHE &amp; CRL 104 (3-4)</td>
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<td>ESS 330 (3)</td>
<td>ESS 331 Gen Ed “W” course (3)</td>
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<td>ESS 347 (1)</td>
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<td>ESS 370 (3)</td>
<td>Gen Ed SPK (3)</td>
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<td>PHY 130 (4) &amp; ESS 480 (1)</td>
<td>ESS 405 (3)</td>
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<td>ESS 302 (3)</td>
<td>ESS 420 (3)</td>
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<td>4</td>
<td>ESS 447 (1)</td>
<td>Elective: recommend GEO 324 (3)</td>
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<td>ESS 450 (3)</td>
<td>ESS elective (3)</td>
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<td>Gen Ed Elective (3)</td>
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<td></td>
<td>Gen Ed Elective (3)</td>
<td>Elective: Recommend PHY 140 (3-4)</td>
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<td>Elective (3)</td>
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### Approved General Education Courses

**Behavioral and Social Sciences (6 cr from 2 areas):**
- Anthropology: ANT 101, ANT 102, ANT 103
- Economics: ECO 111, ECO 112, ECO 200
- Geography: GEO 101, GEO 103, GEO 200, GEO 214
- Government: PSC 100, PSC 101, PSC 213
- Psychology: PSY 100
- Sociology: SOC 200, SOC 240

**Humanities (6 cr from 2 areas):**
- History: HIS 100, HIS 101, HIS 102, HIS 150, HIS 151, HIS 152, HIS 444
- Literature: LIT 100, LIT 165, LIT 219, LIT 220, CLS 165, CLS 260, CLS 261
- Philosophy: PHI 100, PHI 101, PHI 150, PHI 180, PHI 206, PHI 207, PHI 220, PHI 280, PHI 282, PHI 350

**Arts (3 cr):**
- Art: ARH 101, ARH 103, ARH 104, ARH 210, ARH 211, ART 106, ART 111, ART 113, ART 228, ART 231
- Dance: DAN 132, DAN 133, DAN 134, DAN 135, DAN 136, DAN 137, DAN 138, DAN 150, DAN 210
- Film: FLM 200, EGE 405, ESP 305, ESP 309, GER 405, SPA 313
- Music: MDA 240, MHL 121, MHL 125, MHL 210, MHL 312, MHL 325, MTC 110
- Theatre: THA 101, THA 103, THA 212