Group Advisement
Earth Sciences and Geology Majors

for Fall 2016
Meet with your Advisor every semester!

If you don’t know who your advisor is ...

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Your primary advisor’s name is listed in DegreeWorks in the top row and it should also appear in Banner under student information (If you have trouble meeting Dr. Williams, contact Dr. Solar or I to arrange for advisement)

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A printed list is posted outside the department office (SCI 271) on the bulletin board.

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If worst comes to worst and the name is missing or the wrong advisor appears, come to the department office (SCI 271) and we will help you.
IF14 Requirements

Don’t forget to check the status of your general education requirements.

http://intellectualfoundations.buffalostate.edu/intellectual-foundations-2014

Web page summarizes requirements

- The Degree Works (DW) degree audit system helps you keep track of the courses required to graduate
Degree Works summarizes

Three primary categories of courses:

- IF14 courses
- Major and minor courses
  - Any majors and minors electives
- All-college electives (i.e. everything else)
General Requirements

- Minimum **120 credits** to graduate
- Minimum 32 credits taken at Buffalo State
- **Upper-Division 33 credits**
- Must maintain minimum 2.0 GPA overall **and** in the major
  - Note: To enter the Masters of Science Education program you must maintain a 2.5 overall GPA and a 2.75 in your major
Our Majors

- BS – Earth Sciences
  - Earth Sciences (intended for students going into teaching)
  - Environmental Earth Science
  - Geology

- BA – Geology
The differences …

- The BA in Geology requires CHE 111 and 112 and gives you a choice of 3 upper division electives (consult your advisor)

- The BS Geology track requires GES 111, GES 131, GES 307, GES 450W and is less flexible in terms of course requirements

(see the handouts)
Normal Course Scheduling

Every Semester
GES 101 – Introductory Geology
GES 102 – Historical Geology
GES 103 – Intro. Geol. Lab
GES 131 – Introductory Astronomy
GES 241 – Meteorology
GES 223 – Environmental Earth Science
GES 410 – Undergraduate Research Seminar
Normal Course Scheduling

Every Semester
GES 101 – Introductory Geology
GES 102 – Historical Geology
GES 103 – Intro. Geol. Lab
GES 131 – Introductory Astronomy
GES 241 – Meteorology
GES 223 – Environmental Earth Science
GES 410 – Undergraduate Research Seminar

Fall ONLY Courses
* GES 111 – Oceanography
GES201 – Geosciences I
† GES 300 – Sedimentology
GES 302 – Invertebrate Paleontology
GES 303 – Mineralogy & Petrology
GES 332 – Stars and Stellar Astronomy
GES 450W – Field Geology
### Normal Course Scheduling

#### Every Semester
- GES 101 – Introductory Geology
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#### Fall ONLY Courses
- * GES 111 – Oceanography
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- GES 450W – Field Geology

#### Spring ONLY Courses
- † GES 301 – Stratigraphy
- * GES 307 – Geomorphology
- GES 408W – Structural Geology
- GES 405 – Geology of North America
- GES 452 – Hydrogeology
- GES 460 – Applied Environmental Methods
Normal Course Scheduling

Every Semester
GES 101 – Introductory Geology
GES 102 – Historical Geology
GES 103 – Intro. Geol. Lab
GES 131 – Introductory Astronomy
GES 241 – Meteorology
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GES 410 – Undergraduate Research Seminar

Spring ONLY Courses
† GES 301 – Stratigraphy
GES 307 – Geomorphology
GES 408W – Structural Geology
GES 405 – Geology of North America
GES 452 – Hydrogeology
GES 460 – Applied Environmental Methods

Courses with variable scheduling
GES 224 – Geological Hazards
GES 310 – Great Lakes Environmental Issues
GES 33x – upper-division astronomy elective
GES 350 – Environmental Geochemistry
GES 360 – Forensic Geoscience
GES 401 – Igneous & Metamorphic Petrology
GES 465 – Tectonics
ENS 300 – Environmental Science Seminar

Fall ONLY Courses
* GES 111 – Oceanography
GES201 – Geosciences I
† GES 300 – Sedimentology
GES 302 – Invertebrate Paleontology
GES 303 – Mineralogy & Petrology
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GES 450W – Field Geology
<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
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<td>GES 450W</td>
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<td>Also for Environmental Science Minors ...</td>
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<td></td>
<td>ENS 300 Environmental Case Studies (juniors/seniors only)</td>
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</tbody>
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Note:

†GES 300 and GES 301 – are not being offered. Instead take GES 306 – Sedimentology and Stratigraphy - it will count for both GES 300 and GES 301 (or either one).

BUT – you might need additional upper division credits! GES 300 and GES 301 are each 3 credits, GES 306 is 4 credits.
GES 201 is the equivalent of GES 101 + GES 103.

If it isn’t showing up appropriately in DegreeWorks for you, come to the department office so I can fix it.
Other classes of interest in the Fall

BIO 315W – Ecology (pre. BIO 212, 213, CHE 111, 112)
BIO 430W – Stream Ecology (pre. BIO 212 & 213)

GEG 325 – Maps and Mapmaking Using GIS
GEG 307 – Conservation and Environmental Management
GEG 385 – Paleoclimatology
GEG 421 – Watershed Analysis
GEG 425 – Fundamentals of GIS (pre. GEG 325)

SOC 353 – Environment and Society
NEW!

- You can now do class searches in Banner!

- Note – for some reason ESSE is listed as “Geosciences”
Summer Course Offerings

-GES 101 – Introductory Geology
-GES 131 – Introductory Astronomy
-GES 232 – The Solar System
We strongly encourage students to consider taking on a minor. The following are some of the minors that can serve as a strong compliment to your degree:

- Astronomy (in Earth Sciences and Sci. Ed.)
- Biology (in Biology)
- Chemistry (in Chemistry)
- Environment and Society (in Sociology)
- Environmental Science (in Earth Sciences and Sci. Ed.)
- Geographic Information Systems (in Geography)

If you plan on taking a minor, please discuss your plans with your academic advisor.
Minors

A minimum cumulative GPA of 2.0 is required for admission to a minor program.

At least 3 of the courses in each minor must be completed at the college.

A minor may include no more than 9 total hours that overlap with the student’s major disciplinary requirements.

If you plan on taking a minor, please discuss your plans with your academic advisor.
Minors

Students interested in selecting a minor program should contact the coordinating department as soon as possible and complete a Change of Major/Minor form.

The coordinating department provides advisement on individual minors.
If you are interested in becoming a Science Teacher

- You must complete a BA or BS in Biology, Chemistry, Physics or Earth Science with a minimum of 30 credits in the discipline.
- As an undergraduate take
  - EXE 100 (it = EXE 500 and meets the diversity IF)
  - SPF 303 (it = SPF 503)
- You should also join the NSTA club
- See Michele Parente in SCI 370 for more information
If you are interested in going to Graduate School in Geology/Earth Science

Most graduate school programs expect you to have taken additional core science and math courses – need to check a program’s requirements early!

- One year of Chemistry (CHE 111 and CHE 112)
  - Environmental programs often expect you to have taken organic chemistry as well.
- One year of Physics (PHY 111 and PHY 112)
- One year of Calculus (MAT 126 AND MAT 127) and/or Statistics (MAT 311)
- Many programs expect you to have some field experience such as a Geology Field Camp (though GES 450W and research experience might substitute)
Program Review

- We will have two visitors on April 11 and 12
- Dr. David Steer, Associate Dean, Natural Sciences and Professor, Department of Geosciences from the University of Akron and
- Dr. David Mogk, Professor of Geology from Montana State University
- They will be here to evaluation our degree programs and offer advice on changing/improving them
- They need to meet with our majors to talk with you about your experiences and goals. Who can attend a lunch on …
- Monday April 11 at noon? Tuesday April 12 Bengal Pause?
Questions?

Don’t forget to sign in
AND

Fill out and return the ESSE Department Advisement Survey
Use the survey to indicate which “variable scheduling” classes you are interested in!