### Geography Major – GEOLOGY EMPHASIS

1. **11/12 units CORE**
   - GEOGRPY 100 Introduction to Geography 1
   - GEOLOGY 100 Principles of Geology OR 5
   - GEOLOGY 101 Elements of Geology OR 4
   - GEOLOGY 210 Physical Geography 5
   - GEOGRPY 230 Human Geography 3
   - GEOGRPY 270 Introduction to Mapping 3

2. **3 units GIS**
   - GEOGRPY 370 Geographic Information Systems 3

3. **14 units Geology CORE**
   - GEOLOGY 204 Earth and Life History 3
   - GEOLOGY 310 Rocks and Minerals 4
   - GEOLOGY 317 Paleontology 3
   - GEOLOGY 318 Geologic Structures and Field Methods 4

4. **3 units Geological electives**
   - GEOLOGY 203 Volcanoes 3
   - GEOLOGY 300 Principles of Oceanography 3
   - GEOLOGY 301 Environmental Geology 3
   - GEOLOGY 307 Dinosaurs 3
   - GEOLOGY 319 Stratigraphy and Sedimentation 3
   - GEOLOGY 352 Geohazards 3
   - GEOLOGY 498 Independent Study in Geology 1-3
   - GEOGRPY 300 Soil Science 3
   - GEOGRPY 310 Geomorphology 3

5. **3 units Advanced disciplinary course**
   - GEOLOGY 491 Travel Study 1-3
   - GEOLOGY 492 Field Studies in Geology 1-3
   - GEOLOGY 496 Special Studies 1-3
   - GEOGRPY 440 Applied GIS: Business 3
   - GEOGRPY 450 Advanced Methods Physical Geography 4
   - GEOGRPY 455 Advanced Topics in Human Geography 3
   - GEOGRPY 452 Cultural Ecology 3
   - GEOGRPY 460 Applied GIS in Physical Geography 3
   - GEOGRPY 470 Applied Environmental GIS 3
   - GEOGRPY 485 Internship in Geography 3-12
   - GEOGRPY 492 Field Course 4-6
   - GEOGRPY 499 Geography Thesis

6. **1 unit capstone course**
   - GEOGRPY 400 Capstone in Geography 1

7. **3 units from writing course**
   - ENGLISH 370 Advanced Composition 3
   - ENGLISH 372 Technical & Scientific Writing 3
Other Considerations for the Geology Emphasis:

The Minor:

The College of Letters and Sciences requires that all students complete an approved minor. Approved minors consist of 21-24 units from courses that are not duplicated in the major. While there are over 70 minors to choose from, Geology Emphasis students are strongly encouraged to select a minor that complements the major while enhancing their prospects for future employment and/or acceptance into graduate programs. The most common minors for students in the Geology Emphasis are: Environmental Studies, Physical Science, and Biology.

GIS Certification:

The Department of Geography and Geology offers two different GIS (Geographic Information Systems) certificates – Economic Emphasis and Environmental Emphasis. Both require GEOGRPY 270 and GEOGRPY 370 (6 units total), plus 6 additional units from advanced GIS courses in either of the two emphases, for a total of 12 units total needed to receive the certificate. The GIS certificate requirements are not unique, i.e. the same courses may count for both the certificate and the major or certain minors. Note that Geology Emphasis students are already halfway towards a GIS certificate as both 270 and 370 are major requirements! Many students even find the time and room in their schedules to complete both certificates.

Undergraduate Research:

While not an explicit requirement, an experience in undergraduate research is strongly advised for all Geology Emphasis students, especially for those intending to go to graduate school. There are numerous field and laboratory opportunities for the eager student to assist Department faculty members within established research programs. Research often begins with volunteer effort or as part of GEOLGY 498. Funding support may eventually come from a variety of sources, including the UWW Undergraduate Research Program, Department of Geography and Geology, Wisconsin Space Grant Consortium and individual faculty members’ grants. Travel to professional conferences to present the results of the research is both expected and supported.

Field/ Travel Study:

It has been said that “The best geologists are the ones that have seen the most rocks.” Students in the Geology Emphasis should make all attempts to learn/do their science outside of the regular classroom, even though this is also not an explicit requirement. Opportunities vary from semester to semester and include everything from local day trips to longer overseas adventures. Courses such as GEOLGY 492 and GEOGRPY 492 allow the student to accumulate units for the major at the same time. Qualified students may receive scholarship support for their travel. Research students often travel as part of their projects.