

**901. Problems in Cultural Geography**  
Fall, Winter, Spring. Variable credit.  
May reenroll for a maximum of 6 credits. Approval of department.  
Special research problems.

**902. Problems in Physical Geography**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 6 credits.  
Supervised research in specific topics of physical geography.

**906. Problems in Economic Geography**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 6 credits. Approval of department.  
Special research problems.

**908. Problems in Political Geography**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 6 credits. Approval of department, GEO 416.  
Special research problems.

**910. Problems in Historical Geography**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 6 credits. Approval of department.  
Special research problems in historical geography.

**912. Independent Study in Regional Geography**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 15 credits. Approval of department.  
Individual studies in regional geography.

**918. Problems in Geography**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 9 credits. Approval of department.  
Research on specific geographical problems.

**934. Problems in Population**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 9 credits. Approval of department.  
Special research problems.

**970. Problems in Medical Geography**  
Fall, Winter, Spring. Variable credit. May reenroll for a maximum of 6 credits. Approval of department.  
Selected research topics in medical geography.

**999. Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

## **GEOLOGY**

**GLG**

### **College of Natural Science**

**200. The Geology of Man's Environment**  
Fall, Winter, Spring, Summer. 3(3-0)  
Not open to Geology majors. Credit will be given in only one of the following: GLG 200, GLG 201, GLG 306.

Man and his geologic environment: earthquakes, volcanoes, landslides, subsidence, flooding, coastal erosion, hydrology and human use, waste disposal, geologic aspects of environmental health, resources and energy, environmental law.

**200L. Laboratory–Geology of Man's Environment**  
Fall, Winter, Spring, Summer. 1(0-3)  
GLG 200 or concurrently.

Laboratory study of geologic processes associated with environmental hazards. Emphasis placed on land-use planning, applying geologic criteria to evaluate land potentials.

**201. Earth Processes**  
Fall, Winter, Spring, 4(4-2) Credit will be given for only one of the following: GLG 200, GLG 201, GLG 306.

Physical processes concerning evolution of Earth and its environments. Conservation and interaction of energy and matter through time. Laboratory stresses interpretation of process through studies of geologic data.

**202. Evolution of the Earth**  
Fall, Winter, Spring. 4(4-2) GLG 200; or GLG 201; or GLG 306.

Integration of physical, chemical and biological processes from which man's present environment has evolved; problems and controversies in the development of ideas of geologic and organic evolution.

**205. Oceanology–The Marine Environment and Man**  
Fall. 3(3-0)

Physical oceanography, including origin, hydrologic, chemical, geological properties; and environmental quality of the oceans. Man-sea interactions are emphasized including resource utilization and pollution.

**221. Minerals, Rocks and Fossils**  
Spring 3(2-3) Not open to majors.

Description, occurrence and identification of minerals, rocks, fossils, and additional features of especial significance to general science teachers and other earth science interest groups.

**271. Geophysics and the Earth**  
Spring. 3(3-0) GLG 200 or GLG 201 or GLG 306 or approval of department.

Basic concepts used in geophysics, including description of the Earth and its interior, methods of exploring for mineral and energy resources. Contributions of physical methods to understanding our terrestrial environment.

**282. Energy Resources of the Earth**  
Winter. 3(3-0)

World energy resources of petroleum, coal, and atomic fuel. Social, political, economic and environmental problems of fuels.

**300. Solar System Geology**  
Winter. 4(4-0) AST 119 or AST 217 or AST 229; GLG 200 or GLG 201.

The origin, relationships, make-up and features of the bodies in the solar system emphasizing recent space exploration results and developing theories.

**302. Vertebrate Life of the Past**  
Fall. 3(3-0) One course in a physical or biological science or Juniors. Interdepartmental with the Department of Zoology.  
Fossil vertebrates from fish to man.

**303. Introductory Geomorphology**  
Fall. 4(3-4) GLG 200 or GLG 201 or GLG 306.

Descriptive course treating the geological origin and development of important surface features including special consideration of Pleistocene landforms of the Great Lakes region. Field trips required.

**304. Geology of Michigan**  
Fall. 3(3-0) GLG 200 or GLG 201 and/or GLG 202; or approval of department.

A historical accounting of the physical, historical and economic geology of Michigan and its environs; a course designed for students seeking an overall picture of the rather unique Michigan geological environment.

**306. Engineering Geology**  
Fall, Spring. 3(3-2) Credit will be given for only one of the following: GLG 200, GLG 201, GLG 306. Sophomore Engineering students.

Fundamental principles of geology as applied to civil engineering practice. Minerals and rocks, aerial photographs, topographic and areal geologic maps and geologic cross sections studied in laboratory. Source of geologic literature and maps.

**307. Geology Central Appalachians**  
Winter. 1(0-2) GLG 200, or GLG 201, or GLG 202, or concurrently.

General geology of the Central Appalachians. A preparatory course for GLG 308. Field excursions—Central Appalachians during spring vacation.

**308. Field Excursion—Central Appalachians**  
Spring. 2 or 3 credits. GLG 307.

Training in stratigraphic, sedimentological, paleontologic, and structural principles as applied to field methods.

**321. Mineralogy**  
Fall. 5(4-4) One term of chemistry.

Introduction to crystal systems and forms exhibited by minerals, followed by study of composition, occurrence, classification, and identification of nonmetallic minerals.

**322. Mineralogy**  
Winter. 4(3-4) GLG 321.

Economic and chemical importance of minerals; mineralogy of non-silicates; practical crystallography; geochemistry of minerals.

**335. Fossil Plants, Their History and Paleocology**  
Spring. 3(3-0) One course in geology or botany or biology or approval of department. Interdepartmental with the Department of Botany and Plant Pathology.

History of plants through geologic time; their form and evolution; how and where found, identified and reconstructed; their use in determining ancient geographic patterns, paleoenvironments, paleoclimates and community structure. Field trip.

**337. The Fossil Record of Organic Evolution**  
Spring. 3(3-0) One course in a natural science; Juniors. Interdepartmental with the Department of Zoology.

The direct evidence for organic evolution in the fossil record. Evolution of life from prebiological systems to man. Impact of fossil discoveries on human thought.

**344. Field Geology—Summer Camp**  
Summer. 9 credits. GLG 202, GLG 363. Trigonometry; GLG 446, GLG 437, GLG 451 recommended.

Methods and techniques of geological surveying and mapping. Field interpretation of geological phenomena in igneous, metamorphic and sedimentary rocks in northern Michigan and Wisconsin.

**Descriptions – Geology  
of  
Courses**

**A. Introduction to Field Techniques**  
3 credits.

Introduction to field techniques with stress in those that apply to sedimentary rocks. Stratigraphic correlation.

**B. Methods of Geological Mapping**  
4 credits.

Plane table surveys, aerial photo and reconnaissance mapping. Examination and interpretation of structural and textural relationships in igneous and metamorphic rocks.

**C. Geologic Interpretation of Selected Areas**  
2 credits.

Independent mapping and interpretation.

**363. Lithology**  
Winter. 4(3-4) GLG 321.

Processes that form igneous, metamorphic and igneous rocks, origin, distribution, variation and occurrence of rock. Study of rock properties in the field, in laboratory, and with the microscope.

**392. Sedimentology**  
(492.) Spring. 3(2-3) GLG 363.

Grain and aggregate properties of sediments; relationships of these properties to processes in the environment of deposition and to the predepositional and post-depositional history.

**400H. Honors Work**  
Fall, Winter, Spring. Variable credit.  
Approval of department.

**401. Environmental Geology**  
Spring of odd-numbered years. 3(3-0)  
GLG 200, or GLG 201, or GLG 306, MTH 113, or  
approval of department.

Quantitative solution of geological problems applied to environmental planning and management, including surface and ground water waste disposal, urban geology, and methods for prediction of geologic hazards and resources.

**411. Hydrogeology**  
Winter. 3(3-2) One term of geology and  
trigonometry.

Principles of the source, occurrence, and movement of ground water. Surface and subsurface investigations of ground water and elementary ground water hydrology.

**413. Glacial Geology**  
Spring. 4(3-4) GLG 201.

Geological aspects of glaciers and glaciation. Theories of ice ages through geologic time. Origin and development of glacial geomorphic features. Character and chronology of the Pleistocene. Laboratory techniques, with field trips to observe glacial materials and features of Michigan.

**426. Optical and X-ray Mineralogy**  
Fall. 4(3-4) GLG 321, PHY 239 or PHY  
289.

Theory, principle and application of the polarizing microscope and X-ray diffractometer in mineral analysis.

**430. Vertebrate Paleontology**  
Winter. 4(3-3) ZOL 428 or approval of  
department. Interdepartmental with the De-  
partment of Zoology.

Fossil vertebrates with emphasis on the evolution of major groups. Laboratories on modern techniques and on the identification and interpretation of fossils.

**IDC. Introduction to Meteorology**  
For course description, see Interdisci-  
plinary Courses.

**IDC. Introductory Meteorology  
Laboratory**  
For course description, see Interdisci-  
plinary Courses.

**437. Invertebrate Paleontology**  
Fall. 4(3-4) GLG 202 or ZOL 303 or  
approval of department. Interdepartmental  
with the Department of Zoology.

Systematics and evolution of marine invertebrates; uses of fossils in correlation and delineation of geologic time; structure and morphology of fossils as related to evolutionary development.

**438. Paleocology**  
Spring. 4(3-4) GLG 202 or ZOL 389 or  
approval of department. Interdepartmental  
with the Department of Zoology.

Distribution and abundance of marine fossils; response of skeletal morphology to environmental conditions; uses of fossils in reconstructing ancient climates and depositional environments.

**445. Field Studies**  
Fall, Winter, Spring, Summer. Variable  
credit. May reenroll for a maximum of 12 credits.  
Approval of department.

Advanced geologic or geophysical field studies.

**446. Principles of Stratigraphy**  
Fall. 3(3-0) GLG 437, GLG 392 or ap-  
proval of department.

Covers principles of stratigraphy and application and exemplification of these principles to known geologic occurrences.

**451. Structural Geology**  
Spring. 4(2-6) GLG 202.

Description, classification, and origin of secondary structures such as folds, faults, joints, cleavages, foliations and lineations. Three-dimensional visualization stressed in economic laboratory problems involving descriptive geometry, stereographic projections, areal, and structural geologic maps.

**462. Petrology**  
Winter. 4(3-4) GLG 363.

Introduction to the chemical and physical processes that are responsible for the origin and evolution of igneous and metamorphic rocks. Laboratory studies of rock suites that illustrate basic processes in petrology.

**474. Exploration Geophysics**  
Winter. 4(3-2) GLG 201 or GLG 306;  
MTH 112; PHY 239 or PHY 289.

Techniques used in geophysical exploration, with application in petroleum prospecting, minerals exploration, and engineering. Includes gravity, magnetic, seismic, electrical and other methods, and well logging. Interpretation of geophysical data.

**475. Solid Earth Geophysics**  
Fall. 3(3-0) MTH 112; PHY 239 or PHY  
289, one term of geology.

Geophysics, including Earth's composition and structure, its dynamic character, radioactivity and age determinations, seismicity and seismology, gravity and magnetic fields, heat flow, physical properties of earth materials.

**479. Geotectonics**  
Winter of even-numbered years. 3(3-0)  
GLG 451 or approval of department.

Aspects of global dynamics and geotectonics. Includes the origin and distribution of major structural features, geological and geophysical evidence for crustal movements, continental drift, behavior of earth materials.

**482A. Mineral Resources**  
(482.) Spring of odd-numbered years.  
4(4-0) GLG 321, GLG 451.

Genesis, distribution, and classification of ore deposits. Emphasis on metallic ores. Global patterns and tectonic relationships.

**482B. Mineral Resources Evaluation**  
Spring of even-numbered years. 3(3-0)  
GLG 321, GLG 451 and approval of department.

Emphasis on practical applications of geoscience to mineral resources and the extractive industries. Aspects of exploration and development of reserves including evaluation, grade estimation, drilling, recovery, and beneficiation.

**483. Petroleum Geology**  
Fall. 4(3-2) Approval of department.

Fundamental principles of the origin, migration and accumulation of petroleum. Exploration techniques to include well drilling, electric and radioactivity well logging, surface and subsurface exploration methods, seismic surveys, land leasing and oil field development. Laboratory study of well log plotting and subsurface mapping technique.

**484. Applied Petroleum Geology**  
Winter. 4(1-6) GLG 483.

Microscopic examination of well cuttings, practice in the use of electric and radioactivity logs, exploration for petroleum in selected areas by subsurface mapping techniques, economics of petroleum exploration. Field trips.

**493. Carbonate Sedimentology**  
Winter. 3(2-3) GLG 392.

Genesis of carbonate sediments including discussion of carbonate-secreting organisms, effects of environment on mineralogy, depositional environments and diagenesis.

**495. Geochemistry**  
Winter. 3(3-0) GLG 201, CEM 152 or  
approval of department.

Processes affecting the distributions of elements in rocks, soils, waters, the atmosphere, interior of the earth and in meteorites. Origin of the elements. Evolution of the mantle, crust, atmosphere and oceans.

**800. Special Problems**  
Fall, Winter, Spring, Summer. Variable  
credit. Approval of department.

Special problems in hydrogeology, geomorphology and glacial geology, mineralogy and crystallography, petrology, paleontology, structural geology, and petrofabrics, stratigraphy, aerogeology, geophysics, economic geology, petroleum geology, sedimentation, and geochemistry.

**803. World Regional Geology**  
Spring of even-numbered years. 3(3-0)  
One course each in structural geology, sedi-  
mentation.

World regional geology emphasizing mountain building, basin structure and associated sediments, continental drift and plate tectonics.

**810. Seminar**  
Fall, Winter, Spring. 1 to 3 credits. May  
reenroll for a maximum of 12 credits.  
Seminar relating to current research in geology.

**825. Clay Mineralogy**

Winter. 4(3-4) CSS 840, CSS 850 or approval of department. Interdepartmental with the Department of Crop and Soil Sciences.

Structures and properties of clays; their origins, occurrence, and utilization. Methods of studying clays including x-ray diffraction, differential thermal analysis, infrared absorption and other chemical and physical techniques.

**830. Paleobotany**

Fall. 4(3-4) Approval of department. Interdepartmental with and administered by the Department of Botany and Plant Pathology.

Survey of fossil plants: their preservation, occurrence, geology, paleogeography, paleoecology, evolutionary history, classification and representative types. One weekend field trip to fossil plant locality.

**831. Palynology**

Spring of even-numbered years. 4(3-4) Approval of department. Interdepartmental with the Department of Botany and Plant Pathology.

An introduction to the principles and techniques of spore and pollen analysis, both fossil and recent, and utilization of plant micro-fossils for stratigraphic determinations and paleoecologic interpretations of most sedimentary accumulations and rocks. Includes certain algae, protozoans, similar organisms of uncertain affinity and dissociated fragments of larger organisms.

**833. Advanced Invertebrate Paleontology**

**B. Quantitative Paleontology**

Fall. 3(2-4) GLG 437 or GLG 438. Interdepartmental with the Department of Zoology.

Application of mathematical tools to paleontological problems, including statistical applications and numerical taxonomy; computer applications.

**C. Paleocology**

Fall. 3(2-4) GLG 437 or GLG 438. Interdepartmental with the Department of Zoology.

Advanced problems in population, community, and province level paleocology, primarily of marine invertebrates, including study of taxonomy, diversity, and adaptation.

**D. Developmental Paleontology**

Fall. 3(2-4) GLG 437 or GLG 438, ZOL 317 or approval of department. Interdepartmental with the Department of Zoology.

Application of the principles of development to the ontogeny and phylogeny of fossil invertebrates as known from skeletal morphology.

**E. Evolutionary Paleontology**

Fall. 3(2-4) GLG 437 or GLG 438. Interdepartmental with the Department of Zoology.

Aspects of evolutionary biology that can be studied in the fossil record, with emphasis on marine invertebrates.

**834. Advanced Vertebrate Paleontology**

Winter of even-numbered years. 3(3-0) GLG 430 or approval of department. Interdepartmental with the Department of Zoology.

Recent advances and controversial issues in vertebrate paleontology including origin, classification, phylogeny, and stratigraphic relationships of fossil vertebrates.

**838. Advanced Paleobotany**

Winter. 3(2-4) Approval of department. Interdepartmental with and administered by the Department of Botany and Plant Pathology.

Morphology, anatomy, phylogenetic relationship and classification of fossil plants. Microscopic analysis of tissues and organs prepared by thin section, transfers, peels, polished and etched surfaces, and macerations.

**843. Paleozoic Stratigraphy**

Winter of even-numbered years. 4(5-0) GLG 446, GLG 392.

Classification, distribution, paleogeography, paleontology, interrelation, and structural setting of stratigraphic units within the Paleozoic systems. Laboratory work involves construction of correlation charts, structure and restored sections, paleogeologic, paleogeographic, and lithofacies maps, and study of certain key fossils.

**844. Mesozoic and Cenozoic Stratigraphy**

Winter of odd-numbered years. 3(3-0) GLG 446.

Stratigraphy and paleontology with emphasis on tectonics and sedimentation.

**852. Structure of Ore Bodies**

Winter of even-numbered years. 3(2-4) GLG 451, MTH 214.

Mathematics and physics applied to problems in structural geology.

**861. Evolution of the Earth's Crust and Mantle**

Fall. 3(3-0) GLG 462.

The composition, mineralogy and petrology of the Earth's mantle and crust. Plate tectonics and its relationship to earlier models of geosynclines, orogenic cycles, continental drift, etc.

**862. Petrology-Igneous**

Spring of even-numbered years. 2 to 4 credits. May reenroll for a maximum of 8 credits. GLG 462. Must enroll for laboratory with initial registration.

Physical and chemical principles involved in the origin of igneous rocks. Application of experimental techniques in petrology.

**863. Petrology-Metamorphic**

Spring of odd-numbered years. 2 to 4 credits. May reenroll for a maximum of 8 credits. GLG 462. Must enroll for laboratory with initial registration.

Origin and classification of metamorphic rocks. Study includes thin section investigation of the metamorphic textures and mineral associations and the physical-chemical principles involved in their development.

**870. Topics in Geophysics**

Spring. 1 to 3 credits. May reenroll for a maximum of 12 credits. Approval of department.

Topics and problems in geophysics, such as tectonophysics, terrestrial heat flow, processing and analysis of geophysical data, geomagnetism, paleomagnetism, high-pressure geophysics.

**872. Exploratory Seismology**

Fall of even-numbered years. 4(2-4) GLG 474.

Theory and technique of field seismic exploration methods. An associated geophysical survey will be conducted and a report prepared.

**873. Seismology I**

Winter of odd-numbered years. 3(3-0) MTH 215 or concurrently; PHY 289 or concurrently.

Theory and application of seismic wave propagation in earth materials.

**874. Seismology II**

Spring of odd-numbered years. 3(3-0) GLG 873 or approval of department. Continuation of GLG 873.

**875. Advanced Geophysical Exploration I**

Fall of odd-numbered years. 4(3-2) GLG 474.

Theory and technique of gravity and magnetic methods, and their use in geophysical exploration. Associated practical exercises and laboratory work.

**876. Advanced Geophysical Exploration II**

Winter of even-numbered years. 4(3-2) GLG 474, MTH 214.

Methods and techniques in geophysical exploration, including electrical, electromagnetic, radioactivity, magnetotelluric, and the physical principles of well logging. Associated practical exercises.

**879. Rock Magnetism and Paleomagnetism**

Spring of even-numbered years. 3(3-0) GLG 321, GLG 475, one year mathematics, one year physics; or engineering or physics majors.

Geomagnetism, and application to earth science. Character and history of the Earth's magnetic field, physics of remanent magnetism, magnetic properties of minerals and rocks, paleomagnetism, experimental results and procedures.

**884. Regional Petroleum Geology**

Spring of odd-numbered years. 3(3-0) Approval of department.

Regional study of tectonics, stratigraphy and sedimentation in the U.S. and their relationship to petroleum occurrences in sedimentary basins. Analysis of petroleum distribution with emphasis on creative thinking in petroleum exploration. Practice in the analysis of petroleum possibilities in selected foreign areas.

**891. Advanced Sedimentology**

**B. Sandstone Petrology**

(864.) Spring. 3(2-4) GLG 392.

Origin, deposition and diagenesis of sandstones. Study includes thin section, X-ray, and SEM analysis of sediments.

**895. Topics in Geochemistry**

**A. Thermodynamics in Geology**

Fall of odd-numbered years. 1 to 3 credits. May reenroll for a maximum of 12 credits. GLG 462, GLG 495.

Interpretation and prediction of natural mineral assemblages from thermochemical studies. High pressure and high temperature techniques in petrology. Phase equilibria studies and diffusion phenomena in natural systems.

**B. Aqueous Geochemistry**

Winter of even-numbered years. 1 to 3 credits. May reenroll for a maximum of 12 credits. GLG 462, GLG 495.

Ideal and non-ideal solutions, ion activities in natural waters, carbonate sedimentation, evaporite deposits, colloids, chemical weathering and diagenesis. Importance of organic species in natural waters and their effect in metal complexing. Redox reactions.

**C. Analytical Geochemistry**

Fall of even-numbered years. 1 to 3 credits. May reenroll for a maximum of 12 credits. GLG 462, GLG 495.

Instrumental techniques for the analysis of geological materials. Topics on application of X-ray diffraction, X-ray fluorescence, neutron activation analysis, and atomic absorption spectrometry. Recently developed techniques in geochemistry will be discussed.

**Descriptions – Geology  
of  
Courses**

**D. Geochemical Cycles**

Spring of even-numbered years, 1 to 3 credits. May reenroll for a maximum of 12 credits. GLG 462, GLG 495.

Examination of the natural circulation of the elements and man's impact on these cycles.

**897. Isotope Geochemistry**

(892.) Winter of odd-numbered years. 3(3-0) GLG 495 or approval of department.

The abundances of stable and radiogenic nuclides and their variations in nature. Applications to geochronology and petrogenesis. Principles and application of neutron activation analysis to geological problems.

**899. Research**

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**900. Special Problems**

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

Special problems in hydrogeology, geomorphology and glacial geology, mineralogy and crystallography, petrology, paleontology, structural geology and petrofabrics, stratigraphy, aerogeology, geophysics, economic geology, petroleum geology, sedimentation, and geochemistry.

**999. Research**

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**Earth Science**

**E S**

**407. Earth Science for Teachers**

Fall. 3(3-0) or 4(3-3)

Fundamentals of climatology and its relationship to weathering in rocks; agents of erosion, transportation, and deposition; study of the common minerals; the three classes of rocks, and igneous, sedimentary and metamorphic processes; geomorphic features including glaciers, volcanoes, oceans, lakes, deserts, caves and others. Laboratory includes identification of minerals, rocks; study of topographic maps; and field trips to points of geologic interest.

**445. Field Studies**

Fall, Winter, Spring, Summer. 1 to 9 credits. May reenroll for a maximum of 15 credits. Approval of department.

Experience and techniques in field investigation of the near surface layers of the earth.

**446. Laboratory Investigations**

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. E S 445 or concurrently.

Independent laboratory investigation of materials and phenomena obtained from field studies.

**800. Problems in Earth Science**

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Approval of department.

Independent study in topics related to earth science education.

**GERMAN AND RUSSIAN**

**College of Arts and Letters**

Students who have had high school work in the foreign language in which they wish to continue their studies must take a placement examination in that language. Placement in the appropriate course is determined by the results of this examination. University credit is not given for courses waived by performance on the placement examination.

**German and Russian Courses G R**

**303. Folklore**

Spring. 3(3-0)

Folk heritage of peoples as revealed in their legends, superstitions, ballads, folksongs, hero tales, sayings, customs, and beliefs. Historical development of traditional lore as a reflection of social attitudes and the source for national mythologies.

**417. Scandinavian Contributions to Literary Tradition**

Fall. 3(3-0) Approval of department. Interdepartmental with the departments of English and Romance and Classical Languages.

Development and influence of the ideas, forms and motifs of the Scandinavian literatures in the literatures of the world.

**418. Scandinavian Contributions to Literary Tradition**

Winter. 3(3-0) Approval of department. Interdepartmental with the departments of English and Romance and Classical Languages.

Continuation of G R 417.

**498. Topics in Comparative Literature**

Fall, Winter, Spring. 3(3-0) or 4(4-0) May reenroll for a maximum of 12 credits if different topics are offered. Interdepartmental with the departments of English and Romance and Classical Languages and administered by the Department of Romance and Classical Languages.

Varying topics on relationships among writers, themes, genres, movements and periods in different national literatures, and between literature and other arts.

**825. Comparative Literature: Studies in Theme and Idea**

Fall. 3(3-0) May reenroll for a maximum of 9 credits. Interdepartmental with the departments of Romance and Classical Languages and English and administered by the Department of Romance and Classical Languages.

Myths, archetypes, "Topoi," significant ideas and intellectual currents in different periods and cultural traditions.

**856. Comparative Literature: Literature and Other Disciplines**

Winter. 3(3-0) May reenroll for a maximum of 9 credits. Interdepartmental with the departments of Romance and Classical Languages and English and administered by the Department of Romance and Classical Languages.

Relations between literature and the sciences and other arts; social, historical, psychological, philosophical bases of literary study.

**878. Comparative Literature: Methods in the Study of Comparative Literature**

Fall. 3(3-0) Interdepartmental with the departments of English and Romance and Classical Languages and administered by the Department of English.

Rationale and techniques of study in comparative literature.

**902. Comparative Literature: Studies in Form and Genre**

Winter, Spring. 3(3-0) Interdepartmental with the departments of English and Romance and Classical Languages and administered by the Department of English.

Development and interrelationships of individual and collective forms and genres of literature of the Western world, including the drama, tragedy, the novel, the short story, the theory and forms of poetry, popular literature, and the tale.

**903. Comparative Literature: Studies in Periodization**

Fall, Winter, Spring. 3(3-0) Interdepartmental with the departments of English and Romance and Classical Languages and administered by the Department of English.

Analyses of the manner in which various genres, conventions and continuing traditions of literature interact with the creative and critical climates of particular periods and movements, such as classicism, the Middle Ages, the baroque, or romanticism, in qualifying or modifying characteristic literary works.

**987. Seminar: Special Topics in Comparative Literature**

Spring. 3(3-0) Advanced graduates. Interdepartmental with the departments of Romance and Classical Languages and English and administered by the Department of Romance and Classical Languages.

**German**

**GRM**

**101. Elementary German**

Fall, Winter, Spring, Summer. 5(5-0)

German language, civilization, and culture. Development of language skills in contemporary German. Independent practice in the language laboratory.

**102. Elementary German**

Fall, Winter, Spring, Summer. 5(5-0)

GRM 101.  
Continuation of GRM 101.

**103. Elementary German**

Fall, Winter, Spring, Summer. 5(5-0)

GRM 102.  
Continuation of GRM 102.

**105. Intensive Elementary German**

Winter, Spring. 10(10-0) GRM 101 with 3.0 or better or approval of department. May not receive credit for both GRM 105 and GRM 102, GRM 103.

Combination of GRM 102, GRM 103 in one term.

**111. German for Travelers**

Spring. 2(3-0) Not applicable to major or minor requirements.

Essential German for travelers: basic grammar, vocabulary and useful phrases. Introduction to German culture and life through lectures, audio-visual aids and reading.