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. *Doctoral Dissertation 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.

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.

304. *Geology of Michigan*

Fall. 3(3-0) GLG 200 or GLG 201 and/or GLG 202; or approval or 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 Apalachians*

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.

Basics of crystallometry, crystallography, and crystal chemistry. The classification, occurrence, composition and identification of minerals. Mineral genesis.

322. *Optical Mineralogy*

Winter. 4(3-4) GLG 321.

Continuation of GLG 321 with emphasis on the theory, principles and mineralogical applications of the polarizing microscope. Identification, textural relationships and determination of composition of the non-opaque rock-forming minerals in thin-section.

323. *Introduction to Optical Mineralogy*

Winter. 1(0-3) GLG 321.

Basic principles underlying the use of the polarizing microscope. Recognition and understanding fundamental optical properties. Identification of minerals and texture in thin sections of rocks.

335. *Fossil Plants, Their History and Paleoecology*

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.

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 intepretation of structrual and textural relationships in igneous and metamorphic rocks.

C. Geologic Interpretation of Selected Areas

2 credits.

Independent mapping and interpretation.

351. *Structural Geology*

(451.) Fall. 4(2-6) GLG 202; MTH 111.

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.

363. *Lithology*

Spring. 4(3-4) GLG 321.

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

375. *Introduction to Geophysics*

Winter. 3(3-0) GLG 201; MTH 111; PHY 239 or PHY 289.

Earth's interior, lithospheric tectonics, and geophysical exploration including: refraction seismology, gravity, magnetism, earth's internal structure, global seismicity, plate tectonics, structure of plate margins, and planetary geology.

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. 3.00 grade-point average or approval of chairperson; written proposal approved by faculty sponsor and chairperson.

403. Fluvial Geomorphology

Fall. 4(3-4) Junior majors in GLG, C E, and CSS; one course in physical geology and junior standing in geology, civil engineering or soil science.

Quantitative analyses of the fluvial processes associated with the development of drainage basin morphology, with emphasis on stream bed erosion and sediment transport. Field trips are required.

411. Hydrogeology

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

Principles of the sources, 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 polarizating microscope and X-ray diffractometer in mineral analysis.

430. Vertebrate Paleontology

Winter. 4(3-3) ZOL 428 or approval of department. Interdepartmental with the Department of Zoology.

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

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. Paleoecology

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

Winter. 3(3-0) GLG 437, GLG 392 or approval of department.

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

462. Petrology

Winter. 4(3-4) GLG 363, GLG 426.

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

Fall. 4(3-2) GLG 201 or GLG 306; GLG 375; MTH 214; 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

Winter. 3(3-0) GLG 201 or GLG 306; GLG 375; MTH 215; PHY 289; MTH 310 recommended.

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.

478. Exploratory Seismology

(872.) Spring of odd-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.

479. Tectonophysics

Spring. 3(3-0) GLG 351; GLG 474 or GLG 475.

Tectonics of crustal plates emphasizing seafloor spreading and continental drift. Tectonics of plate margins, plate kinematics, observational seismology, inter- and intra-plate stresses, and paleo-continental reconstructions.

482A. Mineral Resources

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

Fall. 3(2-3) GLG 322; GLG 392.

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

495. Geochemistry

Fall. 3(3-0) GLG 201, CEM 152 or approval of department.

Origin of the elements. Geochemical evolution of universe, solar system, earth. Factors affecting the distribution of elements in earth including the applications of thermodynamics and crystal field theory. Isotope geology.

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, structrual 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, sedimentation.

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. Paleoecology

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

Advanced problems in population, community, and province level paleoecology, 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--Igenous*

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.

873. *Seismology I*

Fall of even-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*

Winter 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.

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.

877. *Geophysics of the Lithosphere II*

Fall of even-numbered years. 3(3-0) GLG 475, GLG 479.

Structure and tectonic processes at convergent and divergent plate margins. Earthquake location and prediction, thermal modelling of slabs, origin of back-arc basins, and inter- and intraplate stresses. Regional tectonic analyses.

878. *Dynamic Processes in the Earth*

Fall of odd-numbered years. 3(3-0) GLG 451, GLG 475, MTH 310 or approval of department.

Stress and strain analysis, rheology of materials, buckling and bending of strata, lithospheric stresses, geofluid dynamics, surface waves, attenuation, and other seismological topics.

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*

(891B.) Spring. 3(2-4) GLG 392.

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

894. *Aqueous Geochemistry*

Spring of odd-numbered years. 3(3-0) GLG 495 or a course in physical chemistry or approval of department.

Nature and regulation of electrolytes in solution (fresh water, seawater, brine); activity, complexation, and redox effects. Trace metals in solution. Carbonate, silica, alumina systems. Chemical weathering and mobility of elements.

895. *Topics in Geochemistry*

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 spectometry. Recently developed techniques in geochemistry will be discussed.

896. *Applied Geochemistry*

Spring of even-numbered years. 3(3-0) GLG 495 or GLG 894.

Migrations of elements in the near surface environment. Prediction of mineral deposits, hydrocarbon traps and harmful concentrations of both naturally occurring and artificially introduced hazardous elements and compounds.

899. *Master's Thesis 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. *Doctoral Dissertation Research*

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

Earth Science E S

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.

418. Scandinavian Contributions to Literary Tradition

Winter. 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.

498. Topics in Comparative Literature

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

Development and interrelationships of individual and collective forms and genres of literatures 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. 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. Administered by the Department of Romance and Classical Languages.

German GRM

101. Elementary German

Fall, Winter, Spring, Summer. 4(4-1)

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. 4(4-1) GRM 101.

Continuation of GRM 101.

103. Elementary German

Fall, Winter, Spring, Summer. 4(4-1) GRM 102.

Continuation of GRM 102.

105. Intensive Elementary German

Winter, Spring. 8(8-2) 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.

201. Intermediate German

Fall, Winter, Spring, Summer. 4(3-1) GRM 103.

Systematic review of grammar, oral practice, intensive and extensive reading of modern texts. This course or equivalent is required of majors and those planning to take advanced work in German.

202. Intermediate German

Fall, Winter, Spring, Summer. 4(3-1) GRM 201.

Continuation of GRM 201.

203. Intermediate German

Fall, Winter, Spring, Summer. 4(3-1) GRM 202.

Continuation of GRM 202.

204. Intensive Second Year German

Spring. 10(10-0) GRM 103

Intensive second year, combining in one term the work of GRM 201, GRM 202, GRM 203.

241. German Literature in English Translation

Fall. 3(3-0) Knowledge of German not required. Not applicable to major requirements.

Selections from narrative prose, drama, and lyric poetry chosen to encourage and develop an appreciation of German literature.

242. German Literature in English Translation

Winter. 3(3-0) Knowledge of German not required. Not applicable to major requirements.

Continuation of GRM 241.

243. German Literature in English Translation (A)

Spring. 3(3-0) Knowledge of German not required. Not applicable to major requirements.

Continuation of GRM 242.

299. Special Projects

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

Work in areas outside regular course offerings.

301. Introduction to German Literature

Fall. 3(3-0) GRM 203. Required of majors.

Representative works of eighteenth and early nineteenth century authors.