GEOGRAPHY-GR (GR)

Courses

GR 100  Introduction to Geography (GT-SS2)  Credits: 3 (3-0-0)
Course Description: Major geographic themes applied to selected regions; physical environment, human-land relationships, regional analysis.
Prerequisite: None.
Registration Information: Sections may be offered: Online.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.
Additional Information: Social & Behavioral Sciences 3C, Geography (GT-SS2).

GR 102  Geography of Europe and the Americas  Credits: 3 (3-0-0)
Course Description: Examines the physical and human geographies of Europe including the former Soviet Union; and the Americas from the Southern Cone to Canada. Focus is on the content of these geographies, why they exist, and their current significance; supported by extensive map analysis.
Prerequisite: None.
Registration Information: Credit not allowed for both GR 102 and GR 180A1.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

GR 210  Physical Geography  Credits: 3 (3-0-0)
Also Offered As: ESS 210.
Course Description: Energy, mass budget, and human impacts on atmosphere, hydrosphere, and continental land surfaces.
Prerequisite: None.
Registration Information: Credit not allowed for both GR 210 and ESS 210.
Term Offered: Fall (even years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 303  Mountain Geography  Credits: 3 (3-0-0)
Course Description: The physical and human dimensions of mountains. Examples from mountains around the world with case studies from Colorado.
Prerequisite: GR 100 to 499 - at least 3 credits.
Registration Information: Junior standing.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

GR 304  Sustainable Watersheds  Credits: 3 (3-0-0)
Also Offered As: WR 304.
Course Description: Effects of climate, land use, and water use on the sustainability of water quantity and quality.
Prerequisite: None.
Registration Information: Completion of the AUCC 1B mathematics requirement. Credit not allowed for both GR 304 and WR 304.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.
Additional Information: Biological & Physical Sciences 3A.

GR 305  Geography of Global Health  Credits: 3 (3-0-0)
Course Description: Study, research and practice of global health using an ecological approach that integrates health with spatial thinking. Focuses on a common set of issues which transcends boundaries, both domestic and international, and a set of actions to address the geographic burden of disease. Key principles and concepts, history of global health transitions, common and emerging health issues.
Prerequisite: ANTH 200 or GR 100 or INST 200.
Term Offered: Spring (even years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 311  GIS for Social Scientists  Credits: 3 (1-4-0)
Course Description: Applications of GIS techniques useful to the social sciences. Mapping techniques and GIS toolkits are practiced in lab.
Prerequisite: GR 100.
Registration Information: Sections may be offered: Online.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

GR 315  Quantitative Geographical Methods  Credits: 3 (3-0-0)
Course Description: Methods to collect, analyze, display, and model geographic data.
Prerequisite: GR 100.
Term Offered: Fall (odd years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 320  Cultural Geography  Credits: 3 (3-0-0)
Course Description: Geographic analysis of cultural phenomena, elements emphasizing human-land relationships and spatial patterns of agriculture, cities, language, religion.
Prerequisite: GR 100.
Registration Information: Sections may be offered: Online.
Term Offered: Fall (odd years).
Grade Modes: S/U within Student Option, Trad within Student Option.
Special Course Fee: No.

GR 323  Remote Sensing and Image Interpretation  Credits: 3 (2-2-0)
Also Offered As: NR 323.
Course Description: Remote sensing systems and applications; characteristics of photographic, scanner and radar images; imagery interpretations.
Prerequisite: None.
Registration Information: Must register for lecture and laboratory. Credit allowed for only one of the following: GR 323, GR 503, NR 323, NR 503.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

GR 330  Urban Geography  Credits: 3 (3-0-0)
Course Description: Spatial distribution of urban areas and the geographic similarities and contrasts that exist between and within them.
Prerequisite: GR 100.
Registration Information: Sections may be offered: Online.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.
GR 331 Geography of Farming Systems Credits: 3 (3-0-0)
Course Description: Geographic analysis of farming systems worldwide and by region; their development over time, human-land relationships, and spatial patterns.
Prerequisite: GR 100.
Term Offered: Spring (odd years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 333 Glaciers and Climate Change Credits: 3 (3-0-0)
Course Description: Glacier mass balance, dynamics, past fluctuations, and glaciers’ relation to climate change.
Prerequisite: GR 100 or GR 210 or GEOL 120 or GEOL 122 or GEOL 124 or GEOL 150.
Registration Information: Credit allowed for only one of the following: GEOL 381A2, GR 333 and GR 381A2.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

GR 345 Geography of Hazards Credits: 3 (3-0-0)
Course Description: Causes, effects, distributional patterns, and human adjustments to environmental hazards.
Prerequisite: GR 210.
Term Offered: Spring (odd years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 348 Biogeography Credits: 3 (3-0-0)
Course Description: Species distribution of plants and animals in relation to earth history and environments, evolution, and ecology.
Prerequisite: GR 000 to 99999 - at least 3 credits.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

GR 400 History of Theory-Anthropology and Geography Credits: 3 (3-0-0)
Also Offered As: ANTH 400.
Course Description: Anthropological/Geographical theory from its beginnings with Aristotle through recent developments into the 20th century.
Prerequisite: (ANTH 100 or ANTH 200) and (ANTH 120 and ANTH 121 and ANTH 140 or GR 100).
Registration Information: Junior or senior standing. Sections may be offered: Online. Credit not allowed for both ANTH 400 and GR 400.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

GR 410 Climate Change: Science, Policy, Implications Credits: 3 (3-0-0)
Course Description: Implications and consequences for earth systems including the cryosphere, hydrosphere, biosphere, and human systems.
Prerequisite: GR 100 to 499 - at least 3 credits.
Registration Information: Junior standing.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

GR 415 The Geography of Commodities Credits: 3 (3-0-0)
Course Description: Social relations, international trade, and environmental impacts surrounding the production, transportation, exchange, and consumption of commodities.
Prerequisite: GR 100.
Registration Information: Junior standing.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

GR 420 Spatial Analysis with GIS Credits: 4 (3-2-0)
Course Description: Theory, application of geographic information systems for spatial analysis; conceptual basis of GIS, nature and use of geographic data, case studies.
Prerequisite: GR 000 to 99999 - at least 3 credits.
Registration Information: Credit not allowed for both GR 420 and NR 322.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

GR 430 Land Change Science and Remote Sensing Credits: 3 (3-0-0)
Course Description: Local case studies and global cases of land-use/land-cover changes in rural, peri-urban, and urban areas.
Prerequisite: GR 100.
Registration Information: Junior standing.
Term Offered: Spring (even years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 431 Land Change Science Lab Credit: 1 (0-3-0)
Course Description: Utilize advanced remote sensing techniques and satellite images, air photos, and ancillary data to investigate land-use and land-cover changes.
Prerequisite: GR 323 or NR 323 or GR 503 or NR 503.
Registration Information: Must have concurrent registration in GR 430.
Term Offered: Spring (even years).
Grade Mode: Traditional.
Special Course Fee: No.

GR 440 Political Geography Credits: 3 (3-0-0)
Also Offered As: POLS 440.
Course Description: Examines the meaning of political space; states and nations; competition for territory, including methods and justifications; the structure of political space focusing on states; geopolitics; and the state in an era of globalization. Concepts are illustrated by real-world situations.
Prerequisite: GR 100 or POLS 101.
Registration Information: Sophomore standing. Sections may be offered: Online or Mixed Face-to-Face. Credit not allowed for both GR 440 and POLS 440.
Grade Mode: Traditional.
Special Course Fee: No.

GR 448 Forest Biogeography and Climate Change Credits: 3 (3-0-0)
Course Description: Forest adaptation and conservation in relation to global change with a focus on climate change.
Prerequisite: ESS 211 or ESS 311 or F 311 or GR 100 or GR 210 or ESS 210 or GR 303 or GR 348 or GR 410.
Registration Information: Junior standing.
Term Offered: Spring (odd years).
Grade Mode: Traditional.
Special Course Fee: No.
GR 487 Internship Credits: Var[1-9] (0-0-0)
Course Description: Academic-based work experience with selected organizations or agencies. Supervised application of principles of geography.
Prerequisite: GR 100 to 499 - at least 9 credits.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Traditional.
Special Course Fee: No.

GR 493 Capstone Seminar Credit: 1 (0-0-1)
Course Description: Exploration of the linkages among the human and physical geography sub-fields, geographic techniques, and other natural and social sciences as well as how professional geographers approach issues.
Prerequisite: None.
Registration Information: Junior standing. Concurrent registration in one of the following AUCC Category 4A courses for the Major in Geography: GR 303, GR 410, GR 415, or GR 430.
Terms Offered: Fall, Spring.
Grade Mode: Traditional.
Special Course Fee: No.

GR 495 Independent Study Credits: Var[1-3] (0-0-0)
Course Description:
Prerequisite: None.
Terms Offered: Fall, Spring.
Grade Mode: Instructor Option.
Special Course Fee: No.

GR 503 Remote Sensing and Image Analysis Credits: 4 (3-3-0)
Also Offered As: NR 503.
Course Description: Interpretation and analysis of photographic, multispectral scanner, and radar data; sensor systems; applications to resource management.
Prerequisite: None.
Registration Information: Must register for lecture and laboratory. Credit allowed for only one of the following: GR 323, GR 503, NR 323, or NR 503.
Term Offered: Fall.
Grade Mode: Traditional.
Special Course Fee: No.

GR 592 Special Topics in Geography Credits: 3 (0-0-3)
Course Description: Recent papers from the literature will be used to foster discussion among participants.
Prerequisite: None.
Registration Information: Graduate standing.
Grade Mode: Traditional.
Special Course Fee: No.