

GEOGRAPHY, MINOR

This minor may only be completed by students admitted to Elementary Education options leading to certification in K-9 or Middle Childhood through Early Adolescence. A minor is not required to complete the K-9 certification program, but students may elect to complete one.

Minors provide a depth of study in a particular area of interest and also inform classroom instruction. The completion of a minor is required to teach middle school in some states and may benefit students particularly interested in teaching at this level.

The Department of Geography (<https://geography.wisc.edu/>) is housed in the College of Letters & Science. Students may wish to consult with academic advisor Joel Gruley, jgruley@wisc.edu, 144 Science Hall, 262-4438, to discuss course selection and other issues related to this field of study.

Upon completion, the subject area of the minor will be posted on the UW-Madison transcript. **Students will not receive an additional certification or license in the subject area as was possible prior to fall, 2022 program admission.** The Wisconsin Department of Public Instruction does not offer content licenses in association with the K-9 educator license.

HOW TO GET IN

This minor may only be declared by students completing Elementary Education certification in either K-9 or Middle-Childhood-through-Early-Adolescence. The declaration form is located on the School of Education's Undergraduate Admissions page and can be submitted any time after admission into the program.

REQUIREMENTS

The Geography minor requires a minimum of 24 credits to include GEOG 342 and the required course distribution listed below. Each course may be counted in only one of the groups. Coursework must include at least two upper-level courses, numbered 300-699.

A minimum cumulative grade point average of 2.75 is required, based on all geography minor coursework taken on the UW-Madison campus.

REQUIRED COURSE

Code	Title	Credits
GEOG 342	Geography of Wisconsin (Or an acceptable substitute selected in consultation with the undergraduate advisor in the Department of Geography. This course may be also used to fulfill the requirement in Area Studies and Global Systems)	3

COURSE DISTRIBUTION REQUIREMENTS

Complete one course from each of the six groups:

PHYSICAL GEOGRAPHY: EARTH SYSTEMS AND ENVIRONMENTAL PROCESSES

Courses address the locational arrangements of earth phenomena and their interaction as physical systems.

Physical Geography: Earth Systems and Environmental Processes course options

Code	Title	Credits
GEOG/ ENVIR ST 120	Introduction to the Earth System	3
GEOG/ENVIR ST 127	Physical Systems of the Environment	5
GEOG/GEOSCI 320	Geomorphology	3
GEOG/ATM OCN/ ENVIR ST 322	Polar Regions and Their Importance in the Global Environment	3
GEOG/ ATM OCN 323	Science of Climate Change	3
GEOG/GEOSCI 326	Landforms-Topics and Regions	3
GEOG 329	Landforms and Landscapes of North America	3
GEOG/ATM OCN/ ENVIR ST 332	Global Warming: Science and Impacts	3
GEOG/ATM OCN/ ENVIR ST/ GEOSCI 335	Climatic Environments of the Past	3
GEOG/BOTANY 338	Environmental Biogeography	3
GEOG 344	Changing Landscapes of the American West	3
GEOG/GEOSCI 420	Glacial and Pleistocene Geology	3
GEOG 523	Advanced Paleoecology: Species Responses to Past Environmental Change	3
GEOG/ SOIL SCI 525	Soil Geomorphology	3
GEOG/ SOIL SCI 526	Human Transformations of Earth Surface Processes	3
GEOG/ATM OCN/ ENVIR ST 528	Past Climates and Climatic Change	3

PEOPLE-ENVIRONMENT INTERACTION

Courses examine human use, perception, and modification of environments.

People-Environment Interaction course options

Code	Title	Credits
GEOG/ ENVIR ST 139	Global Environmental Issues	3
GEOG/ENVIR ST/ SOIL SCI 230	Soil: Ecosystem and Resource	3
GEOG/ ENVIR ST 309	People, Land and Food: Comparative Study of Agriculture Systems	3
GEOG/ATM OCN/ ENVIR ST 332	Global Warming: Science and Impacts	3
GEOG/ ENVIR ST 333	Green Urbanism	3

GEOG/ ENVIR ST 337	Nature, Power and Society	3	GEOG 348	Latin America	4
GEOG/BOTANY 338	Environmental Biogeography	3	GEOG 349	Europe	3
GEOG/ ENVIR ST 339	Environmental Conservation	4	GEOG 355	Africa, South of the Sahara	3
GEOG 340	World Regions in Global Context	3	GEOG 358	Human Geography of Southeast Asia	3
GEOG 344	Changing Landscapes of the American West	3	GEOG/ AMER IND 410	Critical Indigenous Ecological Knowledges	3
GEOG/AMER IND/ ENVIR ST 345	Managing Nature in Native North America	3	GEOG/ENVIR ST/ HISTORY 469	The Making of the American Landscape	4
GEOG 359	Australia: Environment and Society	3	GEOG 501	Space and Place: A Geography of Experience	3
GEOG/ AMER IND 410	Critical Indigenous Ecological Knowledges	3	GEOG/ URB R PL 503	Researching the City: Qualitative Strategies	3
GEOG/C&E SOC/ ENVIR ST 434	People, Wildlife and Landscapes	3	GEOG/ GEN&WS 504	Feminist Geography: Theoretical Approaches	3
GEOG/ ENVIR ST 439	US Environmental Policy and Regulation	3-4	GEOG/ URB R PL 505	Urban Spatial Patterns and Theories	3
GEOG/ENVIR ST/ HISTORY 460	American Environmental History	4	GEOG/ URB R PL 506	Historical Geography of European Urbanization	3
GEOG/ENVIR ST/ HISTORY 469	The Making of the American Landscape	4	GEOG 507	Waste Geographies: Politics, People, and Infrastructures	3
GEOG/ SOIL SCI 526	Human Transformations of Earth Surface Processes	3	GEOG 510	Economic Geography	4
GEOG/ ENVIR ST 534	Environmental Governance: Markets, States and Nature	3	GEOG 511	Critical Social Theory	3
GEOG/ ENVIR ST 537	Culture and Environment	4	GEOG/ GEN&WS 514	Feminist Geography: Methodological Approaches	3
GEOG 538	The Humid Tropics: Ecology, Subsistence, and Development	3	GEOG 518	Power, Place, Identity	3
GEOG/ ENVIR ST 557	Development and Environment in Southeast Asia	3	GEOG 566	History of Geographic Thought	3

HUMAN GEOGRAPHY

Courses examine the location and organization of human settlements and activities.

Human Geography course options

Code	Title	Credits
GEOG 101	Introduction to Human Geography	4
GEOG 104	Introduction to Human Geography	3
GEOG 300	Weird Geographies	3
GEOG 301	Revolutions and Social Change	3
GEOG 302	Economic Geography: Locational Behavior	4
GEOG/ URB R PL 305	Introduction to the City	3-4
GEOG 307	International Migration, Health, and Human Rights	3
GEOG/CHICLA/ GEN&WS 308	Latinx Feminisms: Women's Lives, Work, and Activism	3
GEOG/INTL ST 311	The Global Game: Soccer, Politics, and Identity	3
GEOG/INTL ST 315	Universal Basic Income: The Politics Behind a Global Movement	3
GEOG 318	Introduction to Geopolitics	3
GEOG 340	World Regions in Global Context	3

AREA STUDIES AND GLOBAL SYSTEMS

Courses focus on the ways in which regions, places, and landscapes have acquired distinctive characteristics and problems as a result of their locations and resource potentials, and of their settlement, appraisal, and use by particular peoples and cultures.

Area Studies and Global Systems course options

Code	Title	Credits
GEOG/ASIAN/ HISTORY/POLI SCI/ SOC 244	Introduction to Southeast Asia: Vietnam to the Philippines	4
GEOG/HISTORY/ POLI SCI/ SLAVIC 253	Russia: An Interdisciplinary Survey	4
GEOG/AFROAMER/ ANTHRO/C&E SOC/ HISTORY/LACIS/ POLI SCI/SOC/ SPANISH 260	Latin America: An Introduction	3-4
GEOG/AFRICAN/ AFROAMER/ ANTHRO/HISTORY/ POLI SCI/SOC 277	Africa: An Introductory Survey	4
GEOG 342	Geography of Wisconsin	3
GEOG 348	Latin America	4
GEOG 355	Africa, South of the Sahara	3

GEOG/ ENVIR ST 557	Development and Environment in Southeast Asia	3
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GEOG 565	Colloquium for Undergraduate Majors (offered only in fall)	3
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CARTOGRAPHY AND GEOGRAPHIC INFORMATION SCIENCE

Courses examine the creation and use of maps.

Cartography and Geographic Information Science course options

Code	Title	Credits
GEOG 170	Our Digital Globe: An Overview of GIScience and its Technology	3
GEOG 370	Introduction to Cartography	4
GEOG/ENVIR ST/ F&W ECOL/ G L E/GEOSCI/ LAND ARC 371	Introduction to Environmental Remote Sensing	3
GEOG/ENVIR ST/ F&W ECOL/ G L E/GEOSCI/ LAND ARC 372	Intermediate Environmental Remote Sensing	3
GEOG/CIV ENGR/ ENVIR ST 377	An Introduction to Geographic Information Systems	4
GEOG 378	Introduction to Geocomputing	4
GEOG 379	Geospatial Technologies: Drones, Sensors, and Applications	3
GEOG/ENVIR ST/ LAND ARC/ URB R PL 532	Applications of Geographic Information Systems in Planning	3
GEOG 572	Graphic Design in Cartography	3-4
GEOG 573	Advanced Geocomputing and Geospatial Big Data Analytics	4
GEOG 574	Geospatial Database Design and Development	4
GEOG 575	Interactive Cartography & Geovisualization	4
GEOG 576	Geospatial Web and Mobile Programming	4
GEOG 578	GIS Applications	4
GEOG 579	GIS and Spatial Analysis	4

STAT 301	Introduction to Statistical Methods	3
STAT 324	Introductory Applied Statistics for Engineers	3
STAT 371	Introductory Applied Statistics for the Life Sciences	3

METHODOLOGY

Courses examine the skills, techniques and methodology necessary to conduct geographic investigation.

Methodology course options

Code	Title	Credits
GEOG 170	Our Digital Globe: An Overview of GIScience and its Technology	3
GEOG 365	Geographical Traditions and Practices	3
GEOG 370	Introduction to Cartography	4
GEOG/CIV ENGR/ ENVIR ST 377	An Introduction to Geographic Information Systems	4
GEOG 500	Qualitative Strategies in Geography	3
GEOG 560	Advanced Quantitative Methods	3