BACHELOR OF ARTS IN GLOBAL STUDIES

University of Wisconsin-Milwaukee

Global Sustainability Track (Revised 1-11-17)

The **Global Sustainability** track develops student expertise in the diverse concepts of global sustainability and their application to development fields. Students following this track are expected to:

- Recognize and explain principles of sustainability in human, environmental, and governance systems; and
- Evaluate and identify methods for planning and implementing sustainable development strategies in differing contexts.

This track affords graduates a range of career options including positions such as sustainability specialists/ coordinators/officers, educators/outreach coordinators, and project managers, working in industry, consultancy, utilities, regulatory agencies, nonprofits, governmental agencies and nongovernmental organizations. Students are also prepared to enter graduate programs in sustainability.

Enrolling in the Global Studies B.A. Degree Program

Any student interested in pursuing a Bachelor of Arts in Global Studies should set up a meeting with one of the Global Studies advisors in Garland Hall, Christine Wolf, cawolf@uwm.edu, 229-6925, Garland 111. Students may enroll in the Global Studies degree program by declaring their major as Global Studies, which is possible after they have earned 56 credits. The simple process includes: (1) reviewing the degree requirements with a Global Studies advisor, and (2) signing the Declaration of Major Form. Students who intend to pursue a Global Studies degree are strongly advised to declare before earning 75 credits.

✓ DEGREE CORE COURSES ➤

Common to all tracks is the degree's core curriculum, which includes the following:

Global Studies Degree Core Courses

1. Three foundational Global Studies Core Courses (9 cr):

Global 101: People and Politics, 3cr (SS)

Global 201: Economics and the Environment, 3 cr (SS)

Global 202: Globalization and Information Technology, 3 cr (SS)

- 2. Eight semesters (or equivalent) of foreign language study:
- 3. One semester (12 cr minimum) of Study Abroad;
- 4. International Internship (3 cr);
- 5. **One** of the following 'World Regions' courses (3 cr):

Geog 110: The World: People and Regions, 3 cr (SS)

Hist 132: World History since 1500, 3 cr (HU)

Pol Sci 106: Politics of the World's Nations, 3 cr (SS)

<u>Graduation requires</u> a minimum grade point average of 2.5 in the Global Studies core courses, including foreign language, and a 2.0 overall. Students must complete at least 120 cumulative degree credits with 36 credits at the 300-level or higher, of which 24 credits must be in L&S. *All degree requirements must be taken for credit.*

NOTE: GLOBAL STUDIES GENERAL EDUCATION REQUIREMENTS (GER)

Arts (A) 3 credits Cultural Diversity (CD) 3 credits

Humanities (HU) 12 credits (Hist 132 if taken as World Region course)

Social Sciences (SS) 12 credits (Global 101, 201, 202, Econ 103)

Natural Sciences (NS) 6 credits, 3 of which need to include a lab (NS+) (Math Stat

215, Geog 125, Geo Sci 105, 106 - NS; Chem 104, Geog

120, Geo Sci 100, 102 - NS+)

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TRACK CORE CURRICULUM

- * Indicates that a prerequisite course is required in order to enroll.
- **These courses can additionally be taken for elective credit (but not double-counted).

Thirty-six to forty-one (36-41) credits are **REQUIRED** from the following list of courses:

Track Core Courses (9 cr)

- 1. Global 361 Environment and Sustainability, 3 cr*
- 2. Global 461 The Politics and Policy of Sustainability, 3 cr*
- 3. Global 550 Global Studies Integrated Capstone: 3 cr* (OWCB)

Additional Track Course Requirements (27-32 cr)

4. **BOTH** of the following *Introductory Economics* courses (6 cr):

Econ 103 Principles of Microeconomics, 3 cr (SS)

Econ 104 Principles of Macroeconomics, 3 cr (SS)

5. One of the following *Statistics* courses (3-4 cr):

Anthro 568 Introduction to Anthropological Statistics, 3 cr*

Bus Adm 210 Introduction to Management Statistics, 4 cr*

Chem 221 Elementary Quantitative Analysis, 4 cr*

Econ 210 Economic Statistics, 3 cr*

Geog 247(447) Quantitative Analysis in Geography, 3 cr*

Math Stat 215 Elementary Statistical Analysis, 3 cr* (NS)

- 6. CES 210 Introduction to Conservation and Environmental Science, 3 cr
- 7. **TWO** of the following *Introductory Science* courses (6-10 cr), including:

Bio Sci 150 Foundations of Biological Sciences I, 4 cr

Bio Sci 152 Foundations of Biological Sciences II, 4 cr*

Chem 102 General Chemistry, 5 cr*

Chem 104 General Chemistry and Qualitative Analysis, 5 cr* (NS+)

Geog 105 Introduction to Human Geography, 3 cr (SS)

Geog 120 Our Physical Environment, 3 cr (NS+)

Geog 125 Introduction to Environmental Geography, 3 cr (NS)

Geog 140 Our Urban Environment: Introduction to Urban Geography, 3 cr (SS)

Geo Sci 100 Introduction to the Earth, 3 cr (NS+)

Geo Sci 102 Principles of Historical Geology (NS+), 3 cr* (NS+)

Geo Sci 105 Earth, Air, Fire and Water, 3 cr (NS)

Geo Sci 106 The Earth Environment, 3 cr (NS)

Geo Sci 150 Introduction to Ocean Sciences (NS), 3 cr

8. **ONE** of the following *Proposal Development/Grantwriting* courses (3 cr):

Ed Pol 602(421) Proposal Writing and Fundraising Skills for Community-Based Organizations, 3 cr

Ed Pol 605(424) Community-Based Organization Funding, 3 cr

English 443 Grant Writing, 3 cr

9. **ONE** of the following **Communication for Development** courses (3 cr):

Global/Bus Adm 541 Cross-Cultural Management, 3 cr*

Commun 310 Communication in Organization, 3 cr

Commun 350 Intercultural Communication, 3 cr

Commun 365(520) Negotiation Skills Workshop, 3 cr

Commun 450 Cross-Cultural Communication, 3 cr

Commun 665 Introduction to Mediation, 3 cr

Commun 675 Communication in International Mediation & Peacebuilding, 3 cr

10. ONE of the following Society, Politics, and Sustainability courses (3 cr)**:

Anthro 355 Globalization, Culture, and Environment, 3 cr

Anthro 441 Nature, Knowledge, and Technoscience in Anthropological Perspective, 3 cr

Bus Adm 495 Special Topics in Business - Subtitle: Environmental Policy, 3 cr

CES 471 Principles of Natural Resources Management, 3 cr

Geog 464 Environmental Problems, 3 cr*

History 432 North American Environmental History, 3 cr

Philos 337 Environmental Ethics, 3 cr

GLOBAL SUSTAINABILITY TRACK CURRICULUM (Continued)

11. Fifteen (15) elective credits are **REQUIRED** in total from the following list of courses:

Anthropology (ANTHRO)

355 Globalization, Culture, and Environment. 3 cr. U. (If not selected in #10)

Anthropological approaches to examining the concept of environmental justice as a crucial component of global security. Prereg: jr st; satisfaction of GER English Composition competency req.

431 Urban Anthropology. 3 cr. U/G.

Cross-cultural study of urban systems and subsystems; theories of evolution of urban society; concepts and methods in the study of human adaptations to cities. Prereg: jr st; Anthro 102(R).

441 Nature, Knowledge, and Technoscience in Anthropological Perspective. 3 cr. U/G. (If not selected in #10)

Anthropological approaches to contemporary issues of science in society; critical perspectives on knowledge construction with respect to culture and indigenous traditions, race, class and gender.|Prereq: jr. st

448 Cultural and Human Ecology. 3 cr. U/G

Relationships of human societies to natural environments; energy systems involved in processes of human adaptation; ways in which culture and society operate as dynamic components of that exchange. Prereq: ir st; Anthro 102(R).

449 Economic Anthropology. 3 cr. U/G.

Uses and allocation of resources; modes of production and distribution and their relationship to kinship, politics, and other aspects of culture. Prereq: jr st.

Biological Sciences (BIO SCI)

310 General Ecology. 4 cr. U.

Complex interrelationships between organisms and their environment. Physiological and behavioral adaptations, populations, biotic communities, ecosystems. 3 hrs lec, 3 hrs lab, field work. One req'd all-day Saturday field trip for which fee is assessed. Prereq: Bio Sci 150(P) & 152(C) or cons instr.

458 Community Ecology. 3 cr. U/G.

Theories and models in community ecology. Analysis of biological communities emphasizing the origin, maintenance and consequences of species diversity within local communities. Prereq: jr st; Bio Sci 152(P) & 310(P) or cons instr; or grad st.

505 Conservation Biology. 3 cr. U/G.

Genetic and ecological approaches to the conservation of biological diversity. Topics include biology of rare plants and animals, design of nature reserves, and restoration ecology. 3 hrs lec. Prereq: jr st; Bio Sci 152(P) & 325(260)(P).

Business Administration (BUS ADM)

485 Environmental Issues in Real Estate. 3 cr. U.

Survey course dealing with the impact of governmental environmental regulations on lender and developer liability. Topics include Phase 1 reporting, legal considerations, remediation, and wetland impacts. Counts as repeat of Bus Adm 495 with topic, 'Intro to Envir Bus Issues.' Prereq: jr st (excluding Pre-Bus Adm srs & Univ Special Students with no undergrad degree); Bus Adm 380(P).

495 Special Topics in Business – Subtitle: Environmental Policy, 1-3 cr. U. (If not selected in #10)

Current topics and issues related to specific management areas of business. Specific topics and additional prerequisites announced in Schedule of Classes whenever course is offered.|May be retaken with change in topic to max of 9 cr. Prereq: jr st.

Civil Engineering (CIV ENG)

492 Environmental Impact Assessment. 3 cr. U/G.

Study and evaluation of the impacts of large scale projects on the quality of the environment with emphasis on the assessment of physical and community impacts. Impact statement preparation. Prereq: sr st

Conservation and Environmental Sciences (CES)

471 Principles of Natural Resources Management, 3 cr. U/G. (If not selected in #10)

Environmental issues and problems from an interdisciplinary perspective; principles in the management and maintenance of natural resources. 3 hrs lec.|Prereq: jr st; Bio Sci 310(P).

490 Senior Seminar: Conservation and Environmental Science, 1 cr. U.

Examination of conservation literature and preparation, presentation, and discussion of oral reports by individual students. Prereg: sr st; Conservation & Environmental Sciences major or Bio Sci major.

499 Ad Hoc: (Subtitled). 1-6 cr. U.

Course created expressly for offering in a specified enrollment period. Requires only dept & assoc dean approval. In exceptional circumstances, can be offered in one add'l sem. Retakable w/chg in topic. Prereq: ir st; add'l prereqs may be assigned to specific topic.

550 Introduction to Science Interpretation. 3 cr. U/G.

Concepts and practices of presenting science information for audience understanding of impact of science on daily life. Interpretation techniques for science content in nonformal settings. Prereq: jr st; CES 210(P) or cons instr.

551 Application of Science Interpretation. 3 cr. U/G.

Building upon CES 550, application of skills and knowledge to interdisciplinary environmental issues. Prereq: jr st; CES 550(P).

571 Practical Approaches to a Sustainable Future. 3 cr. U

Natural ecological principles used to develop sustainable human-influenced environments. Emphasis on practical solutions to assess and develop alternative sustainable human agroecological models. Prereq: jr st; grade C or better in CES 210(P).

Economics (ECON)

328 Environmental Economics, 3 cr. U.

Evaluating public policy of environmental and natural resources. Regulation of pollution, endangered species, natural resources, and other case studies. Prereq: Econ 103(P).

353 Economic Development. 3 cr. U.

Examination of determinants of growth, modernization, poverty, and inequality in developing countries of Africa, Asia, and Latin America. Analysis of development strategies. Prereq: Econ 103(P) & 104(P).

525 The Economics of Water, 3 cr. U/G.

Comprehensive development of water resource economics for engineers, scientists, and economists; analysis of the public and private sector economics of water resources. Prereq: jr st; Econ 103(P); Math 231(P); a statistics course; or cons instr.

Freshwater Sciences (FRSHWTR)

502 Aquatic Ecosystem Dynamics. 3 cr. U/G.

Interdisciplinary, quantitative approach to understanding large lake dynamic processes, including geological formation, hydrology, hydrodynamics, chemistry and the dynamics of plankton and fish communities. Prereq: jr st, 1 sem calculus or algebra & 2 sem Physics, Chem or Bio Sci; or cons instr.

504 Quantitative Freshwater Analysis, 3 cr. U/G.

A fundamental set of tools for the quantitative analysis of environmental data sets, with an emphasis on the calculation of reservoirs, residence times and rates in aquatic systems. Prereq: jr st & cons instr.

650 Topics in Freshwater Science, 1-3 cr. U/G.

Current issues in freshwater sciences. Prereg: jr st.

690 Undergraduate Seminar in Freshwater Sciences, 1-3 cr. U/G.

Seminar on topics of interest in freshwater sciences.

Geography (GEOG)

215 Introduction to Geographic Information Sciences. 3 cr. U.

Geographic objects, their representation and analysis. Topics include special nature of spatial data; concepts of space, mapping, spatial relationships; and use of geographic information systems. 2 hrs lec, 2 hrs lab. Prereq: none.

304 Human Impact on the Environment. 3 cr. U.

Geographical and temporal distribution of human effects on land and resources; historical background of human concern for deleterious effects of impacts on environments. Prereq: jr st; intro course in Geog or a life sci recom.

350 Conservation of Natural Resources. 3 cr. U.

Analysis of environmental ethics; the positive and negative consequences of resource development with emphasis on strategies designed to resolve environmental conflicts. Prereq: jr st or a geog course.

400 Population, Environment, Development. 3cr. U.

Prereq: jr st, and have taken GEOG 105, 110, 114, and/or 115.

403 Remote Sensing: Environmental and Land Use Analysis. 4 cr. U/G.

Use of aerial photographs and digital imagery in environmental and land use analysis, including urban areas. 3 hrs lec; 2 hrs lab PC/Windows familiarity recom. Prereq: jr st & Geog 215(P); or grad st.

415 Hydrogeography. 3 cr. U/G.

Role of water in geographic systems. Interaction of water with physical and human systems, key hydrological processes, spatial and temporal variations of water, data collection, modeling. Prereq: jr st, Geog 120(P) & 215(P), or grad st.

441 Geography of Cities and Metropolitan Areas. 3 cr. U/G.

Extent, localization, and geographic relations of land uses, facilities, and internal circulation, with particular reference to large North American cities. Prereq: jr st & intro course in geog or acceptable course in an urban related field, e.g. Econ, UrbPlan, Urb Std; or grad st.

443 Cities of the World: Comparative Urban Geography. 3 cr. U/G.

Geographic analysis of world urban systems with emphasis on the cultural traditions, form, function and socio- economic development of cities. Prereq: jr st & Geog 110(P), 115(P), or 140(P).

464 Environmental Problems. 3 cr. U/G. (If not selected in #10)

General discussion and case studies of geographical contexts and historical roots of modern environmental problems. History of human concern over adverse environmental impacts. Prereq: jr st & an intro course in a life science or environmental science.

475 Geography of Soils. 3 cr. U/G.

Systematic and regional study of soils, interrelationships of soils with the physical and cultural landscape. 2 hrs lec, 2 hrs lab. Prereq: jr st; Geog 120(P), 121(P), or 125(P) or equiv.

520 Physical Geography of the City. 3 cr. U/G.

Spatial aspects and interactions of plants, animals, climate, soils, and water resources relevant to human activities in the urban environment. Prereg: jr st & Geog 120(P) or 125(P); or grad st.

540 Globalization and the City. 3 cr. U/G.

Spatial aspects of globalization and their impact on the city. Topics include emergence of global cities, impacts on urban development, and global era urban strategies. Prereg: jr st.

564 Urban Environmental Change and Social Justice. 3 cr. U/G.

Spatial aspects of contributors to urban environmental change affecting social justice. Inequitable distribution of environmental risks and benefits; challenge of developing policies. Prereq: jr st.

Geosciences (GEO SCI)

400 Water Quality. 3 cr. U/G.

Water availability and water quality in surface and subsurface water bodies; management of water as a resource. 2 hrs lec, 3 hrs lab. Prereq: jr st; Chem 102(P); Math 232(P); or cons instr.

401 General Soil Science. 3 cr. U/G.

Soil profile development, weathering, soil mineralogy, water and nutrient relationships, classification of soil. 2 hrs lec, 3 hr lab. Required field trips for which fees are assessed. Prereq: jr st; Chem 104(P) or equiv or cons instr.

463 Physical Hydrogeology. 3 cr. U/G.

Study of ground water occurrence, its interrelationship with surface water, aquifer properties, groundwater flow and water supply development, including well hydraulics, water quality, and groundwater law. Lec, lab, & field trip for which fee is assessed. Prereg: jr st; Geo Sci 100(P) or 101(P); Math 232(P).

562 Environmental Surface Hydrology. 3 cr. U/G.

Land-atmosphere interactions, modeling of runoff generation, and water movement in the vadose zone. 3 hrs lec. Prereq: jr st; Math 232(P); or cons instr.

Global Studies (GLOBAL)

321 The Global City in History. 3 cr. U.

Key issues in history of the global city from Mesopotamia to the age of globalization; changing role of urban centers; global dimensions of Milwaukee's history..Prereq: jr st.

421 Cities in the Global Economy. 3 cr. U.

How and why globalization leaves different imprints on cities; how cities in turn constantly restructure the form of the global economy. Prereq: jr st.

Industrial and Manufacturing Engineering (IND ENG)

Topics in Industrial and Systems Engineering: Sustainable Energy Systems & Industrial Management. 3 cr. U/G.

Sustainable energy systems and industrial management is the study of sustainable practices and technologies in industrial and commercial operations.

Public Health (PH)

375 Topics in Public Health for Undergrads - Subtitle: Environmental Sustainability. 3 cr. U.

Topics of current interest in Public Health for undergrads.

Philosophy (PHILOS)

337 Environmental Ethics. 3 cr. U/G. (If not selected in #10)

Theories of environmental ethics, practical application. Responsibilities to nature/future generations; moral value/status of environment and organisms; philosophical issues concerning environmental studies and ecology.|Prereq: jr st.

Urban Planning (URBPLAN)

315 Great Cities of the World: Their Growth and Guided Urbanization. 3 cr. U.

Great cities of the world, how they were built and developed. Culture, politics and economics, their role in urban planning and the built form. Prereq: soph st.

684 Planning Local Economic Development. 3 cr. U/G.

Exploration of the role of planning in the generation, evaluation, and implementation of policies for the development and revitalization of communities. Prereq: jr st & cons instr.