

Environmental Science Urban Resilient Systems

GE Track

This track will introduce the students to environmental resilience and recovery in an age of disturbances, such as increased population, urbanization, resource depletion, industrialization, and climate change. In urban settings, it is even more crucial that the natural and built environments support a healthy, productive, and sustainable society. Through the diverse and balanced course portfolio, the students will gain a comprehensive understanding of urban environmental issues as well as an integrated approach to keeping the planet safe for humanity

List of Courses by GE Foundation Area

Click on a Foundation Area or scroll below to see list of courses and descriptions.

ARTS AND HUMANITIES - LITERARY AND CULTURAL ANALYSIS (1 COURSE)

ARTS AND HUMANITIES - PHILOSOPHICAL AND LINGUISTIC ANALYSIS (0 COURSES)

ARTS AND HUMANITIES - VISUAL AND PERFORMING ARTS ANALYSIS (3 COURSES)

SOCIETY AND CULTURE - HISTORICAL ANALYSIS (4 COURSES)

SOCIETY AND CULTURE - SOCIAL ANALYSIS (5 COURSES)

SCIENTIFIC INQUIRY - LIFE SCIENCE (6 COURSES)

ARTS AND HUMANITIES - LITERARY AND CULTURAL ANALYSIS (1 COURSE)

HNRS 44 – Society of Excess: On Waste, Consumer Culture, and Environment. Examination of waste in both real and virtual worlds, looking in interdisciplinary ways at various cultural representations of trash set against backdrop of society of excess and environment constantly threatened by overflowing and mismanaged waste, including social and cultural responses to physical waste and cyber battle against Internet debris. Credits: 5.0 Units.

ARTS AND HUMANITIES - PHILOSOPHICAL AND LINGUISTIC ANALYSIS (0 COURSES)

No courses for this GE Foundation area in this track

ARTS AND HUMANITIES - VISUAL AND PERFORMING ARTS ANALYSIS (3 COURSES)

DESMA 10 – Design Culture. Understanding design process, with emphasis on development of visual language; study of historic, scientific, technological, economic, and cultural factors influencing design in physical environment. Credits: 5.0 Units.

ART HIS 24 – Architecture in Modern World. (Formerly numbered 58) Introduction to study of architectural history through examination of built world of past two centuries. Building technologies and forms of economic, social, and political life have produced modern built environment that is both diverse and increasingly connected. Focus on factors that have affected architecture globally and those that give regions, cultures, and historical periods their particular qualities. Topics include architectural and urban ramifications of modern self-consciousness, nationalism and internationalism, industrialism, colonialism and anticolonialism, and new art and architectural theories. Credits: 5.0 Units.

ARCH & UD 30 – Introduction to Architectural Studies. Exploration of role of built environment in social, cultural, and political life: how buildings are constructed, what they mean, effects they have on world, and ways they imagine new futures and shape private and public life. Focus on series of contemporary case studies for what each reveals about new possibilities for shaping world in which we live, with emphasis on how architecture extends to cities, roads, books, and films. Consideration of historical context and cultural genealogy of particular buildings and environments, material and economic conditions of building, and more. Credits: 5.0 Units.

SOCIETY AND CULTURE - HISTORICAL ANALYSIS (4 COURSES)

GEOG 4 – Globalization: Regional Development and World Economy. Economic geography explores spatial distribution of all forms of human productive activity at number of geographical scales--local, regional, national, and global. Key theme is impact of increasingly powerful global economic forces on organization of production. Credits: 5.0 Units.

ARCH & UD 10A – History of Architecture and Urban Design: Prehistory to Mannerism. Exploration of developments in global architecture and urban design from prehistory to 1600 and critical reflection on terms such as building, architecture, city, history, and culture. Focus on world context, construction and technology, and history of architectural ideas. Credits: 5.0 Units.

ARCH & UD 10B – History of Architecture and Urban Design: Baroque to Contemporary Moment. Survey of architectural and urban history from 1600 to present in global context. Exploration of buildings, cities, spaces, artifacts, landscapes, and ideas through their relation to geopolitical conditions and through their relation to theories of design. Credits: 5.0 Units.

ART HIS 24 – Architecture in Modern World. (Formerly numbered 58) Introduction to study of architectural history through examination of built world of past two centuries. Building technologies and forms of economic, social, and political life have produced modern built environment that is both diverse and increasingly connected. Focus on

factors that have affected architecture globally and those that give regions, cultures, and historical periods their particular qualities. Topics include architectural and urban ramifications of modern self-consciousness, nationalism and internationalism, industrialism, colonialism and anti-colonialism, and new art and architectural theories. Credits: 5.0 Units.

SOCIETY AND CULTURE - SOCIAL ANALYSIS (5 COURSES)

GEOG 6 – World Regions: Concepts and Contemporary Issues. Interdisciplinary and historical approach to modern peoples, their differences in wealth or poverty, and their local origins of food production. Brief introduction to physical geography and biogeography of each region. Discussion of each region's peoples, languages, foods, pre-histories, and histories. Credits: 5.0 Units.

PUB PLC 10D – Public Policy and Urban Homelessness. Application of policy analysis to issues and solutions concerning homelessness. Guest lectures from local policymakers. Credits: 5.0 Units.

DGT HUM 30 – Los Angeles Tech City: Digital Technologies and Spatial Justice. Lecture, two and one half hours; studio, two hours. Investigation of spatial justice and injustice in multi-ethnic city of Los Angeles through lens of three thematic technologies that built and transformed Los Angeles into global metropolis: cars and highways, networking technologies culminating in Internet and World Wide Web, and film and broadcast media. Use of innovative forms of investigation and communication, from digital mapping to video-sensing, to integrate interpretative and historical approaches of humanities with material and projective practices of design. Letter grading. Credits: 5.0 Units.

STATS 12 – Introduction to Statistical Methods for Geography and Environmental Studies. Introduction to statistical thinking and understanding, with emphasis on techniques used in geography and environmental science. Underlying logic behind statistical procedures, role of variation in statistical thinking, strengths and limitations of statistical summaries, and fundamental inferential tools. Emphasis on applications in geography and environmental science in laboratory work using professional statistical analysis package, including spatial statistics. Credits: 5.0 Units.

HNRS 41 – Understanding Ecology: Finding Interdisciplinary Solutions to Environmental Problems. Exploration of ecological basis of planet's most important environmental issues, including global climate change, ocean acidification, biodiversity loss, deforestation, pollution, and declining freshwater resources and fisheries. Examination of both hard science and interdisciplinary solutions (social, political, educational) to environmental problems. Credits: 5.0 Units.

SCIENTIFIC INQUIRY - LIFE SCIENCE (6 COURSES)

GEOG 5 – People and the Earth’s Ecosystems. Exploration of ways in which human activity impacts natural environment and how modification of environment can eventually have significant consequences for human activity. Examination, using case studies, of real environmental problems that confront us today. Credits: 5.0 Units.

ENVIRON 25 – Good Food for Everyone: Health, Sustainability, and Culture. Good food is healthy, sustainably produced, and culturally meaningful. Introduction to basic concepts and history of food systems, food science and nutrition, fair and sustainable food production, natural resources and environmental issues including climate change and biodiversity, agriculture and food policy and law, food distribution and access, cultural identity and artistic engagements with food. Credits: 5.0 Units.

HNRS 41 – Understanding Ecology: Finding Interdisciplinary Solutions to Environmental Problems. Exploration of ecological basis of planet’s most important environmental issues, including global climate change, ocean acidification, biodiversity loss, deforestation, pollution, and declining freshwater resources and fisheries. Examination of both hard science and interdisciplinary solutions (social, political, educational) to environmental problems. Credits: 5.0 Units.

EE BIOL 18 – Why Ecology Matters: Science Behind Environmental Issues. Basic ecological concepts, scientific method, and ecological basis for local and global environmental issues. Major challenges to be faced in this century, including need to find interdisciplinary and collaborative solutions to world’s worsening environmental problems (e.g., global climate change, biodiversity loss, deforestation, pollution, declining water resources, declining fisheries). Environmental literacy to equip students to become leaders in growing green economy and to help forge solutions to current and future environmental crises that threaten natural resource base. Credits: 5.0 Units.

GEOG 2 – Biogeography: Spatial Dynamics of Biogeography in a changing world. Biogeographic exploration of plant and animal diversity and conservation issues on continents and islands around world. Study of physical, biotic, and human factors responsible for evolution, persistence, and extinction of species and ecological communities. Analysis of effects of human activity. Credits: 5.0 Units.

ENV HLT 207 – Introduction to Geographic Information Systems. Designed for freshmen/sophomores. Introduction to fundamental principles and concepts necessary to carry out sound geographic analysis with geographic information systems (GIS). Reinforcement of key issues in GIS, such as geographic coordinate systems, map projections, spatial analysis, and visualization of spatial data. Laboratory exercises use database query, manipulation, and spatial analysis to address real-world problems. Credits: 5.0 Units.