

SUSTAINABILITY TOOLBOX COURSES- Spring 2013

ARCHITECTURE

ARCH 3368 Sustainable Development New perspectives in development: overview of environmental and ecological systems, land use, smart growth, new urbanism, traffic and transportation, brownfield development and mitigation, site development, and marketing.

ARCH 4367 Case Studies in Sustainable Architecture Green Revolution, sustainability, and ecological restoration. Sustainability measurements including biomimicry, ecological footprint, embodied energy, and full cost accounting. Building components sustainability by CSI division. LEED certification overview.

BIOLOGY

BIOL 3305 Biodiversity Causes, consequences, importance, and preservation of biological diversity.

BIOL 3306 Evolutionary Biology Origins and maintenance of biological diversity and the mechanisms of phenotypic change.

BIOL 4206 Ecology and Evolution Laboratory Field and laboratory exercises illustrating concepts in evolution, ecology, and animal behavior.

CIVIL ENGINEERING

CIVE 3331 Environmental Engineering Introduction to air, water, and environmental pollutants, and concepts of design for treatment.

CONSTRUCTION MANAGEMENT

CNST 6380 Leed & Green Construction Principles in Const Management Green construction methods and benefits in applying the Leadership in Energy and Environmental Design (LEED) principles.

ELECTRICAL, COMPUTER ENGINEERING

ECE 6397 Selected Topics (Nanomaterials and Solar Energy)

ECONOMICS

ECON 6345 Energy Economics Energy Economics with applications: market structures including the effects of regulations; sources; substitutes; externalities, data analysis and policy.

ENERGY AND SUSTAINABILITY

INTB 4397 Intro to Energy and Sustainability Learn the history of energy production and use, emerging energy sources, and energy's role in global economic, social, and political issues. Develop strategies to create a sustainable energy future.

ENGLISH

ENGL 3396 Literature and the Environment Literature about nature, the environment, wilderness preservation, environmental justice, and urban nature in the context of current developments in ecocritical theory and criticism.

ENTREPRENEURSHIP

ENTR 3310 Entrepreneurship Entrepreneurship as it relates to starting and building a successful business.

ENTR 3312 Intrapreneurship Entrepreneurial activities within an existing organization.

FINANCE

FINA 4370 Energy Trading Examination of risk-management objectives and organization of energy trading. Valuation of the principal energy contracts. Organization and trading of petroleum, natural gas, and power markets.

FINA 4397 Selected Topics in Finance (Energy Analysis)

FUTURES STUDIES

FUTR 6333 Systems Thinking Introduces students to a perspective on the world involving the interaction of interconnected parts.

FUTR 6371 World Futures A review of global trends shaping the future, including the most important demographic, environmental, technological, economic, political, and cultural changes.

GEOLOGY

GEOL 1302-01 Intro to Global Climate Change Examines how past climate records and models provide a better understanding of possible future climate changes. Greenhouse gases, solar output, Earth's orbit, and anthropogenic effects.

GEOL 1340 Earth Systems Earth's dynamic systems emphasizing the interactions among the atmosphere, hydrosphere and lithosphere. Includes the processes by which the Earth was formed and continues to be modified as well as how humans affect and are affected by those processes.

GEOL 3342 Introduction to Air Pollution Structure of the atmosphere, anthropogenic and natural emissions of pollutant precursors, meteorological influences on pollutant transport and diffusion, chemical transformations, and health effects of pollution.

GEOL 3377 Oceanography Introduction to the world's oceans and oceanic processes.

HISTORY

HIST 4322 Environment in US History

LAW

LAW 5183 Mediation Process

LAW 5297-02 Energy and the Environment

LAW 5397-10 Selected Topics (Reform in Oil Producing States)

LAW 6305 Animal Law The study of statutory and decisional law in which the nurture - legal, social, or biological - of non-human animals is an important factor.

NUTRITION

NUTR 4334 Community Nutrition Assessment of the nutritional needs of population groups. Application of nutritional epidemiology and overview of nutritional programs and interventions available in the community.

NUTR 4396 -2 Selected Topics in Nutrition (Public Policy in Nutrition)

POLITICAL SCIENCE

POLS 3318 - 02 Intro to Public Policy The nature and functions of public policy, policy institutions and processes, and policy evaluations with a primary focus on the United States.

SOCIAL WORK

SOCW 3330 Nonprofit Financial Management Principles of financial management and budgeting in nonprofit human services organizations.

SOCW 7329 Social Policy Advocacy Provides an understanding of political systems and teaches the skills to affect policy in the legislative as well as administrative arenas.

SOCW 7374 Mediation for Social Workers Concepts regarding conflict and conflict resolution with emphasis on teaching a generic mediation model applicable to social work practice.

Know of additional courses that might be interesting to students interested in sustainability? Email lwolftha@central.uh.edu