

Building Sustainable “Green” Buildings and Economic Growth Communities

Focus on the Urban Regional Ecosystem



Emerging Trends



Emerging Opportunities



Emerging Challenges



The University of Toledo — University College Degree Programs Sustainable Development Courses (3 credit hour courses)

Instructor Kenneth Dobson, Director of UT’s Clean and Green Building Resource Laboratory

Expert sources of information will be used in the courses including published reports, journals, articles, internet-based references and guest lecturers.

Course 1: INTRODUCTION TO GLOBAL WARMING, CLIMATE CHANGE AND SUSTAINABILITY (UC 4980 SPECIAL TOPICS)

Description: This course focuses on the causes and effects of global warming and climate change, examining the context of energy efficiency, energy independence, reductions in greenhouse gases, and alternative renewable energy. This introductory course will review and study key theories, concepts, terms, definitions and standards associated with energy and environmental “green” applications. The contextual and foundational nature of the course is designed to better prepare students for the more advanced and specialized applications courses in sustainable “green” development. *This course is a pre-requisite to all other sustainability courses. Pre-requisite may be waived with instructor approval.*

Summer 2009: Session II: June 29-August 7, 2008, Distance Learning

Course 2: BUILDING SUSTAINABLE “GREEN” COMMUNITIES (APPLICATIONS) (UC 4980 SPECIAL TOPICS)

Description: This course focuses on the primary areas associated with sustainable development: (a) understanding alternative renewable energy sources and resources; (b) review and evaluation of global energy and environmental policy initiatives and domestic federal, state and local government policies, programs and practices; (c) planning, engineering, design, development principles and practices associated with “green” development; and (d) value-creation organizing and engagement strategies and processes, which include collaboration, consensus-building, strategic alliances, partnership and leadership skills development.

Summer 2009: Session II: June 29-August 7, 2008, Distance Learning

Co-requisite: Course 1

Course 3: BUILDING SUSTAINABLE “GREEN” BUILDINGS & DEVELOPMENT PROJECTS (APPLICATIONS) (UC 4980 SPECIAL TOPICS)

Description: This course focuses on the development of emerging energy and environmentally-efficient “green” technologies and techniques for new construction, renovation, conversion and adhesive re-use of buildings of all sizes and types, including residential, commercial, industrial, educational and other institutional buildings. Emphasis is placed on cost-saving, integrated planning, design and development; monitoring and evaluating energy, CO₂ and other greenhouse gases (GHG); water and waste recycling; life-cycle cost assessment; and development of financing tools, techniques and strategies.

Fall 2009: August 24-December 18, 2009, Wednesday, 5:30-8 p.m., CC 2170

Course 4: BUILDING SUSTAINABLE “GREEN” BUILDINGS AND COMMUNITIES (SERVICE LEARNING APPLICATIONS) (UC 4980 SPECIAL TOPICS)

Description: This service learning, hands-on applications-based course provides students who have completed the three previously referenced courses the opportunity to apply their new found knowledge and skills to practical problem-solving projects at their homes, workplaces, schools, communities, non-profit organizations, etc. These demonstration projects will benefit the students learning processes and will contribute to the development of sustainable “green” projects and communities.

Fall 2009: August 24-December 18, 2009, Distance Learning

These courses can be taken individually for credit or audit or as part of a degree program.

For more information about course content contact:

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For information on how to get started contact University College at 419.530.3201