

Inventory of Sustainability Courses

School of Architecture
Courses offered Fall 2012- Spring 2014

Tulane University

“Sustainability education” engages students in the work of building healthy, lasting communities. In sustainability courses, students develop the capacity to critically theorize, analyze and communicate about interconnected social, economic and environmental issues. Students learn to work in collaboration with members of the larger community and to help create solutions in the long-term public interest.

We have attempted to identify both courses in which the primary and explicit focus is on sustainability and/or on understanding or solving one or more major sustainability challenge, and courses that are primarily focused on a topic other than sustainability but incorporate sustainability as unit, module or activity.

We have included all courses with a service learning component.

At Tulane University, undergraduate courses are numbered between 1000-4999 and graduate-level courses are numbered 5000 and above.

This draft list was compiled by Colleen Large, SLA – 2016 by reviewing the Tulane Course Catalog posted at <http://architecture.tulane.edu/courses> and schedule of classes on Gibson. Service Learning courses added by Colleen Large from lists obtained from Center for Public Service. This list was distributed by Dean Ken Schwartz to faculty for review in June 2014.

- **Digital Media**
 - **Sustainability Courses:** no sustainability courses offered
 - **Courses that include sustainability:** no courses that include sustainability offered
- **Architectural History/Theory**
 - **Sustainability Courses:**
 - **AHST 6913 Sustainability, Architecture and Culture:** The concept of sustainability interacts with the design of the built environment in three ways. First is the consideration of durability as opposed to consumption. Second is the appropriate and efficient use of resources and materials. Third is engaging design that promotes human health, a state of physical, mental and social well-being. This course explores architecture through a series of six themes, each engaging the discipline in relation to sustainability and culture. The course is designed at the graduate level for students without a requirement of previous coursework in architecture but with a desire to embrace issues of sustainable culture, using architecture as a

lens. Upper level architecture students who desire to increase their understanding of issues of sustainability are also welcome.

- **Courses that include sustainability:**
 - **AHST 3131 Urban Geography: New Orleans Case Study:** This class explores how to analyze cities spatially, using New Orleans as a detailed case study. We will tackle this subject through lectures, discussion, field trips, film, research, and presentations. Students will apply these guiding geographical questions to urban places:

What is the shape, form, and origin of the city's physical landscape? How have humans transformed and manipulated that landscape into a cityscape? How are phenomena spatially distributed or diffused, why, and how have those patterns changed over time? How may we research, depict, characterize, and interpret those patterns? How are power, class, race, and inequity involved in use of space and the allocation of urban resources? How can we use geographical knowledge to restore and improve disturbed places or patterns? What distinguishes urban places from each other? How do people create, occupy, perceive, and contest the use of urban space? What clues do we see in the present-day cityscape that shed light on the above questions?
 - **AHST 4299 Writing on Architecture:** no course description available (Service Learning- Mandatory, Fall 2013)
- **Professional Concerns**
 - **Sustainability Courses:** no sustainability courses offered
- **Special Topics**
 - **Sustainability Courses:** no sustainability courses offered
 - **Courses that include sustainability:**
 - **ASTP 3300 Architecture and Human Health:** An interdisciplinary course exploring the complex relationships among architectural design, human well-being, and health. Emphasis is placed on the planning and maintenance of health care facilities. The course focuses on user-based planning and design methods.
- **Technological Systems**
 - **Sustainability Courses:**
 - **ATCS 3030/6139 Buildings, Climate, Comfort** This course explores ways that buildings can provide a comfortable environment for the people who spend time inside them, in ways that respond to climate and use resources efficiently.

- **Sustainability Courses:** no sustainability courses offered
- **Courses that include sustainability:** no courses that include sustainability offered
- **Architectural Design**
 - **Sustainability Courses:** no sustainability courses offered
 - **Courses that include sustainability**
 - **DSGN 2200 Second Year Studio** (Service Learning- Mandatory, Spring 2014) Second year studio concentrates on developed architectural form and design methodologies through processes of analysis, synthesis and transformation. Students work on the conceptual frameworks for their designs, with emphasis on issues of environmental context, urban design, and cultural and technological systems and their impact on architectural form. Different approaches to the making of form are investigated, along with principles of organization, such as spatial hierarchy, circulation, structure, and site relationships. Second semester will emphasize the relationship of design to cultural precedents, site conditions, programs, and material tectonics through the study of housing. Second year studios will be fully integrated with digital media classes to ensure that students gain fluency in computer-aided design processes, drawing, spatial modeling and digital design techniques.
 - **DSGN 4100 URBANbuild Studio** (Service Learning- Fall 2013) no course description available
 - **DSGN 4200 Advanced Studio Elective** (Service Learning- Optional, Spring 2013, Fall 2012) no course description available
 - **DSGN 5100 URBANbuild Studio** (Service Learning- Fall 2013) no course description available
- **Landscape**
 - **Sustainability Courses:** no sustainability courses offered
 - **Courses that include sustainability:**
 - **LNSP 3300 Natural Landscape and Built Form:** An approach to the understanding of the interrelationships of man, nature, culture and technology, and the resultant built environment. Each semester the course focuses on a distinct region, emphasizing local flora, fauna, and climatic considerations in relationship with native, imported and evolving culture. Classes focus on design issues that integrate plant materials in built environment contexts.
 - **LNSP 4400 Material Topographies and Architectural Landscapes:** An exploration of the complex relationships that exist between architecture

and the material landscapes that constitutes its site “ that encompassing outer territory that defines the context within which architecture is situated and grounded, and against which it is seemingly defined. The course will specifically focus on the relation of architecture to the environment, calling into question the tools and techniques architects have employed to map, document and analyze site conditions, and the built objects produced.

- **Preservation Studies**

- **Sustainability Courses:** no sustainability courses offered
- **Courses that include sustainability:**
 - **PRST 6520 Studio II Urban Conservation:** Urban Preservation is a six-credit hour course that concentrates on documenting, analyzing and planning for the preservation of enclaves of buildings as a basis for understanding the technical, theoretical and procedural aspects of urban conservation. The course includes intensive study of representative historic residential and commercial districts including streetscapes in the New Orleans region where students work both as independent researchers and in teams to learn professional preservation planning concepts and methods. This studio examines sites comprising historic buildings representing different styles and periods in various conditions where choices in restoration versus rehabilitation versus new work must be considered. Solutions for such situations will be explored with respect to current architectural preservation principles and procedures. Investigations of city planning, zoning, historic district protection regulations and participation at a relevant public review meeting are parts of this course. Information gathering techniques including surveys of the urban context of study areas and consulting local stakeholders towards re-imagining damaged, blighted and underutilized urban areas are also aspects of the course. The course involves both fieldwork and class seminars, occasionally including other Tulane University faculty and experts in the field.
 - **PRST 6710 Introduction to Preservation Studies:** This course offers an in-depth look at the scope, history, theory, methods, and practice of historic preservation in a global context. Coursework will chart the evolution of the preservation field from the late 18th century to contemporary issues, cover the theoretical frameworks that assess architectural significance and values and cultural concerns, and discuss how these ideas are practically applied in contemporary preservation practice. Course

readings and assignments will additionally explore organizational structures, stakeholders, and legislation that shape the direction of the profession. This course pays particular attention to ways in which local and national preservation bodies operate and their influence, and examines how built environments define urban identity and sense of place. The course will include a number of lectures from other Tulane faculty and experts in the field.

- **Urban Studies**

- **Sustainability Courses:** no sustainability courses offered
- **Courses that include sustainability**
 - **RBST 3010 The City I** (Service Learning- Optional, Fall 2013, Fall 2012) no course description available
 - **RBST 6400 Design Urbanism** (Service Learning- Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012) Though the use of seminal writings on urban design ideology presented by architects and historians in the 20th century such as Bacon, Lynch, Koolhaas and Gandelsonas, students will be challenged to consider these significant foundations in order to apply a broader awareness of urbanism to their own architectural design process. Concurrently, methodologies of research and analysis that employ both conceptual and intuitive systems of investigation will be exercised as a critical means of observing, documenting and communicating about the city and the architecture that contributes to its form.

- **Sustainable Real Estate Development**

- **Sustainability Courses:**
 - **SRED 6050 Introduction to Sustainable Urbanism** The aim of this course is to build students' multi-disciplinary understanding of the urban environment and its relationships within the political, economic, ecological and cultural context. In this abbreviated course, the focus will be on introduction to terms, tools and systems, survey of historical and contemporary examples, and finally, broad perspective analysis of urban development theories.

Working from the particular to the general, the class will begin with a survey of the components that make up a city — the parts and pieces, structures and systems that combine to make urban space. An introduction of the regulatory and administrative organizational regimes that control development will follow. In this section, New Orleans will be used as the principal object of study. The second part will be a cursory

survey of contemporary urban place making theories and other conceptual underpinnings that will introduce other metropolitan centers national and international. The concluding part will require the class to make a close reading of chosen sections of New Orleans, providing analysis, insight and speculation on development scenarios, necessitating a synthesis of all knowledge gained throughout the course of the summer semester in your combined coursework.

- **SRED 6200 Introduction to Sustainable Architecture & Design** The intent of this course is to introduce a vocabulary of sustainable principles, design and building. This course will introduce an array of sustainable design concepts and demonstrate their efficacy through lectures, discussions, readings and case studies. Students will learn a variety of green building strategies by analyzing successful projects. Various scales, contexts, cultures, methods and approaches will be explored to encourage a comprehensive and holistic understanding of sustainable design.
- **SRED 6310 Sustainable Design and Development** This course provides students with applied skills and experience in synthesizing real estate projects. It builds upon student's introductory coursework in real estate finance, sustainable urbanism, and architecture and design. As prospective developers, students should begin to have firsthand knowledge of the complexities of development including the development process itself; good design; and synthesizing constraints into an implementable physical development project. This course is rooted in the creative process as real estate development is inherently a creative problem solving profession.
As real estate development is a team-based profession requiring the collaboration of multiple disciplines, the approach of this course is based in lectures and site visits leading to innovative team-based student work that results in an implementable development project. Each member of the team will contribute something unique to the group's work.
- **SRED 6410 Case Studies in Sustainable Real Estate Development** The objective of this course is to build students' multi-disciplinary understanding of the design and implementation of real estate development projects. The course methodology pairs case studies with the experience and expertise of New Orleans and national practitioners. Cases are structured thematically around development, financing and neighborhood typology topics to give students the opportunity to deploy

the skills being developed in other MSRED coursework to a range of contexts and real estate development and operational issues. Course assignments will focus on practicing the hard and soft skills required for successful real estate development. In addition, the course will emphasize giving students the opportunity to build a professional network through the local and national speakers who will come to class and engage in a range of real estate topics. Through this diverse content, the instructors seek to place real estate production within a broader community development agenda for residents of neighborhoods and cities, and will regularly reflect on the core concepts of the sustainability of buildings and places, the impact of (re)investment on people, and the various partnerships required to realize intended outcomes.

- **Courses that include sustainability:** no courses that include sustainability
- **Social Innovation and Social Entrepreneurship:**
 - **Sustainability Courses:**
 - **SISE 2010 Introduction to Social Innovation and Social Entrepreneurship:** The introductory class gives students an appreciation for the field of social entrepreneurship and introduces students to several helpful frameworks that will be used in subsequent classes. Students will examine key concepts and the historical context, understand current theories and debates about social change, and discuss case studies of social entrepreneurs. The class will address two overarching tenets of SISE: (1) Social impact can best be created by moving away from the current divisive approach of separate sectors and towards blended models that connect and combine sectors in new ways. (2) Social mission and social impact are the primary focus - understanding what your mission is, and how you create the greatest social impact, is key. (Service Learning- Mandatory, Spring 2014, Fall 2013, Spring 2013, Fall 2012)
 - **SISE 2020 Introduction to Business for Social Innovation and Entrepreneurship:** This course assumes no prior background in business concepts and is open to declared SISE minors who have completed SISE 2010. The course is designed to give students basic competence in understanding and analyzing the core elements of sustainable business models. Through this course, students will gain a working vocabulary, theoretical toolkit, and fundamental technical skill set for operating in a business environment. Topics include accounting, finance, strategy, marketing, sales, operations, organizational structure and management.

- **SISE 3010 Design Thinking for Collective Impact:** This course is a practical, experience-based introduction to design-thinking tools and techniques for SISE undergraduate minors from diverse departments across campus. Students will be exposed to applied research, ideation and problem-solving tools adapted from human-centered design and architecture. Using New Orleans as a laboratory and working with local partners, students will creatively and collaboratively address local community concerns, leading to a prototype for installation in a neighborhood. In addition, readings, case studies, lectures, and writing exercises will allow students to learn from these local design-thinking experiences to more fruitfully address global problems, such as climate change, poverty, and the AIDS pandemic, that they aim to pursue in their program major and SISE practicum.
- **SISE 4020 Leadership for Collective Impact:** This seminar is about "Leadership" - how the term has been defined and studied, as well as how it has been practiced. On the one hand, the course will focus conceptually on the genealogies and evolution of the theory and practice of leadership. On the other hand, the course will assess the current state of leadership scholarship by engaging students with current leadership literature and thinking. We will explore why leadership has taken on so many different definitions and delve into some of the major issues and debates in the field. Students will be guided in the development of their own leadership skills, as the course will require students to practice leadership both in the course and in the community.