

# 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.

- **ATCS 6400 Sustainability & Tectonics:** The course offers an opportunity to explore two major areas of building technology in greater depth. The first of these is sustainable design. While the concept of sustainable design is widely lauded, fundamental principles and techniques of implementation are less clearly understood. Sustainability will first be investigated regarding issues at the scale of the site, linking place and building. Subsequently sustainability at the scale of building systems and materials will be a major focus. The second focus of the course is tectonics, consideration of the physical conditions of architecture, including the logical application of materials and systems. These issues will be considered first in the relation between structure, envelope and finish conditions, particularly at the building perimeter. Subsequently, the interweaving of systems within the building and their expression will be the topic.
- **Courses that include sustainability:**
  - **ATCS 4010 Structural Systems:** Advanced integrated topics in materials and methods of construction, structural systems, and environmental systems, taught through case study and analysis.
  - **ATCS 4100 Integrated Building Systems:** Advanced integrated topics in materials and methods of construction, structural systems, and environmental systems, taught through case study and analysis.
  - **ATCS 6300 Innovations In Building Materials and Methods:** A research seminar focusing on new materials and technologies being employed in current architectural practices locally, nationally, and globally. The seminar will be directed to gain insight and give exposure to little known or underutilized innovations through specific materials research and data gathering, case study applications research, and hands-on speculative testing/demonstration. Research will explore building components and tectonics, the material and spatial implications of computer technologies, prefabrication and mass production, as well as smart systems and green building. The course will be both practical and experimental in nature.
  - **ATCS 6410 Implementing an Ecocentric Architecture:** The seminar would pose the question, is it possible to make a non-anthropocentric architecture? This seminar attempts to define and develop a model of an ecocentric architecture, redefining the way we currently build against the backdrop of environmental issues and larger ecological imperatives. New Orleans and its environs will act as a laboratory to explore these ideas.
- **Visual Media**

- **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 18<sup>th</sup> 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.

**Inventory of Sustainability Courses**  
**A.B. Freeman School of Business**  
**Courses Offered Fall 2012-Spring 2014**

**Tulane University**

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We have included courses that have a service learning component.

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This draft list was compiled by Jiaxin Fan (MFIN – 2014) and Luis Fernandez Rodriguez (exchange undergraduate student) by reviewing the Tulane BS Undergraduate Course Catalog and MBA/MFIN/MMG/MACCT Student Handbook posted at <http://www.freeman.tulane.edu/students/>. Service Learning courses added by Colleen Large (SLA – 2016) from lists obtained from Center for Public Service. The draft list was sent to Dean Ira Solomon for review in June 2014.

## **ACCOUNTING AND TAXATION**

- **Sustainability courses:** No sustainability courses offered.

## **ENERGY**

- **Sustainability courses:**
  - **ENRG 4410 Energy and Environmental Economics**– This course provides an overview of the economic principles used in analyzing energy markets and environmental issues important to this sector. Students in this class will learn to apply fundamental tools of micro and macro-economics to study business and public policy issues involved in the oil, natural gas, and electric industries including renewable energy sources. The course will cover the fundamentals of externalities in the energy industries and how to evaluate the impact of various environmental policies. They will evaluate incentive compatible mechanisms and efficient environmental regulation design. Students will study a number of industry specific cases and critically analyze typical problems in each industry. Students will apply economic reasoning to unravel popular fallacies and doomsday

scenarios such as peak oil, fallacy of common-use resources, technical vs. economic potential of energy technologies.

○ **Courses that include sustainability:**

- **ENRG 4930 Introduction to Electric Power & Markets**– The number of players in power markets, player’s competing interests, and evolving regulatory policy gives electricity markets a unique niche in the world of commodity trading. The unique physical characteristics of its product, coupled with the nature of its delivery have created opportunities for trading shops and major corporations to rise and fall in a little more than a decade. As this market (slowly) matures, and regulation continues to improve market transparency and efficiency, it will be a bumpy ride. To better understand where these markets are going and where they have been, we shall first obtain a historical perspective. With a concrete understanding of the market evolution, we will then investigate what influence market prices on a long term, day ahead, and real time basis. We will also study the infamous market failures, and how regulators have responded to eliminate opportunities for indiscretion. The course will conclude with a brief look at several recent regulatory enactments to more closely align the interests of all market participants and stakeholders. This course will include market simulation exercises which will give students the opportunity to experience Power Marketing from the perspectives of a pure-marketer, independent power producer, and regulated utility.
- **ENRG 6010 Introduction to Energy Fundamentals** – This course introduces basic energy production, transportation, refining, marketing, and trading activities. This course is designed to teach students, regardless of background and experience, basic concepts and energy terminology that form a basis for further learning in energy courses. In this one-day seminar, students learn energy industry fundamentals affecting companies involved with the exploration, production, transportation, refining, and storage of oil and gas and other related industry segments.
- **ENRG 7100 Energy Markets, Institutions, and Policy**– This course covers a range of energy-related topics including major challenges and policy issues facing the industry, history and structure of the industry, company profiles and strategies, energy economics, energy markets, energy regulation, energy technology, and sustainable development. Faculty associated with the Tulane Energy Institute will lecture on the history, structure, and economics of the energy sector and its importance in the growth of modern economies. The course also includes a series of presentations by industry participants including energy economists, sell-side analysts, industry regulators, upstream oil and gas operators, midstream and downstream participants, as well as representatives of the myriad companies that provide services to the direct participants.
- **ENRG 7130 Energy and Environmental Economics** – Prerequisite: ENRG 6000. This course provides an overview of the economic principles used in analyzing energy markets and environmental issues important to this sector. Students in this class will learn to apply fundamental tools of micro and macro-economics to study business and public policy issues involved in the oil, natural gas, and electric industries including renewable energy sources. The course will also cover the fundamentals of externalities in the energy

industries and how to evaluate the impact of various environmental policies. They will evaluate incentive compatible mechanism and efficient regulation design. The course goal is to have students critically analyze typical problems in the energy sector. They should be able to apply these skills and economic reasoning to unravel popular fallacies and doomsday scenarios such as peak oil, fallacy of common-use resources, and technical vs. economic potential of energy technologies.

- **ENRG 7500 Energy Risk Management** – Prerequisites: ENRG 7110, ENRG 7120, and ENRG 7200. The course balances both the qualitative and the quantitative aspects of the risk in energy markets. The course begins with a broad qualitative look at risk scenarios. For a qualitative perspective, the course draws heavily from Foundations of Energy Risk Management (FERM) and from Managing Energy Risk (MER). For the quantitative aspects such as forwards, MR Models and options, the course relies primarily on Energy and Power Risk Management (EPRM) and Energy Risk (ERVM). Topics covered include the economic impacts of pricing and investment decisions in these industries, privatization of publicly-owned energy assets, regulation of monopolies and antitrust, the transportation and storage of energy commodities, and the economics of renewable energy sources. Major policy trends related to energy production and use, such as deregulation, climate change, and environmental impacts, are critically analyzed. The course focuses on risk management applications from the perspective of an energy company.
- **ENRG 7600 Electricity Markets and Trading** – Prerequisite: ENRG 6000. This course covers the fundamental concepts necessary to maintain and operate an efficient wholesale electric power market. Through in-class simulations, students will apply concepts from operations management, economics, risk management, and negotiations to manage physical and financial power portfolios. Lecture topics will include deregulation/industry segmentation, security constrained economic dispatch (including unit commitment and scheduling), locational marginal pricing, resource development (including traditional thermal and renewable resources), and contract negotiation. Instructor-led case studies will review historic successes and failures of deregulated energy firms. Successful completion of this course will provide students with a firm understanding of electric power market operations and portfolio management.
- **ENRG 7920 Energy Seminar (3)** – This course covers energy topics that are not covered extensively in other energy courses. The course may cover a range of topics depending upon the faculty member's interests and the availability of guest speakers. Possible topics include investment banking, energy policy, energy legal and regulatory environment, emerging technologies, energy industry structure and analysis, sustainable development, and energy strategy.

## **FINANCE AND BUSINESS ECONOMICS**

- **Sustainability courses:** No sustainability courses offered.
- **Courses that include sustainability:**
  - **FINE 4890 Financial Literacy Service Learning-** Students may elect to fulfill their upper-level Newcomb-Tulane public service requirement through this

service learning option that functions as an add-on component to FINE 4100 or FINE 4600. This added one-hour component supplements the finance curriculum and gives students the opportunity to research, prepare and teach core elements of financial literacy to high school students who live in the New Orleans community. Students are required to fulfill 40 hours of public service. The 40 hours of public service includes preparation of lesson plans, lab meetings with reflection, and classroom experiential teaching in a high school class environment.

## **LEGAL STUDIES IN BUSINESS**

- **Sustainability courses:** No sustainability courses offered.
  
- **Courses that include sustainability:**
  - **LGST 3010 Legal, Ethical and Regulatory Environment of Business -** Prerequisites: ECON 1010; LGST 3010 examines ethical and legal issues that affect business decision-making. The course covers ethical decision making, including the concepts of professionalism, integrity-based management, compliance-based management, and corporate social responsibility. The course then focuses on the ethical and legal issues associated with the legal system, the litigation process, alternative dispute resolution techniques, business torts based on negligence, intent and strict liability, including fraud, product liability, misrepresentations, and misleading advertising, contracts, consumer protection issues, business crimes, bankruptcy, labor and employment law, laws surrounding equal opportunity, and property law, including patents, copyrights, trade secrets, trade names, and trademarks. (Service Learning- Optional, Fall 2013, Fall 2012)
  - **LGST 3890 Legal Studies -** Freeman students may elect to fulfill their upper-level Newcomb-Tulane public service requirement through this service learning option that functions as an added component to the foregoing legal studies courses. This added one-hour component supplements the legal studies curriculum and gives students the opportunity to become familiar with courtroom procedure while acquiring research, investigation, and analytical skills through courtroom observation and data collection. Students are required to fulfill 20 – 40 hours of public service and will engage in reflective learning through journal exercises and class presentations.
  - **LGST 4120 International Business Law -** Prerequisite: LGST 3010; LGST 4120 introduces students to relevant features of the various legal systems currently governing the conduct of international business—national, regional, and international. Topics include international trade agreements, international dispute resolution, jurisdictional and choice of law problems, treatment of foreign investments, foreign corrupt practices, conflicting standards on labor, the environment, competition, and tariff law. The course presents policy problems and operational concerns that arise as the result of conflicting laws, gaps in laws, and developing international standards.<sup>66</sup>

## MANAGEMENT

- **Sustainability courses:**
  - **MGMT 4150 Environment, Society, and Capitalism** - Prerequisites: All 3000-level BSM core courses; junior standing or above; This course takes a strategic planning perspective to investigate environmental management issues in the context of assessing and responding to competitive and social forces. This course examines a serious challenge to corporations competing in the global economy: How to maximize profitability and production in such a way that will allow the planet to support operations indefinitely. Emphasis will be on the company's ability to use both traditional management concepts and new sustainability practices to build and sustain a competitive advantage. Students will learn how an enterprise can meet sustainability goals while still fulfilling its financial and market objectives.
  - **MGMT 7150 Environment, Society, and Capitalism** - Prerequisite: MGMT 6210. This course takes a strategic planning perspective to investigate environmental management issues in the context of assessing and responding to competitive and social forces. This course examines a serious challenge to corporations competing in the global economy: how to maximize profitability and production in such a way that will allow the planet to support operations indefinitely. Emphasis will be on the company's ability to use both traditional management concepts and new sustainability practices to build and sustain a competitive advantage. Students will learn how an enterprise can meet sustainability goals while still fulfilling its financial and market objectives.
  
- **Courses that include sustainability:**
  - **MGMT 4160 Leadership Service Learning** - The purpose of this course is three-fold. First, students will develop a general understanding of leadership theories and an understanding of their own leadership traits. Second, students will use theories to help analyze real-world cases involving both successful and unsuccessful examples of leadership. Finally, students will practice their own leadership skills as they lead their teams in a variety of exercises and projects. Course includes a mandatory service learning component, MGMT 4896.
  - **MGMT 4890 Management of Technology and Innovation Public Service (Add-on Component)** - Prerequisite: MGMT 3010; Corequisite: MGMT 4180; junior standing or above; In this course students are required to complete an Eco Challenge Project where they will develop a plan utilizing the latest technologies to have the metropolitan New Orleans area run on totally renewable energy. This public service experience will add to the student's knowledge and experience seeing firsthand the needs of the community, and the challenges in transforming the city to an area sustained entirely on renewable resources. (Service Learning- Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012)
  - **MGMT 6140 Leadership & Ethics** - This course concerns the ethical foundations of leadership in business and society. Students will gain an understanding of various academic perspectives on leadership, real-world examples of effective and ineffective leadership, and insights into their own leadership capabilities. The emphasis on ethics will include some moral philosophy, but will also involve the application of common

sense morality to business leadership. This means that active student participation is essential in this course. The classroom experience will include much conversation, debate, disagreement, and dissent in response to provocative case studies, class exercises, and group projects.

# Inventory of Sustainability Courses

## School of Law

### Tulane University

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This list of sustainability courses in the School of Law is based on a document titled “Tulane Law School, Curriculum in Environmental and Energy Law, 2014-2015,” with additional suggestions from Professor Oliver Houck. The [Course Descriptions](#) pages of the Law School’s website were also consulted. The list was reviewed by Dean Meyer in July 2014.

All courses offered by the Law School are graduate-level courses.

Courses that include sustainability:

#### **Administrative Law**

The course explores the history, present status and nature of administrative agencies. The main emphasis is placed on administrative procedure, contrasting it with the judicial process, as well as constitutional limits on administrative action and the due process rights of persons who are adversely affected by agency action. Topics covered include: delegation of powers, the law of judicial review of agency actions, and procedural requirements of administrative rulemaking and adjudication. (3 credits)

#### **Comparative Environmental Law**

This course treats the rising evolution of environmental law around the world. It is not a class in international treaties or the management of transboundary resources, which are treated in international environmental law. Rather, it is a comparative look at the constitutional bases, institutions, and policy approaches of selected countries in coming to grips with pollution control and resource development, including impact assessment, judicial review, pollution control, resource management, land use and wildlife species. The class will be graded on the basis of a mid-term examination, and on student research presentations and papers towards the end of the course. (3 credits)

#### **Complex Litigation Seminar**

This is an advanced civil procedure course focusing on a number of important aspects of civil procedure which are only superficially considered in the first year. It is useful for anyone interested in litigation or practice involving multi-party transactions such as involved commercial dealings, antitrust, securities, product liability, mass torts, consumer litigation and civil rights. The procedures considered include: joinder of parties and structure of law suits in complicated multi-party suits; duplicative litigation and use of stay orders, injunctions, consolidation, transfer to a more convenient forum, and transfer to the



Multi District Panel; class actions; discovery and trial in complex cases; and res judicata and collateral estoppel. (2 credits)

### **Energy & Environment LLM Seminar**

This seminar explores current issues in Environmental and Energy law through faculty and LLM candidate presentations and discussion. This seminar is open to graduate Energy & Environment students only. (1 credit)

### **Energy Regulation & the Environment**

This course lies at the crossroads of energy and environmental law. It exposes students to the legal, economic, structural, and environmental issues involved in energy regulation, focusing primarily on electricity, and to a lesser degree, transportation. The course will cover legal concepts important to an understanding of energy law, including both the traditional monopoly model of cost of service regulation and evolving competitive alternatives for electricity. The primary focus of this course is on the environmental impacts and legal challenges associated with different sources of energy (coal, natural gas, nuclear, renewables, oil and alternative fuels). This course examines common policy tools used to advance clean energy sources, including feed-in-tariffs, tax credits, and renewable portfolio standards. This course also exposes students to the latest approaches to managing the electric grid, including energy efficiency, demand side management, and smart grid technologies. This course does not cover traditional oil and gas law. (3 credits)

### **Energy Regulation Seminar**

This course will review, in depth, several significant transactions of electric public utilities, the treatment of those transactions by public utility regulators and the potential impacts on ratepayers and shareholders. Transactions examined will include; 1) mergers and acquisitions; 2) construction of a generating unit from planning through rate recovery, and 3) storm damage, repair, restoration of service, reconstruction and financing via securitization. Grade will be based upon a paper. Students will, time permitting, be asked to make presentations of their papers. There will be guest lecturers for each topic covered. (2 credits)

### **Environmental Criminal Law**

No course description available

### **Environmental Enforcement**

This course is a theory of everything environmental. That is, it cuts across the body of the environmental media statutes and goes to the heart of the law -- enforcement. Permits and rules are mainly technical, and (except for rule-making litigation and legal transactions) enforcement is mostly where the lawyer reigns. So we will not focus so much on details of the media programs other than what happens after a violation. We'll cover such topics as EPA priorities, enforcement theories, overfiling, reporting, investigations, civil penalties, injunctions, citizen suits, audits, remediation and NRD remedies (optional), and even aspects of LEED litigation, qui tam, EJ, and white collar criminal prosecution. Classes will be lecture, case discussions, and problem solving from a text. (2 credits)

### **Environmental Law Clinic**

The Tulane Environmental Law Clinic's (TELC's) purpose is to train law students in the practical aspects of representing clients in highly regulated fields, with an emphasis on strategic thinking, thorough investigation and research, and persuasive writing and oral communication. TELC student attorneys are responsible for advancing client interests in disputes across a wide range of environmental issues. They typically research and draft pleadings or administrative comments, argue motions, negotiate settlements, and/or present evidence at hearings. TELC is open to 3Ls, 2Ls (during the spring semester only), and LLMs with JD degrees from U.S. law schools. We encourage - but do not require - JD students who receive a "B-" or above during their first semester to continue for a second semester. LLMs are limited to one semester in TELC. Under student-practice rules, 3Ls and LLMs may sign pleadings and appear in court under the guidance of TELC's supervising attorneys. 3 credits each semester.

### **Environmental Law: Clean Air Act**

No course description available.

### **Environmental Law: Clean Water Seminar**

This class examines hot topics in clean water law and policy, some of long standing that are coming to a head, others new and challenging. Subjects include the Chesapeake Bay program, the Everglades, Thermal Power plants, Concentrated Animal Farms, Ocean acidification, and potential litigation by private and public parties against pollution impacts. Several of these we will treat preliminarily in class; others of any kind you may choose to investigate for your class projects. The class will be of two parts, selected readings that illustrate the Act's approach to key sectors, followed by classes based on student research, leading to a final paper. Grades will be determined on the basis of class and TWEN discussion, research presentations, and the ultimate paper. Because the Clean Water Act is also included this Spring in Pollution Control, the focus of this seminar will be more geographic and sectoral, how the law works with regard to a particular problem. While Pollution Control is not a prerequisite for this seminar, a student should either be taking it concurrently or have equivalent experience with the law or the research intended. (3 Credits)

### **Environmental Law: Coastal & Wetlands Law**

This course focuses on federal and state laws designed to manage coastal and wetland resources including the Coastal Zone Management Act, Section 404 of the Clean Water Act, and programs related to flood insurance, flood control, and fisheries. Independent research leading to a final presentation and paper will be required on topics of your choosing relating to the above programs or beyond, including but not limited to hurricane protection, private development, restoration, living marine resources, and impact of oil and gas activities. One weekend will be spent at a coastal research station in Terrebonne Parish. Grades will be based primarily on the research presentations and papers, with an up to two step adjustment for class and TWEN participation. Environmental Law: Natural Resources is recommended as a pre- or co-requisite. (3 credits)

### **Environmental Law: Endangered Species & Biodiversity Seminar**

This course examines the law and policy of endangered species and biodiversity protection in the United States, and at your option abroad. It begins with four classes in conservation biology which underpins

the law of this field every step of the way. We then turn to the Endangered Species Act, the “pit bull” of environmental law, with impacts on natural resources, land use and pollution control across the board, and then to emerging concepts in biodiversity conservation including indicator species, biological corridors, and ecosystem management, capped at mid-term by a one-hour exam. The second part of the course will be taught by students based on research projects, leading to final papers. Grades will be determined by class and TWEN discussion, the mid-term exam, and the research papers. No prerequisites, but Natural Resources law or equivalent is useful and recommended. (3 credits)

#### **Environmental Law: Hazardous Wastes & Substances**

No course description available.

#### **Environmental Law: Historic Preservation Seminar**

This seminar will present a national, state and local perspective on historic preservation in a broad sense, including protection of the urban environment and of archaeological, cultural and other historic resources. It will examine laws dealing directly and indirectly with preservation, and the institutions that implement them. The City of New Orleans provides rich material for this examination. Students will be required to research selected topics and to present their findings orally to the class and in a substantial final paper. Grade will be based on research paper, oral presentation of paper topic, class participation and attendance. (2 credits)

#### **Environmental Law: International**

This course examines the basic international legal setting for the protection and management of the environment. It discusses how international law is made and applied, the role of international environmental regimes or institutions, transboundary liability and compensation, enforcement strategies and compliance control mechanisms. Major themes of the course include human rights and the environment, free trade and environmental protection, the financing of global environmental protection measures, the protection of biodiversity, North-South issues generally, as well as various regulatory regimes for the protection of the global commons and internationally sensitive natural resources, including the Climate Change Convention. (3 credits)

#### **Environmental Law: Natural Resources**

This course is one of the two foundation courses in environmental law and presents a survey of programs that govern the use and protection of natural resource systems, including energy, mining, timber, grazing, transportation and water resource development. Special attention is given to the National Environmental Policy Act, and to management statutes for public lands, forests, parks, refuges, wilderness areas, and endangered species. (3 credits)

#### **Environmental Law: Pollution Control**

This course introduces the basic pollution control statutes, the Clean Water Act, the Clean Air Act and hazardous waste laws. It examines and contrasts their objectives, their regulatory schemes and their relative successes. Special emphasis is given to comparing and critiquing the major regulatory approaches to pollution control: command and control regulation according to health-based or

technology-based standards and economic incentive schemes, as well as statutory interpretation. (3 credits)

### **Environmental Law: Water Resources Law & Policy**

This course will cover the role and influence of the legal system on the use, allocation, and stewardship of water resources in the United States and Louisiana. Since the field of water resources management is rapidly evolving to accommodate storm protection, ecosystem restoration and sea level rise an understanding of the policies that underlay our current laws and the factors that are influencing current policy and law-making will be an important part of the course's focus. Course materials will include law cases and related materials which must be read before class. The course will be lecture oriented with occasional guest lecturers with specific experience in development of water resources law and policy. Students will be asked to participate in one group project in which they will be asked to develop, present and defend a position paper on some aspect of the water resources management challenges arising in coastal Louisiana. (2 credits)

### **Environmental Litigation**

This course offers a trial practice workshop in environmental litigation. Its classes follow the progress of a typical case from client interviews to complaint and answer, discovery, expert testimony (direct and cross), motions and oral argument. Grading will be based on written and oral exercises; no examination. This course was previously taught as Toxic Tort Litigation Practice. (1 credit)

### **Health Care Law & Regulation**

The course begins with an overview of the U.S. health care industry and then addresses the law that affects major portions of that industry and those it serves. Relationships among individual health care providers (e.g., physicians), institutional providers (e.g., hospitals, nursing homes, clinics), and patients of those providers are explored, as are various statutory entitlements (e.g., Medicare, Medicaid, EMTALA), medical malpractice concepts, preemption effects of ERISA, patient privacy/consent issues including HIPAA mandates, and the policing of fraud and abuse. The class will examine the health law that resulted from the health reform legislation signed by the president in March, 2010. Finally, the course will review how the antitrust laws impact the structure and conduct of health care providers. (3 credits)

### **International Human Rights**

In this course we will explore the place of human rights in United States and international law. More broadly, we will closely examine and evaluate the entire human rights "regime," that is to say the norms, principles, rules, and decision-making institutions that occupy and organize this issue area within the broad sphere of international relations. The course is designed to provide students with a confident grasp of: the substantive norms of human rights; the philosophic basis for the concept of rights and the leading points of controversy about the existence or character of certain rights that appear in conventional enumerations; the diverse procedures available at the global, regional, and national level for defense and promotion of human rights; the subtle and not-so-subtle ways in which ideological and material interests influence the definition and enforcement of rights; the ways in which policy makers

attempt to reconcile the demand for human rights enforcement with more traditional foreign policy objectives. (3 credits)

### **Land Use Planning**

No course description available.

### **Law of the Sea**

This course reviews the public order of the oceans, i.e., the basic principles of international law, both customary and treaty-based, that apply to maritime spaces, such as the territorial sea, the high seas, continental shelf, seabed, and ocean floor. The course analyzes the allocation of jurisdictional powers among individual states and the international community at large over the various maritime zones involved; the use and management of ocean resources, such as regional and global fisheries regimes and seabed mining; marine environmental protection and pollution control; military uses of the ocean; and freedom of navigation. Special consideration will be given to enforcement issues related to drug trafficking and violations of marine environmental protection or fisheries regulations. (3 credits)

### **Law, Sustainability & Development**

This course will be jointly offered to students in the School of Law and International Development graduate students enrolled in Payson Center degree programs. The course will ask students to explore three central questions: (1) how can and do law and regulation promote -- or hinder -- sustainable development; (2) to what extent are national development goals at odds with sustainability goals and (3) can sustainable development law and regulation promote a more just, equitable society? Students will consider the meaning and interpretation of the term "sustainable development" through various lenses – e.g., trade and the environment, human rights, property rights. The materials and assignments will be organized around a case study involving articulation of a protected area and biodiversity regulation in a rapidly urbanizing area in a less-developed country in the Americas. This course is not graded anonymously. The grade in this course will be based 80% on written work and 20% on an oral presentation. Of the 80% written work, 60% will be done as part of a team. (3 credits)

### **Legislative & Administrative Advocacy**

Legislative and Administrative Advocacy examines how bills become law and how agency rules are promulgated. Each student will research and draft a proposed bill or agency regulation on behalf of a client group, present it in a mock hearing, and write a research paper. Grades are based in equal proportions on the draft of an instrument, mock hearing, and research paper; there is no examination. Class meetings will cover legislative and administrative enactment and promulgation procedures, research methodologies, drafting techniques, constitutional restrictions, and public access to information. This clinical course is open for enrollment by second and third year students. Students will register via the normal registration procedure; no application process is required. Interested students are encouraged to get on the waitlist and attend the first class, when decisions will be made about enrollment in the course.

### **Marine Pollution**

This course will cover U.S. legislation, administrative regulations, state legislation, and case law in the

area of marine pollution. This course counts as credit for both the Environmental and Maritime certificates. (2 credits)

**Sustainable Energy Law & Policy**

This course is an introduction to basic issues in Energy Policy and Law, to include utility regulation, new carbon-based sources via oil shale and fracking, fast-rising renewable sources such as wind and solar, and regulatory responses to climate change. Students will survey the impact of energy production, transmission, and consumption on human health and the environment, and examine how the law is evolving to manage that impact through more sustainable paradigms – including policies to limit fossil fuel externalities, expand renewable and clean energy alternatives, and promote consumer conservation and efficiency. (2 Credits)

**Tax: Natural Resources Tax**

No course description available.

**Toxic Tort Theory & Practice**

This course will study the characteristic features of toxic tort litigation, such as the temporal separation between wrongful conduct and the appearance of injury, novel issues of medical causation, property valuation, environmental restoration and hazard assessment, and the difficulty of fashioning remedies. The impact of these core problems on doctrinal, procedural and evidentiary matters will be explored. Special attention will be given to the resolution of practical problems in the face of developing science, and unsettled law. (2 credits)

## Draft Inventory of Sustainability Courses

### School of Liberal Arts

#### 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.**

Undergraduate courses are numbered 1000-4999. Graduate courses are numbered 5000 and above.

Draft list compiled by Jamie Garuti, SLA 2015, by reviewing the Tulane Course Catalog at <http://catalog.tulane.edu/content.php?catoid=41&navoid=1639>. Spring 2014, Fall 2013 Service Learning courses added by Liz Davey from lists obtained from Center for Public Service. Spring 2013, Fall 2012 Service Learning courses added by Colleen Large, SLA 2016, from lists obtained from Center for Public Service. The draft list was distributed by Dean Carole Haber to SLA Chairs and Directors for review in June 2014.

- **African and African Diaspora Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **ADST 1550 New Orleans Hip Hop** (Service Learning- Fall 2012): This course surveys major locations, musical influences, and aesthetic elements of New Orleans hip hop culture, with special emphasis on Bounce and the defining features of local spoken word. The course includes a required service learning component, which guides students through the completion of a public event designed to showcase New Orleans hip hop's educational and entertainment value.
    - **ADST 3200 Black Women's Health** (Service Learning-Mandatory, Fall 2013) An exploration of some of the central themes of African studies

through the study of selected issues arising out of the African moral, cultural, political, and religious experience.

- **Anthropology:**

- **Sustainability courses:** no sustainability courses offered

- **Courses that include sustainability:**

- **ANTH 3140/6140 Primate Behavior and Ecology:** An introduction to the social and physical diversity of the Order Primates, emphasizing the biology, ecology, and behavior of living nonhuman primates. Social structure will be explored from an evolutionary perspective, and the ecological and social constraints on behavioral flexibility will be examined. Examples will cover both field and laboratory investigations of nonhuman primates.
- **ANTH 3190 Economic Anthropology:** The study of economic behavior in band, tribal, and peasant societies. Emphasis on the impact of culture and environment on economic decision-making in the Third World. Competing theoretical approaches, particularly evolutionary, ecological, substantivist and Marxist are critically reviewed.
- **ANTH 3360 Anthropology of Cities:** This course focuses on anthropological approaches to cities and urban life. Topics include the cultural meanings of public space and the built environment, processes of social differentiation and class formation, the role of capital, and the emergence of social movements. The second half of the course is organized around a comparison of four ethnographic case-studies of cities outside the United States and Europe. Throughout the semester, studies will also discuss how anthropological approaches may be applied to New Orleans.
- **ANTH 3395 Ethnography of Performance and Identity in New Orleans and French Louisiana:** This course focuses on symbolic meaning in the vernacular expressive culture or folkloric forms of community groups in New Orleans, French Louisiana, the Gulf South region and selected out migrant locations. It addresses differential identities of tribal, ethnic, regional, religious, linguistic, occupational, class and gender affiliations—and examines aesthetic forms as a primary means to do so. Some of these are largely intangible such as music and dance, ritual and festival, narrative and jokes; others are tangible or material culture to varying degrees such as the built environment (houses, boats, landscape use), crafts, costumes and cuisine. All are examined via ethnographic and historical writing, oral histories and documentary media as to how shared cultural knowledge is performed in an array of contexts. These include dancehalls, Carnival parades, second lines, work settings,



festivals, neighborhood museums, sacred spaces and so on. Note: Capstone.

- **ANTH 3520 Diaspora Yoruba** (Service Learning-Mandatory, Spring 2014): Familiarize students with the fundamentals of Yoruba language and culture; show students how Diaspora dynamics have changed Yoruba language and culture; use Diaspora Yoruba to teach students the principles of language death and innovation involving tones, vowels, nasalization, word formation, and sentence structure
- **ANTH 3560 Environmental Archaeology:** The course examines the fundamentally important relationship between human behavior and environmental change in the past. It looks at both the ways in which humans have responded to their environmental circumstances and the ways in which human activities have influenced environmental conditions at various scales. The course explores methods for learning about environmental conditions in the past and the nature of human interaction with the environment. The course also presents basic information on some particularly important topics concerning past human/environment interactions, including causes of global climate change, the origins of agriculture and animal domestication, agricultural landscape modification and environmental over-exploitation, and Holocene changes in human health, including the origins of modern disease epidemics.
- **ANTH 3700 Environmental Anthropology:** Critically reviews case studies of ecosystemic and energetic relations between human populations, cultures, and the environment in diverse ethnographic settings of the world, such as Amazonia, the Great Basin, New Guinea, and Southeast Asia. Examines the historical emergence of ecological paradigms in anthropology. Compares the modern contributions of cultural ecology, evolutionary ecology, ethnoecology, and historical ecology. Evaluates potential contributions of ecological anthropology to general ecology.
- **ANTH 3710 Historical Ecology of Amazonia:** Interactions between local peoples and Amazonian landscapes from prehistory to the present. Amazonian landscapes as an analytic unit will be examined from the interdisciplinary perspective of historical ecology. Changes and development of forests and savannas since the arrival of human beings. Historical, ecological, cultural forces involved in biological and edaphic diversity in modern forests. Long-term effects of prehistoric and historic human occupations and manipulation of landscapes. Implications for conservation and development.
- **ANTH 3720 Adaptation and Human Variability:** Biological adaptations of living human populations to their environments, and the interaction of these adaptations with cultural patterns. Relationships of body size, form, and composition to climatic and nutritional factors in

various geographical groups of modern man. Major adaptive problems facing the human species are discussed and implications for the future explored.

- **ANTH3770: Global Vietnam** (Service Learning-Mandatory, Spring 2013): This course examines how Vietnamese-American identities are constructed and performed. The course is divided into three sections. In the first section, "Diaspora and Transnationalism", we will examine how the two theoretical concepts may be illuminated through fiction, memoir, and autobiography. The second section, "Reconstructing Identities", provides students with a broad overview of Vietnamese nationalism in the 20th century and the subsequent dispersal of peoples after 1975. The third section, "Public memory and Cultural Politics", considers how collective identities are represented. Students will have the opportunity to learn about Vietnamese-American experiences in New Orleans and ongoing projects related to social justice and civic engagement.
- **ANTH 6430 Archaeology of Cultural Landscapes:** Sustainability is integrated into the course because it explores the archaeology of landscapes, the effects of humans on ancient environments, and the social, and even sacred meanings of architecture, monuments and places in the past. Landscapes are an outcome of natural processes and cultural activity. Like archaeological sites, landscapes are palimpsests of the many forces of change that create them. Archaeologists of course do study ancient monuments and settlements, but they are also interested in the relationships between sites, patterns of movement between and through them, and the ways that past societies understood the landscapes in which they lived.
- **ANTH 6340 Medical Anthropology:** Survey of the relationships among disease, curing, culture and environment. Topics include problems of adapting modern medicines to diverse cultures; explication of the social and cultural correlates of physical and mental health and disease (social epidemiology); cross-cultural variation in disease concepts, medical practices, role of patients, and mental health; health and nutritional implications of planned culture change; contributions of anthropology to health-policy decisions of development organizations.
- **ANTH 6710 Historical Ecology of Amazonia:** Interactions between local peoples and Amazonian landscapes from prehistory to the present. Amazonian landscapes as an analytic unit will be examined from the interdisciplinary perspective of historical ecology. Changes and development of forests and savannas since the arrival of human beings. Historical, ecological, cultural forces involved in biological and edaphic diversity in modern forests. Long-term effects of prehistoric and historic human occupations and manipulation of landscapes. Implications for conservation and development.
- **ANTH 6097 New Orleans English** (Service Learning-Mandatory, Spring 2014)
- **ANTH 7190 Economic Anthropology:** The course emphasizes the impact of culture and environment on economic decision-making in the

Third World. The course examines economic behavior in band, tribal, and peasant societies. Competing theoretical approaches, particularly evolutionary, ecological, substantivist and Marxist are critically reviewed.

- **ANTH 7700 Ecological Anthropology:** The course critically reviews case studies of ecosystemic and energetic relations between human populations, cultures, and the environment in diverse ethnographic settings of the world, such as Amazonia, the Great Basin, New Guinea, and Southeast Asia. It examines the historical emergence of ecological paradigms in anthropology. The course compares the modern contributions of cultural ecology, evolutionary ecology, ethnoecology, and historical ecology. It evaluates potential contributions of ecological anthropology to general ecology.
  - **ANTH 7720 Bioanthropology of Modern Humans:** The course because major adaptive problems facing the human species are discussed and implications for the future are explored. Biological adaptations of living human populations to their environments, and the interaction of these adaptations with cultural patterns are studied. Relationships of body size, form, and composition to climatic and nutritional factors in various geographical groups of modern man.
- **Art History and Studio Art:**
    - **Sustainability Courses** – no sustainability courses offered
    - **Courses that include sustainability:**
      - **ARST 2380 Intermediate Printmaking: Screen Print** (Service Learning-Mandatory, Fall 2013): An in-depth exploration of the printmaking medium covering technical, historical, and conceptual issues. A strong emphasis is placed on students developing a personal voice through their work. An intensive study on fine art silk screen.
      - **ARST 3020 Sign Painting and Typography** (Service Learning-Mandatory, Spring 2014)
      - **ARST3650: Mural Painting** (Service Learning-Mandatory, Spring 2013)
  - **Asian Studies:**
    - **Sustainability courses:** no sustainability courses offered
    - **Courses that include sustainability:**
      - **ASTC 1020 Beginning Chinese II** (Service Learning-Optional, Fall 2013, Spring 2013): A continuation of the objectives presented in Beginning Chinese I. Attention is given to practical and topics-oriented conversational skills, moods of speech, and complex level of syntax.
      - **ASTC 2030 Intermediate Chinese** (Service Learning – Optional, Fall 2012): An intensive study of conventional Chinese characters, additional grammar, and an exposure to simplified Chinese characters. Continued emphasis on reading, writing, listening, and speaking abilities.
      - **ASTC 2040 Intermediate Chinese II** (Service Learning-Optional, Spring 2014, Fall 2012): A continuation of the objectives presented in

Intermediate Chinese I. Attention is given to improvement of the student's ability to read and write in modern Chinese.

- **Classical Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **CLAS 3090 Law and Society in Ancient Rome** (Service Learning-Optional, Spring 2014, Spring 2013): This course investigates the social and cultural values of the Roman world by studying Roman private law. The course also examines the development of Roman courts in the empire and the influence of Roman law on modern legal systems.
    - **CLAS 3170 Greek Art & Archaeology** (Service Learning-Optional, Spring 2014, Fall 2012): Greek arts (architecture, sculpture, and painting) and material culture in the light of social, intellectual, and historical developments from the end of the Bronze Age (ca. 1200 B.C.E.) to the end of the Hellenistic period (31 B.C.E.).
- **Greek:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Latin:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Communications:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **COMM 3140 Cross-Cultural Analysis:** A critical examination of communication in intercultural, interethnic and international contexts. An overview of models and approaches designed to explain cultural differences in communication, with emphasis on the dimensions of symbolization, acculturation, prejudice, stereotyping and ideology. Conceptual frameworks are applied and tested within a range of cultural populations as defined by race, ethnicity, gender, physical disability, sexuality, socio-economic class and geographic location.
    - **COMM 3260 Media Analysis** (Service Learning-Optional, Fall 2013): The study of the structure of media industries and their contents based on humanistic and social science approaches. Theorizes major trends in industry ownership and practices; the effects of political economy on textual symbols, discourses and genres; the function of media programming in reinforcing or altering perceptions of ideas, events, and people. Familiarizes students with research methods for analyzing media.
    - **COMM 3290 Digital Production for Nonprofits** (Service Learning-Mandatory, Fall 2013): This course emphasizes the role of communication in building understanding and nurturing change. It will consider the art of expressing ideas combined with the science of transmitting information. In this hands-on experience, students will analyze a communication situation

or problem and then design and implement a communication plan that will help the nonprofit community partner achieve positive social change, fulfill its mission, advance its program and policies, and make its value known.

- **COMM 3400 Communication and Leadership in Groups and Organizations** (Service Learning-Mandatory Spring 2014, Spring 2013)
  - **COMM 3510 Environmental Communication:** The purpose of this course is to provide an understanding and analysis of communication processes used in defining environmental issues and shaping environmental policies. Topics include defining nature and environment; diverse audiences and environmental messages; developing strategies for risk communication; and creating effective environmental campaigns. Case studies of successful and unsuccessful environmental communication will be examined.
  - **COMM 3650 Feminist Documentation and New Media:** A service-learning, praxis-oriented course in which students develop analytical and reflective skills by critiquing and creating feminist documentation in various media. Study of history and theory of feminist documentary filmmaking and new media will be complemented with learning production and post-production skills. Weekly volunteer work will be done with an organization serving women and girls in New Orleans.
  - **COMM 4200 Media Literacy/Media Educ II** (Service Learning-Mandatory Spring 2014, Spring 2013): This is the second semester of a two-semester course that introduces students to media literacy--what it is, media education, and basic media pedagogy. In the second semester, students put to use the media literacy knowledge gained in the first semester by applying those pedagogical considerations in the classroom, assessing student outcomes, and effectively teaching media literacy concepts.
  - **COMM 4820/6220 Creative Labor** (Service Learning-Optional Spring 2014): A detailed study of particular issues, problems and developments in the history, theory and criticism of communication. Topics may be drawn from any of the departmental areas of concentration, for example, the concept of invention, the rhetoric of religion, non-verbal communication, mass media and culture and similar themes. May be taken twice for credit on different topics. This course satisfies the capstone requirement.
- **Dance:**
    - **Sustainability courses:** no sustainability courses offered
    - **Courses that include sustainability:**
      - **DANC 3050 Environmental Performance:** Environmental Performance is an interdisciplinary course that may in any semester combine theatre, dance and other performing arts as these concern environmental issues. Students will study environmental topics and then use composition and improvisation techniques to create a performance project based on the environmental issues studies. All students must be interested in

collaborating and be willing to move. Dance experience is not necessary. Course may involve community partners and/or public service.

- **DANC 4900 Building Community through the Arts** (Service Learning-Mandatory, Spring 2014, Spring 2013): This course will be taught in coordination with courses offered at Xavier and Dillard Universities. The course examines the theory and practice of community-based arts, civic engagement in higher education, and the relationship between art and community development. Students will work in teams with local artists on Home, New Orleans?, a multi-disciplinary, art-and-community-development project grounded in 4 selected New Orleans neighborhoods, the 9th Ward, the 7th Ward, Central City and Lakeview.

- **Economics:**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**
  - **ECON 3320 Urban Economics:** A review of the determinants of the location, size, growth, and form of urban areas. Study of the major issues of contemporary urban life: physical deterioration, growth of ghettos, congestion, pollution, transportation, and land use.
  - **ECON 3330 Environment and Natural Resources:** An introduction to the economic theory of how and why people make decisions that have consequences for the natural environment and the availability of renewable and nonrenewable natural resources. Analysis will include valuation of pollution damages and controls, the use of environmental valuations to determine optimal rates of extraction and utilization of natural resources. The course will apply analytical results to current environmental and natural resources issues.
  - **ECON 3540 Development Economics:** An analysis of the problems of generating economic growth in less developed countries. Alternative strategies for promoting economic growth. The impact of the industrialized Western World on the economic development of poor countries.
  - **ECON 3590 Economic Development in Latin America:** An introduction to economic issues that are of particular concern to Latin America. Emphasis is placed on understanding the position of Latin America within the world economy by studying measures of development and poverty, discussing theoretical models of structural economic change, and examining changes in international trading relations.
  - **ECON 3810 The Economics of Labor:** A survey and economic analysis of some contemporary labor market issues. Topics include labor force participation and the economics of retirement, the supply and demand for labor, the demand for education and investment in human capital, unions and collective bargaining, the structure of compensation, occupational choice, job turnover and labor mobility, an introduction to theory of job search as well as various other theories of unemployment. The course focuses on theoretical and empirical aspects of labor economics and is

only peripherally concerned with institutional, legal or management aspects.

- **ECON 3820 Economics of Education** An examination of education from an economics viewpoint. Topics include school finance, school reform, factors that influence school outcome, efficient school size, and the relationships between public and private schools.
- **ECON 3830 Economics of Gender:** The goal of this course is to explore and understand the similarities and differences between men and women from economic perspectives. Based on economic theory and empirical analysis, this course examines how gender differences lead to different economic outcomes for the sexes and evaluates the effectiveness of government and corporate policies aimed to improve the welfare of women.
- **ECON 4500 Health Economics and Policy** Provides an overview of the field of health economics. Economic theories and tools will be used to study behavior and outcomes in health care markets. Institutional features of the U.S. health care system will be examined. General topics include the demand for health care, determinants and consequences of health, medical technology, the role of health insurance, the behavior of health providers, managed care, comparative health care systems, and health policy and reforms.
- **ECON 4600 Inequality and Poverty in Latin America:** Latin America is the region with the highest levels of income inequality and where inequality has been most persistent. Through comparative and in-depth country studies this course analyzes the dynamics of income inequality and poverty in the region focusing on the role of markets and the state. The course includes a review of quantitative methods to measure inequality and poverty and the theories and methods to analyze their determinants. Using a qualitative scorecard, students will learn to assess government efforts to reduce inequality and poverty.
- **ECON 4962 Economics of Poverty Analysis (Capstone Course):** This course presents an overview of poverty analysis and how it is applied by multilateral organizations. Topics include measuring poverty, analyzing its economic determinants, and assessing policies to reduce poverty. Using the World Bank's poverty assessments as a model, students will learn to prepare a basic poverty assessment for a developing country of their own choosing.
- **ECON 4970 Topics in Economic Development:** The course analyzes the economic challenges faced by low and middle-income countries in their quest for development and public policies meant to address those challenges. The course is divided into two parts. In the first part, the course examines what might cause some development strategies to succeed and others to fail. In the second part, the course analyzes how development strategies and government policies may result in equitable or inequitable outcomes.

- **English:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **ENLS 3620 Workshop in Creative Writing: Journalism** (Service Learning-Mandatory, Spring 2014): Intensive workshop in creative writing, usually with a visiting professor.
    - **ENLS 3620 Place-Based Storytelling in New Orleans** (Service Learning-Mandatory, Fall 2013, Spring 2013, Fall 2012)
    - **ENLS 3650 Aristotle in New Orleans** (Service Learning-Mandatory, Spring 2014, Fall 2013, Spring 2013, Fall 2012)
    - **ENLS 4011 Literature and the Environment:** The course examines the foundational American texts that explore the relationship between humans and the natural world, and that does so with an overt impulse toward conservation and ethical critique. With a strong foundation in environmental literature and ecocriticism, it turns to such topics as post-Katrina New Orleans, environmental justice, and science fiction. Authors include Henry David Thoreau, Mary Austin, William Faulkner, Edward Abbey, Rachel Carson, Ursula Le Guin, and others.
    - **ENLS 4030 Literary New Orleans** (Service Learning-Optional, Spring 2014): A study of literary works which are set in New Orleans or otherwise have connections with the city.
    - **ENLS 4830 Race, Class, and Gender:** Study of the textual representations of three forms of difference—race, class, and gender—and their intersections with issues of power and agency.
    - **ENLS4850: Makers and Motivations: Culture and Organizing in New Orleans** (Service Learning-Optional, Spring 2013): Study of the intersections and negotiations between cultural production and political institutions. Specific topics include literary representations of disease or poverty, and literature and the law.
    - **ENLS 4860 Food and Culture:** The course explores how food—its production, consumption, history, culture, pathways—so powerfully influences our sense of ethnic, communal, familial, and personal identities. The readings will be interdisciplinary and cross-cultural and students will be encouraged to pursue additional research and experiential routes into the cultures of food from macro-level geopolitics to micro-level impacts and, if the service learning option is approved, civic engagement. Texts include *Food and Culture: A Reader* (Counihan and Van Esterik, 3rd ed.), *If I Can Cook/You Know God Can*, *The Art of Eating*, and *The Botany of Desire: A Plant's-Eye View of the World* along with a selection of films and clips. (Service Learning-Optional, Fall 2013)
  
- **Environmental Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**



- **EVST 1010 Introduction to Environmental Studies:** (Service Learning-Mandatory, Spring 2014)
  - **EVST 4210 Seminar in Historical Ecology:** Temporal and spatial dimensions in the relationships of human societies to local environments and the cumulative global effects of these relationships are studied. Historical ecology contains core postulates that concern qualitative types of human-mediated disturbance of natural environments and the effect of these on species diversity, and environmental quality generally, among other parameters. A central term used in historical ecology to situate human behavior and agency in the environment is the landscape, as derived from historical geography, instead of the ecosystem, which is from systems ecology. The contribution that applied historical ecology can make to restoration of past landscapes will be explored.
  - **EVST 4650 Senior Colloquium in Environmental Studies**
- **Film Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **French:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **FREN 1010 Beginning French** (Service Learning- Optional, Fall 2012): An introduction to the five skills of language acquisition: reading, writing, listening, speaking, and cultural understanding.
    - **FREN 1020 Elementary French II** (Service Learning-Optional, Spring 2014, Fall 2013, Fall 2012): A continuation of the objectives presented in French I.
    - **FREN 2030 Intermediate French** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012): Intermediate French language with emphasis on reading, conversation, and composition.
    - **FREN 3010 Racial Injustice and Multicultural Community-Building in post-2005 Paris and New Orleans** (Service Learning-Mandatory, Spring 2014)
    - **FREN 3150 Advanced French Grammar and Composition** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012): The study of the sound system of French for improving pronunciation. Students learn the fundamental concepts of phonetics, phonemics, and contrastive analysis while also practicing French pronunciation and learning to convert French spelling into phonetic transcription using the International Phonetic Alphabet. Independent work in the language laboratory is an important component of the course.

- **FREN 4050 Teaching French** (Service Learning-Mandatory, Spring 2014, Spring 2013)
  - **FREN4110: Field Research on French in Louisiana** (Service Learning-Mandatory, Spring 2013) An introduction to the French-related language varieties spoken in Louisiana: Cajun, Creole and Colonial French. Examines the history of their implantation and development in Louisiana, their basic structural features, and the main sociolinguistic issues surrounding their use. Attention will also be given to language planning measures currently being taken to revitalize the French language in the state.
  - **FREN 4160/6160 Translation Theory and Practice** (Service Learning-Mandatory, Spring 2014): This course will provide students with the tools to translate a variety of types of texts (mostly literary, but also legal, journalistic, commercial, etc.) and to introduce them to translation theory as it relates to the problem of translating cultural difference and to the issues of originality, authorship, and the ownership of the text. Students will translate from French to English as well as from English to French. Course taught principally in English. Reading knowledge of French required.
- **Gender and Sexuality Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **GESS 2900 Introduction to Gender and Sexuality Studies:** This course is an interdisciplinary introduction to gender and sexuality studies. Its primary focus is critical perspectives on the social construction of gender and sexuality, inequalities on the basis of gender and sexuality, activism around issues of gender and sexuality, and how gender and sexuality shape and are shaped by other systems of inequality such as race, ethnicity, class, religion, nation, region, and age.
    - **GESS 3500 Identity, Difference, and Social Inequality:** This course is an interdisciplinary exploration of how gender and sexuality are implicated in, mediate, or are mediated by the social and cultural construction of racial and ethnic identities and cultures, the formation of economic structures and class cultures, and race, ethnic, and class inequalities.
    - **GESS 4500 Gender, Archives, Musical Culture (Service Learning-Optional, Fall 2013):** This course focuses on developing knowledge of major theories of archives, on fostering research skills by engaging with materials, and on involving students in archival work that will allow questions about gender. Exploring theories and practices of archives, the

course takes students through the history of archives, with special attention to women as keeping, and represented in, scholarly collections.

- **GESS 4930 Black Feminist Thought** (Service Learning- Fall 2012)
  - **GESS 4950/6950 Advanced Sexuality and Queer Theory:** This course is an advanced seminar in sexuality and queer theory. The primary focus is critical engagement with social, political, and cultural theories of the social construction of sexuality and sexual identities, and of the sources, causes, and effects of sexual inequality and strategies for reducing or eradicating inequality. While emphasis will be placed on theories of sexuality, substantial time will be spent on theories of how sexuality is implicated in and supported by other forms of inequality such as gender, race, ethnicity, and class.
  - **GESS 4960/6960 Advanced Gender and Feminist Theory:** The primary focus of this course is critical engagement with social, political, and cultural theories of the social construction of gender and gender difference, and of the sources, causes, and effects of gender inequality and strategies for reducing or eradicating inequality. While emphasis will be placed on gender difference and inequality, substantial time will be spent on theories of how gender is implicated in and supported by other forms of inequality such as sexuality, race, ethnicity, and class.
- **German and Slavic Studies:**
    - **Sustainability courses:** no sustainability courses offered
    - **Courses that include sustainability:**
      - **GERM 2030 Intermediate German 1** (Service Learning- Optional, Fall 2012): Continues to develop proficiency in the four language skills (listening, reading, speaking, and writing) at the intermediate level. Further introduces students to contemporary German culture.
      - **GERM 3050 Adv. Grammar & Composition** (Service Learning- Optional, Spring 2014, Spring 2013): Course combines language acquisition with content-based instruction for varying topics. With respect to language learning, the course aims at reinforcing and expanding students' proficiency primarily in writing. In this endeavor, the course offers a thorough and comprehensive review of German grammar at the advanced level, including principles and distinctions not usually covered in lower and intermediate courses. Class activities will include discussions, oral reports, and directed compositions.
      - **GERM 4170 German New Orleans** (Service Learning- Optional, Fall 2012)
  - **History:**
    - **Sustainability courses:** no sustainability courses offered

- **Courses that include sustainability:**
  - **HISB 3250 Archiving Africa** This is an advanced course in historical methods that uses a service-learning component to enhance student understanding of historical materials, archives and how these connect with the larger community. In this course, students will focus in particular on materials related to African history found in New Orleans archives, allowing students to develop an understanding of the historical links between the local community and the continent of Africa. Moreover, students will consider the methodologies used to preserve the various histories of Africa and consider how these methods can be used for other under-represented communities, such as found in New Orleans. (Service Learning course)
  - **HISB 4210 History of Development in Africa** This course focuses on development as a structural element of the “modernizing” of African societies in the nineteenth and twentieth centuries. As the subtitle suggests development has most often been discussed as a function of western interaction with the continent of Africa. Yet, Africans have worked to develop their own communities, nations and continent as well. For every western “development” project led by westerners, it is Africans who implement the project and it is Africans who are simultaneously subjects of the projects. Development is almost always framed as “projects” implying a temporary element to the changes being created by these projects, even when they are marked by permanent structures. This course explores the historical ways in which the West has used the notion of development and its predecessor the civilizing mission to reshape African societies into a Eurocentric model of “modernity”. Yet African societies have not been pliant accomplices to this transformation and we will explore African responses to notions of development – both historically and in the present day. In order to understand African and Western responses to development we will examine pre-colonial views of communal support in African contexts in addition to Western ideas that fuel development such as Christianity and the civilizing mission and the concepts of progress and modernity.
  - **HISE 2170 19th Century Europe** (Service Learning-Optional, Spring 2014): Explores the quest for popular and national security in an age of radically shifting material circumstances deeply influenced by concepts of political and social equality.
  - **HISE 2330 Modern Britain** (Service Learning-Optional, Spring 2013): A survey of the political, social and economic development of Britain from 1760 to the present. The course will examine how and why Britain became

the world's greatest economic and imperial power, and in what ways it may have suffered a decline in the 20th century.

- **HISE 3311: History of Gardens, Parks and Green Spaces** This course examines the creation of gardens, parks and public green space in Europe and the Americas from 1500 to the present day. Gardens and parks have fulfilled utilitarian and aesthetic goals simultaneously, though the two could often conflict. Cultivated green space is a powerful setting for human life. Thus, we will study not just the historical evolution, technology or art form of gardens and parks but will also explore what they mean to people. (Service Learning)
- **HISU 2620 The New South** (Service Learning-Optional, Spring 2014, Spring 2013): An examination of the economic, political, cultural, and intellectual forces that have shaped the American South since the Civil War. Central themes include the rise of sharecropping and tenancy, the struggle for civil rights, the emergence of two-party politics, and the metamorphosis of popular values and social norms triggered by the events of the 1960s. The course will explore the paradox of continued self-conscious regional identity in the face of constant internal change.
- **HISU 2910 US Immigration History** (Service Learning-Optional, Fall 2013)
- **HISU 3100 New Orleans and Senegal, 1400-present** New Orleans & St. Louis, Senegal in Africa were both founded as French colonies. Explore the connected, comparative histories and cultures of these 2 cities. (Service Learning)
- **HISU 3913 History of Reproductive Health** (Service Learning-Mandatory, Spring 2014)
- **HISU 3932: Social History of Medicine in the U.S.** This course examines how race, gender, and class have influenced Americans' interactions with healthcare and understandings of sickness and health. Students study both the etiology of disease and the political, social, and economic transformations that have influenced Americans' ability to receive health care services.
- **HISL 3850 Popular Culture and the Rise of Consumerism:** This course examines the development and meaning of popular and consumer culture in American history beginning in the 1830s and extending through the 1990s. Consumer culture in this course is defined as the commercialization of leisure and the mass arts, the growth of advertising and the creation of a service economy. It investigates the ways in which historians have employed various theories about the social and cultural meanings of consumption in order to understand different historical

problems. Topics of discussion will include how gender and race are expressed and re-figured through the selling of entertainment as a commodity; how ideas about democracy have been fundamentally altered within the context of a consumer culture; and the symbolic uses of commodities over diverse periods.

- **HISU 6912 Wilderness in the North Am. Imagination** Early American colonists thought wilderness was hell, while Americans today often think wilderness is heaven. Why? And so What?
  - **HISL 6600 Peasants, Rebellion and the State in Latin America:** This seminar explores the history of peasants, rebellions and revolution in modern Latin America. Attention will focus on peasant desires and motivations as Latin America has become increasingly urban and states have grown in size and strength.
  - **HISU 6610 The Old South** (Service Learning- Fall 2012)
  - **HISL 6610 Modernity and its Discontents in Latin America:** This class explores the history of modernity, modernization and underdevelopment in Latin America since the 19th century. Key themes will include labor and industrialization; urbanization and the middle class; citizenship and ethnicity; and state formation.
- **International Development:**
    - **Sustainability courses:**
      - **IDEV 1010 Introduction to Development** (Service Learning-Optional, Spring 2014; Mandatory-Fall 2013, Fall 2012): This course is designed to give the students a broad-based understanding of the international issues and the goals and methods of international development since World War II.
      - **IDEV 3200 Approaches to Sustainable Development:** This course is designed to examine the impact of macroeconomic policy and political structure on environment, gender, communications, modernization and cultural change, basic needs, democratization, and appropriate technologies. (Service Learning-Optional, Spring 2014, Fall 2013, Fall 2012)
      - **IDEV 3330 Social Entrepreneurship and Development** (Service Learning- Optional, Fall 2012)
      - **IDEV 4951 Food Security, Sustainable Development and Social Organization:** As urbanization continues to take populations further from their food sources, understanding framework of modern food production and securing food at its source has become critically important. The history of the transformation of food from a locally produced commodity to a nationally and internationally traded good largely results from

technological innovations which have increasingly over the past centuries increased production. As more of us have become distant from the environmental costs associated with food production we have also become less aware of how the degradation of the environment is far away from most of our lives and we therefore pay little attention to it. Technology has changed not only how people eat, but also where they live, how far they had to travel, and their social and economic relations with those around them and their values associated with the land. This course will seek to understand these changes, and analyze the changing world of food security and local food production.

- **IDEV 6640 Sustainable Human Development:** Sustainable Human Development (SHD) is designed to help students learn some of the basic issues of international development. While the concepts are certainly not perfect, or even complete, the standards and measures are constantly evolving. The ability to describe how societies develop is changing as we experience successes and failures in efforts to direct development. These concepts can be combined to build a flexible framework that is adaptive to the shifting development landscape.
- **IDEV 6917 Sustainable Resource Management of Global Manmade Waste:** A weekend experience with case studies and exemplary models, emphasizing prevailing public policy and latent economic challenges for mitigating incipient environmental public health threats from ubiquitous manmade waste, which can impede, even stifle, steady economic growth of developing nations, struggling to enhance the quality of life and to raise living standards. Continuous resource management and manmade waste recovery are viewed as dynamic interdependent processes for safeguarding environmental public health, while encouraging and attracting international investments and commerce. This course combines individual research assignments, case study teams, and class presentations to challenge participants to propose sustainable business models for the reuse of treated waste, supportable in an emerging economy, while catalyzing entrepreneurship, growing new industries, plus promoting trade association.
- **IDEV 6918 Law, Sustainability and Development:** This course will explore how law and regulation promotes or hinders sustainable development; to what extent national development goals are at odds with sustainability goals; and if sustainable development law and regulation promote a more just, equitable society. In addition, assigned readings will consider the meaning and interpretation of words and terms such as “sustainability,” “development,” and “sustainable development” through

various lenses – trade and the environment, human rights, property rights, country studies, and so on.

○ **Courses that include sustainability:**

- **IDEV 3300 Social Entrepreneurship and Development** (Service Learning-Optional, Fall 2013)
- **IDEV 4230 Food Aid and Food Security in Humanitarian Settings:** This course explores the dynamics of the use of food aid, the largest single component of humanitarian emergencies. The course will review policies that guide the use of food aid, as principal controversies surrounding the use of food aid in emergency and transition settings. It will also explore assessment techniques used to gauge the vulnerability of affected populations and their needs for food based interventions, and explore the food aid management system and its logistics. The course will last two weeks.
- **IDEV 4280 Urban Resilience to Climate Change:** This course will explore the concept of resilience in urban communities in the context of the growing challenges presented by global climatic change. Using a multidisciplinary approach, students will address the political, economic, and environmental issues that urban populations will face with the increase of natural disasters and the decrease of available natural resources. Using case studies from around the world, students will explore pragmatic solutions and urban planning techniques to address current and future challenges.
- **IDEV 4950 Environment and Development:** This course identifies potential environmental problems that may arise during development while analyzing global and local environmental problems developing countries face serious environmental challenges such as resource exploitation, rapid industrialization, disadvantageous trade, and labor. The class presents potential avoidance and mitigation measures that may be implemented to guide a developing economy toward responsible and sustainable development.
- **IDEV 4952 Women, Gender and Development:** This course surveys the gendered impacts of international development and globalization on the lives of women and men in different contexts. Drawing on feminist theory, this class approaches the concept of gender as both ‘out there’, influencing men and women in the developing world, as well as ‘in here’, impacting the theories, policies, and practices of development professionals. In particular, we will examine historical processes of marginalization in the global economy and analyze different approaches designed to address gender inequality and empowerment.



- **IDEV 4954 Latin American Development:** The course is organized around the emergent concept of sustainable human development and attempts to balance attention to contemporary economic, social, and environmental issues in Latin America. The course begins with the understanding that Latin America is both diverse and dynamic, and while distinct from other regions, it cannot be understood in isolation from global interactions. It will examine the history of development in the region and investigate divergent impacts and persistent inequalities among women and men, rural and urban, rich and poor, and different racial and ethnic populations.
- **IDEV 4955 Development in the Francophone World:** Students will acquire concrete knowledge of sustainable development's current applications in the francophone world. The course focuses on political, economic, and social aspects of development in francophone developing countries, especially in Africa. Topics of discussion include: historical and political heritage; French and European development practices with a focus on trade, investment, and aid; and the impact of globalization and migration on the regions in question. It will examine development programs in the areas of poverty, food security, education, human rights and gender equity, health, and the environment.
- **IDEV 4956/IDEV 6912 African Migrations & Development:** The course examines internal and external migration flows in Africa, their political, economic, social, cultural, and environmental causes and consequences, as well as their effects on development. It will analyze success stories of migrant integration, upward mobility and thriving businesses, in addition to tales of discrimination, crowded slums and camps where disease is rampant, education is scarce, and youth widen the ranks of the unemployed and revert to crime as a way of living and violence as a means of surviving. This course aims at understanding these patterns and exploring how migrant populations can be better integrated in new societies - in their home country or elsewhere - and become positive agents of change.
- **IDEV 6230 Food Aid and Food Security in Humanitarian Settings:** This is a two-week intensive summer course held in Rome, Italy. This course will explore the dynamics of the use of food aid, the largest single component of humanitarian emergencies. The course will review policies that guide the use of food aid, as principal controversies surrounding the use of food aid in emergency and transition settings. The course will also explore assessment techniques used to gauge the vulnerability of affected populations and their needs for food-based interventions. Lastly, the

course will explore the food aid management system and its logistics. Field visits will be conducted to the principal UN agencies involved in food aid as well as diplomatic missions that determine food aid policies.

- **IDEV 6670 International Political and Economic Relations:** In this new millennium of rapid change, globalization, and the privatization of international development, we seek to understand how political activity intersects with economic activity and how that nexus impacts the Global South. While the course title reads “international” political economy, we should acknowledge that “global” might be a more appropriate term, thereby including increasingly important non-state actors. Students use the concepts and theories of global political economy to analyze aid, trade, investment, development policy, monetary relations, and regional integration in order to understand how the world has worked in the past, is working now, and is likely to work in the future.
- **IDEV 6914 Microfinance & Microenterprise: Improving Women’s Businesses Internationally:** The course examines two of the most successful approaches to assisting women to improve their microbusinesses, increase their income, improve their families’ wellbeing, and increase their self-esteem. Microfinance is an innovative strategy of financing microenterprises and small businesses. It is designed to assist very low income and limited asset persons to grow their businesses over many loan cycles. This self-sustaining methodology has grown exponentially in the last two and a half decades and is now active in almost every country, whether developing or industrialized. Over a hundred million women worldwide have received loans. Yet credit alone is not sufficient to help most women grow their microenterprises. The second part of the course will take a gender perspective to examine how Microenterprise Development services help women to grow their businesses. While the emphasis in this course is on women’s development, these same methodologies have been used to assist men and young people in their enterprise development internationally. While the both methodologies are used in the US, the emphasis is on developing nations.
- **IDEV 6916 Certification & Development:** Discussion of the market-based development intervention of private certification in which a premium is paid to producers or service-providers who comply with a set of sustainability and labor practices. As membership is voluntary and compliance with standards is premised upon accountability and verification between the producer and a standard-setting body, certification constitutes a form of self-regulation within the marketplace

enabling ethical consumption. Through certification, Adam Smith's invisible hand is rendered visible and deliberate. The course will furthermore empirically examine the multidimensional impact of various product certification paradigms through the lenses of established sustainable human development frameworks. The advantages and disadvantages of particular certification attributes and contextual factors will be explored. The course's single paper will consist of designing a certification system for the production of a yet-to-be certified good or service tarnished with environmental or human rights issues.

- **IDEV 6917 Development, Commerce, and Environmental Protection:** A general examination of main concepts of Sustainable Development, trade and environmental protection and the analysis of some cases in order to apply the theoretical content to solving problems. This is an exploratory course designed primarily for students in a regular program of International Development.
- **IDEV 6920 Social Performance: Managing to Improve the Triple Bottom Line:** This course teaches social performance management (SPM), an institutionalized process of translating social mission into practice. It is easy for an NGO or for-profit institution to say that they are carrying out a social mission but how do they prove it and improve it? Students who are seeking ways to measure and manage to achieve a double bottom line (social and financial) or a triple bottom line (social, financial and ecological) will appreciate the practical skills that this course offers. Students will examine the Universal Standards for Social Performance Management, which offer a comprehensive list of essential practices to clarify and standardize SPM for microfinance institutions (MFIs), investors, and others. Developed through years of worldwide consultation, the Standards are a set of management standards that apply to microfinance institutions and other social enterprises.

- **Italian:**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:** no courses that include sustainability offered

- **Jewish Studies:**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**
  - **JWST 2220 Modern Jewish History** (Service Learning- Optional, Fall 2012): Analysis and interpretation of Judaism in modern times. The meanings of religiosity and secularity are explored through analysis of several Jewish responses to modernity: religious reform, Jewish socialism,

political and cultural Zionism, assimilationism. Integration of these diverse responses produces a coherent picture of how a religion is transformed through interaction with modern culture.

- **Latin American Studies:**

- **Sustainability courses:** no sustainability courses offered

- **Courses that include sustainability:**

- **LAST 1010 Introduction to Latin America I** (Service Learning-Optional Fall 2013, Fall 2012): Majors and minors in Latin American Studies must take LAST 101, a wide-ranging interdisciplinary discussion of Latin America with an emphasis on the 20th century. The course probes the social and cultural institutions and production of modern Latin America through the concepts of Encounter, Identity, Nation, and Welfare. Readings, lectures, discussions, and media presentations are integral components of the course. The objective of the course is to introduce students to the region, institutions, and cultural production of Latin America. Students will become familiar with the physical, political, and cultural boundaries of the region and then examine modern Latin America through the use of case studies, primary source materials, discussion and current research. Several sections of this course are offered during the fall and summer semesters. LAST 101 is designated a service learning course.
- **LAST 1020 Introduction to Latin American Studies II** (Service Learning-Optional and Mandatory, Spring 2014, Spring 2013): Majors and minors in Latin American Studies must take LAST 102, a wide-ranging interdisciplinary discussion of Latin America with an emphasis on the 20th century. The course probes the social and cultural institutions and production of modern Latin America through the concepts of Creativity, Exchange, Land, and Peoples. Readings, lectures, discussions, and media presentations are integral components of the course. The objective of the course is to introduce students to the region, institutions, and cultural production of Latin America. Students will become familiar with the physical, political, and cultural boundaries of the region and then examine modern Latin America through the use of case studies, primary source materials, discussion and current research. Several sections of this course are offered each spring semester. LAST 102 is designated a service learning course.
- **LAST 4960 Social Justice, Human Rights, and Civic Engagement in the Americas** (Service Learning- Mandatory, Fall 2013, Spring 2013, Fall 2012)

- **LAST 4961 Multidimensional Value Creation in Latino Social Enterprises: The Case of Urban Farming in New Orleans** (Service Learning-Optional and Mandatory, Spring 2013)
  - **LAST 4962 Environmental Inequalities in the Greater Gulf Coast Region** (Service Learning – Mandatory, Spring 2013, Fall 2012)
  - **LAST 4966 (or 4960) Service, Citizenship, and Education in the Americas:** no course description available (Service Learning- Mandatory, Spring 2014)
- **Linguistics:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **LING 3700 Second Language Acquisition** (Service Learning- Optional, Spring 2014)
    - **LING 4120 Brain & Language** (Service Learning- Optional, Fall 2013): Brain and Language touches on all of the subfields of linguistic analysis (syntax, semantics, phonology, morphology, pragmatics, and discourse) as they are affected by brain lesions and disease and thus qualifies as an excellent opportunity for the Linguistics.
- **Medieval and Early Modern Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Music:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **MUSC 1900 Music in New Orleans** (Service Learning-Optional, Spring 2014, Spring 2013): This course is intended as an introductory survey of New Orleans music, including jazz, brass band, Mardi Gras Indian, rhythm and blues, funk, and hip-hop, through an intensive exposure to existing research, field trips, and occasional visits from local researchers and musicians. Musical socialization--the role of young people in extending the city's musical traditions--will be a running theme throughout the course and will connect the course materials to the optional service learning project.
    - **APMS 2180, 2186 Orchestra** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013)
    - **APMS 2183 Marching Band** (Service Learning-Optional, Spring 2014, Spring 2013)
    - **APMS 2213 Voice** (Service Learning-Optional, Spring 2014, Spring 2013)

- **Musical Cultures of the Gulf South:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Philosophy:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **PHIL 1010 Intro to Philosophy** (Service Learning-Mandatory, Fall 2013): A general introduction to problems concerning knowledge, reality, and conduct.
    - **PHIL 1210 Elementary Symbolic Logic** (Service Learning, Fall 2013, Spring 2013, Fall 2012): The course concerns techniques of analyzing sentences and arguments by uncovering the formal structures and relations which underlie them. This involves translating ordinary language into the symbolic formulas of elementary logical systems and proving formalized arguments.
    - **PHIL 1030 Ethics** (Service Learning-Optional, Spring 2014, Fall 2013): A critical study of alternative theories of the good life, virtue and vice, right and wrong, and their application to perennial and contemporary moral problems.
    - **PHIL 2930 Philosophy and Gender** (Service Learning, Fall 2013, Spring 2013): Examination of philosophical issues not typically covered in existing courses.
    - **PHIL 3500 Buddhism** (Service Learning-Optional, Fall 2013): This course examines the metaphysical, epistemological, religious, and psychological dimensions of Buddhism, while also tracing its development from India into Southeast Asia, China, Japan, and the West.
    - **PHIL 3340 Humanity's Place in Nature:** This course will compare the predominant Western conception of humanity's place in nature with alternative conceptions, including those held by non-Western thinkers.
    - **PHIL 3560 Social and Political Ethics:** A study of the arguments and positions advanced by philosophers with regard to the need for and justification of social and political institutions and with regard to the character of human rights, justice, and the good society.
    - **PHIL 2931 Developments in Buddhism** (Service Learning-Optional, Spring 2013)
    - **PHIL 6130 Moral Psychology** (Service Learning-Optional, Fall 2013, Fall 2012): This course examines the metaphysical, epistemological, religious, and psychological dimensions of Buddhism, while also tracing

its development from India into Southeast Asia, China, Japan, and the West.

- **PHIL 6510 Theories of Economic Justice:** A study of alternative conceptions of economic justice including the conceptions offered by utilitarians, contractarians, natural rights theorists, and Marxists. Other topics include the just distribution of natural resources and the choice between command and market economies.
- **PHIL 6530 Environmental Ethics:** This course involves an examination of ethical issues regarding treatment of nonhuman beings. Major topics include moral extentionism, as well as critiques of attempts to extend human-centered moral doctrines to nonhuman beings.
- **PHIL 6540 Philosophy of Global Justice:** This course will explore the justice of relations among nations and among individuals across national boundaries. Topics include international distributive justice, the ownership of global resources, the morality of secession, just war, and terrorism.
- **PHIL 6930 Moral Psychology** (Service Learning-Optional, Spring 2013)
- **Political Economy:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **PECN 4140 Theories of Distributive Justice:** This class introduces students to competing theories of social justice, with a particular focus on distributive justice. The course primarily focusses on three different theories proposed by, respectively, John Rawls, Amartya Sen, and John Stuart Mill.
- **Political Science:**
  - **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**
  - **POLI 2500 Intro to International Relations** (Service Learning-Optional, Spring 2013): An introductory analysis of basic factors influencing international politics, organization and law.
  - **POLI 3040 Politics of Immigration** (Service Learning-Mandatory, Spring 2014, Spring 2013): This course will explore the history of immigration to the U.S., the major push and pull factors fueling immigration, the impacts of immigration on sending and receiving communities, and the outcomes of various policy responses.
  - **POLI 4010 Comparative Foreign Policy** (Service Learning-Optional, Spring 2014, Spring 2013):
  - **POLI 4600 Latin American International Relations** (Service Learning-Optional, Fall 2013, Fall 2012) This course deals with relations among Latin American nations as well as those with the United States, Europe, Japan, and multinational institutions. This class will cover the

international aspects of issues such as trade, security, human rights, immigration, and environmental politics as they relate to Latin America.

- **POLA 3010 Big Easy Politics** (Service Learning-Optional, Spring 2013)
- **POLA 3220 American Presidency** (Service Learning-Optional, Spring 2013): A study of the office of the President of the United States that includes both historical review and analysis of the presidential role in our national government. A main focus of the course is on the relative importance of particular presidents and their leadership capacities and the limitations on the office itself.
- **POLA 4020 Politics of Environmental Justice** (Service Learning-Optional, Spring 2013)
- **POLA 4230 Environmental Politics and Policy:** An overview of the issues, institutions, processes, and actors that determine political responses to environmental problems in the United States. The course includes discussions of current controversies in environmental politics.
- **POLA 4250 Power and Poverty in America:** This course will investigate the extent of income inequality and of poverty in contemporary America and the impact of government upon them. Empirically, it will examine the programs of the American welfare state and assess their successes and failure. Normatively, it will discuss how one establishes minimum standards for distributional justice and inquire into the obligations we have toward our fellow citizens.
- **POLC 3003 Women Leading Change: Case Studies on Women in Organizations** (Service Learning-Optional, Fall 2013)
- **POLC 4340 Latin American Environmental Politics:** A survey of the controversies in the management of environmental and natural resource issues in Latin America. Students without prior courses in international relations or American politics should consult the instructor prior to registration.
- **POLC 4450 Revolution, Protest, and Change:** An examination of the causes, dynamics, and consequences of political movements of revolution and reform.
- **POLC 4520 Comparative State Building** (Service Learning-Optional, Spring 2013): This course will explore the nature of state authority and the processes by which different types of states emerged at different moments in world history and in different regions of the world, as well as how the nature of states has evolved over time.
- **POLI 4620 International Environmental Politics:** An examination of the political dimensions of international environmental problems. The course will include investigation and analysis of the causes, consequences, and potential solutions to a range of environmental problems.
- **POLS 1060 Grassroots Politics:** This course explores the role and nature of citizen engagement in American community and political life, models of grassroots activism and community organizing as well as “hands on” experience in civic and political activism.



- **POLT 3780 Feminist Political Theory** (Service Learning-Mandatory, Spring 2014): This course will focus, first on the role of women in the tradition of western political thought. Second, the course will examine the attempts of contemporary feminist thinkers to deal with concepts central to the tradition of political theory, such as justice, equality, and liberty.
- **Religious Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Russian:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Social Policy and Practice:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:** no courses that include sustainability offered
- **Sociology:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **SOCI 1040 Gender and Society:** Examines the social construction of gender and the consequences of gender equality. Topics include socialization, intimate relations, paid and unpaid work, violence, and social change.
    - **SOCI 1050 Introduction to Education and Society:** (Service Learning-Mandatory, Spring 2013) This course is an introduction to sociological research, concepts, and theories about education. In the course, the purpose and function of education for the individual and society are critically considered, and a substantial amount of time is spent discussing the links between education and inequality. Topics that are discussed in detail include: the potential and limitations of schools, schools as agents of socialization, cross-national differences in educational systems, social relationships in schooling (the influence of community, social capital, parents, and peers), within and between school inequalities (school effects/ability grouping), the effects of school characteristics and ascriptive forces on schooling outcomes, and variation in schooling outcomes themselves (achievement, attainment, labor market outcomes). Students will gain an appreciation of the role of schools as powerful determinants of the opportunities that individuals experience in modern societies.
    - **SOCIO 1060 Urban Sociology:** The social patterns, processes, and institutional structure of urban life.
    - **SOCI 1090 Social Problems:** Examination of critical contemporary social problems and social policy options. Emphasis is placed on understanding the multidimensional sources of crisis, unrest, and instability as well as

policy options and tradeoffs associated with ameliorative efforts. Topics vary by semester and instructor.

- **SOCI 1300 Criminology** (Service Learning-Mandatory, Spring 2014, Fall 2013, Spring 2013, Fall 2012): Emphasizes the public's perception of the crime problem and various sociological measures of amounts and trends of criminal behavior in society. Causal and noncausal theories of criminality, and the sociological implications of various selected offenses are explored.
- **SOCI 1470 Global Social Change:** Examines global change and its implications for individuals and groups via exploration of issues of globalization of the economy, international development, urbanization, immigration, social movements, changing gender relations, etc. Emphasis will be placed on how such changes have come about and course focus will be international in scope with emphasis on Latin America, Asia, and/or Africa.
- **SOCI 1510 Work in American Society:** Examines the concepts of occupations, professions, and work organizations. It considers issues about employee selection, job involvement, alienation, satisfaction, performance, and compensation; industrial mental health, occupation safety, health and medicine; social conditions of work in bureaucratic organizations, work groups and union membership; supervision and human resource management; and the changing conditions of work resulting from technological change, social change, shifts in the occupational structure and the interface of work with other institutions such as the family.
- **SOCIO 2050 Population and Society:** An examination of the dynamic relationship between population and society. The course focuses on the contemporary demography of developed and developing countries, with an emphasis on societal problems linked to population.
- **SOCI 2180/6180 Wealth, Power and Inequality:** Survey of theoretical and empirical literature on the distribution of wealth, power, and prestige within and across societies and historical periods. Emphasis is placed on the impact of social change on stratification systems.
- **SOCI 2600 Environmental Sociology:** This course examines political and economic aspects of global and local environmental problems. Topics include how societies and the environment interact, why some environmental risks have gained most attention, how support for environmental concerns can be measured, responses by environmental social movements, and visions of sustainable societies in the First and Third Worlds.
- **SOCI 3000 Civic Engagement and Leadership** (Service Learning-Mandatory, Fall 2012)
- **SOCI 6010 Global Political Economy and Environment:** This is a discussion-based course designed to evaluate the process of globalization and the political and economic forces therein that affect the environment. The course motivates students to critically evaluate the claims of various schools of thought on the relationship between globalization and the

environment. In order to accomplish these objectives, we must first fully understand macro-sociological interpretations of development. In turn, we will extensively consider the interconnections among society, political-economic dynamics, the process of globalization, and natural systems (ecology)

- **SOCI 6010 Race, Crime, and Control** (Service Learning-Optional, Fall 2013)
- **SOCI 6050 Issues in Social Demography:** An examination of the social causes and consequences of population change. Analysis of current issues of demographic concern focusing on the social variables which differentially affect, and are affected by, the demographic processes of fertility, migrations, and mortality.
- **SOCI 6060 Issues in the Sociology of Gender:** This course examines research in several areas of the sociology of gender. Topics include the acquisition of gender identity, face to face interactions, the changing roles of women and men, the intersection of work and family, and social movements. Students will conduct original research in one of these areas.
- **SOCI 6090 Sociology of Medicine:** An examination of social and psychological factors affecting the prevalence and incidence of disease in human populations. Topics also considered include the organization of the health professions, comparative medical systems, social change and health care, and social factors affecting the utilization of health services.
- **SOCI 6120 Race and Ethnic Relations in America:** Sociological examination of the dynamics of race and ethnic relations in the United States. This course provides an opportunity for students to read about, think, and discuss issues of racial and ethnic relations in society. Topics include the social construction of racial classification systems, the historical record of the interaction between the races in America, public policy, and possible mechanisms for dealing with some of the issues that many consider most problematic in our society.
- **SOCI 6170 Problems in the Sociology of Inequality:** An in-depth exploration of one or more current problems of theory and research in sociology in inequality: Poverty, Homelessness and the Cities; The American Underclass; Labor Markets.
- **SOCI 6190 Urban Organization:** A study of the causes and social effects of urban growth and decay in rich and poor countries. An examination of contemporary urban social classes and political coalitions, and how these are changing with shifting regional economies.
- **SOCI 6300 Urban Policy and Planning** (Service Learning-Mandatory, Fall 2013): Investigates how urban planning efforts and government policies and programs have affected U.S. cities and metropolitan areas over the last hundred years. Students are introduced to traditional, mainstream, and radical planning theories and policy critique. Examines urban policy formulation and implementation, conflicts and struggles, and the relationship between theory, research, and planning/policy.

- **SOCI 6330 Sociology of Education** (Service Learning-Mandatory, Spring 2014, Fall 2013): This course will examine the social functions of educational institutions, the role of education in the American social and economic structure, and major controversies and debates concerning educational policy as social policy.
- **SOCI 6350 Marginality and ‘Other’: A Sociology of Persecution and State-Making:** This course examines the role of ideologies justifying persecution itself in the construction and change of national states. Four interrelated and interactive processes are analyzed: cultural construction of pollution, danger, and taboo; marginalization of stigmatized Others; the roles of these processes in construction and change in national states; the responses to Others to the previously described processes.
- **SOCI 6560 Social Movements and Collective Behavior:** An advanced theoretical and empirical analysis of the determinants of organized non-institutionalized forms of collective action. Topics include the interplay of structural conditions and voluntaristic actions, the logic of collective action, culture, and ideology as they shape social movement outcomes.
- **SOCI 6640 Sociology of Organizations** (Service Learning-Mandatory, Spring 2013) Exploration and development of organizational structures, processes and consequences. Interdisciplinary focus drawing conceptual, theoretical, and methodological tools from sociology, management, economics, and applied fields such as law and public administration. The seminar will examine classic and current issues in the sociology of organizations and the influence of complex organizations on different contexts and institutions (e.g., economy, family, healthcare, politics).
- **SOCI 6800 Society and Economy:** An analysis of the overall relationships of the economy to other components of society and specific institutions: economy and government, economy and family, economy and gender. The social organization of the firm, the market, organizations and economic culture and how each affects the other.
- **SOCI 6900 Sociology of Development in Latin America:** This course will examine the transitions from premodern to modern, and from modern to post-modern economies and societies in Latin America. An inquiry into the causes and social effects of rapid “modernizing” social changes such as increases in urban residence, schooling, factory work, and mass media exposure.
- **SOCI 6910 Gender in Latin America:** A sociological examination of how changing political, economics and developmental issues in Latin America shape and are shaped by gender relations.
- **SOCI 6920 Social Stratification and Mobility in Latin America:** An examination of the extent and social bases of wealth and power inequalities in Central and South America along lines of class, gender, race, ethnicity, and regional origin.
- **SOCI 6940 Political Sociology of Latin America:** This course examines theories of the bases and distribution of power in Latin America. Topics include the role of elites and domestic class coalitions in state formation

and regime transitions, the role of civil society/labor, popular associations, political parties in democratization, and the role of culture, including religion, in political life

- **SOCI 6950 Sociology of Migration:** This course will focus on 20th century international migration flows to and within the Americas with three main themes: (1) theories of international migration, (2) immigrant adaptation, assimilation and incorporation, and (3) international migration policies. From the colonization of the continent up to the present, countries in North and South America have been receiving communities for migrants from all over the world.
  - **SOCI 6960 Urban Latin America:** This course is a study of the causes and social effects of urban growth and decay in rich and poor countries in the Americas. Examines contemporary urban social classes and political coalitions, and how these are changing with shifting regional economies. The course discusses theories of urban societies and regional growth, and examines case studies and theories from Latin America.
- **Spanish:**
    - **Sustainability courses:** no sustainability courses offered
    - **Courses that include sustainability:**
      - **SPAN 1010 Elements of Spanish I** (Service Learning-Optional, Fall 2013, Spring 2013, Fall 2012): The overall goal of this course is developing proficiency in the 4 language skills (listening, reading, speaking, and writing) essential to communicative language learning. The course uses a task-based approach which provides the learner with opportunities to use the language interactively.
      - **SPAN 1020 Elements of Spanish II** (Service Learning-Optional, Spring 2014, Spring 2013): The overall goal of this course is developing proficiency in the four language skills (listening, reading, speaking, and writing) essential to communicative language learning. The course uses a task-based approach which provides the learner with opportunities to use the language interactively.
      - **SPAN 1120 Intensive Intro Spanish** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012): The overall goal of this course is developing proficiency in the four language skills (listening, reading, speaking, and writing) essential to communicative language learning. The course uses a task-based approach which provides the learner with opportunities to use the language interactively.
      - **SPAN 2030 Elements of Spanish III** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013) The overall goal of this course is developing proficiency in the four language skills (listening, reading, speaking, and writing) essential to communicative language learning. The course uses a task-based approach which provides the learner with

opportunities to use the language interactively. The overall goal of this course is developing proficiency in the four language skills (listening, reading, speaking, and writing) essential to communicative language learning. The course uses a task-based approach which provides the learner with opportunities to use the language interactively.

- **SPAN 2040 Span Conversation & Comp** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012): This course is designed to develop oral proficiency in Spanish through the study and analysis of recorded, visual, and written texts, as well as a variety of pair and group activities. Special emphasis is placed on pronunciation, vocabulary acquisition, and a review of Spanish grammar and syntax.
  - **SPAN 3040 Grammar and Writing in Spanish** (Service Learning-Optional, Fall 2012): Analysis and practice in the written language. With addition of the registration number Spanish 388 Writing. Practicum, this course fulfills the college intensive-writing requirement for Spanish major speakers.
  - **SPAN 3150 Introduction to Latino Studies** (Service Learning-Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012): An introduction to the cultures of Latino and Hispanic communities in the United States and the Caribbean from the early 20th century to the present, with special emphasis on the contemporary period. Critical analysis of written texts, visual arts, and cinema will guide the investigation of past and current polemics of Latino history, social movements, and cultural heterogeneity
  - **SPAN 4100 Constructions of Gender and Sexuality in Hispanic Culture:** This course focuses on issues of gender and sexuality in Spain and/or Latin America with emphasis on one area or the other depending of the staffing in a given year. It includes consideration of literary and other texts, including popular music, art, and cinema.
  - **SPAN 4120 Social Problems in Spanish American Literature:** The chief problems of Latin American society as reflected in poetry, short fiction, essay, and theatre. Representative works concerning the Mexican revolution; the social status of women, Indians and blacks; the life of urban and rural working classes; tyranny and political repression. (Service Learning-Optional, Spring 2014, Spring 2013)
  - **SPAN 6010 Methods of Teaching Spanish and Portuguese** (Service Learning- Optional, Spring 2013): A general survey of applied linguistics, teaching and testing methodology, and language laboratory use.
- **Portuguese:**
    - **Sustainability courses:** no sustainability courses offered
    - **Courses that include sustainability:**
      - **PORT 3280 Advanced Portuguese Through Brazilian Cinema** (Service Learning-Optional for Spring 2014, Mandatory for Spring 2013):

Reinforcement of spoken Portuguese and review of grammatical structures. A series of films serves as the basis for further development of speaking and writing. Emphasis in dealing with the films is on their utility for skills practice rather than film analysis.

- **Theatre:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **THEA 3710 Shakespeare on the Road** (Service Learning-Optional, Spring 2014; Mandatory, Fall 2013, Spring 2013, Fall 2012): Students in this course will create, rehearse, and perform a piece of theatre that demonstrates Shakespeare's style and modern-day relevance. This piece will tour to middle and high schools in the New Orleans area.
    - **THEA 4910 Documentary Theatre** (Service Learning-Mandatory, Spring 2014)
- **Urban Studies:**
  - **Sustainability courses:** no sustainability courses offered
  - **Courses that include sustainability:**
    - **URST 2010 The City I:** City I is the first semester of a two-semester-long survey introduction to the multi-disciplinary field of Urban Studies. Three broad substantive themes are explored: (1) History and Morphology of Cities and City Systems; (2) Urban Ecology & Demographics; and (3) Urban Design/ Aesthetics/ Land Use /Planning. Attention is given to historically, geographically, and culturally diverse cases in order to provide a comparative framework and backdrop to contemporary practices.
    - **URST 2020 (City II):** City II is the second semester of a two-semester-long survey introduction to the multi-disciplinary field of Urban Studies. Four broad substantive themes are examined: (1) Urban Political Economy; (2) the Social Psychology of Cities; (3) Urban Culture and Expressive Arts; and (4) Urbanism & Urban Issues. Course employs a modular focus and historical-comparative framework, but primary emphasis will be on the contemporary era.

# Inventory of Sustainability Courses

## School of Medicine Tulane University

The STARS methodology for assessing sustainability in the curriculum counts the number of sustainability courses and courses that include sustainability, and then compares it to the overall number of courses offered. This methodology is very difficult to apply to the Medical School curriculum, which is not organized around or defined by “courses” in the same manner as other university programs.

The Medical School has a curriculum that all students take for four years. Medical students take a set of required courses during Year 1 and Year 2 that do not follow a semester-type schedule. There are diverse elective opportunities during these years, which include taking courses in the School of Public Health and Tropical Medicine and participating in a department’s research. During the Clinical Years, Years 3 and 4, medical students complete required “clerkships,” which combine care for patients and intensive study. In identifying sustainability courses, courses that include sustainability, and counting overall courses, we considered only the required courses and clerkships, as the time commitment and experiences of the electives vary a great deal.

“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. Work in the community and service learning have long been a part of School of Medicine’s curriculum. The School of Medicine’s mission is expressed as "Education, Research and Patient Care: We Heal Communities." In all clinical courses, students are engaged in activities that enhance the well-being of the community.

All courses offered by the School of Medicine are at the graduate level.

This list of sustainability courses in the School of Medicine was developed in consultation with Dr. Kevin Krane, Vice Dean of Academic Affairs. To review the overall curriculum of the Tulane School of Medicine, visit: <http://tulane.edu/som/courses/courses.cfm>

### *First Year Courses:*

#### **Foundations in Medicine I**

The Foundations in Medicine course provides the grounding in the physician-patient relationship that is central to all of medical practice. It includes medical interviewing, medical



ethics, community preceptorships, service learning, preventive medicine, human behavior and the healthcare system as well as other topics and issues important for contemporary medicine. The course uses large and small group discussions and extensive field experiences emphasizing patient and community contact. It meets every Tuesday and Thursday afternoon throughout the first year.

*Second Year Courses:*

**Foundations in Medicine II**

The Foundations in Medicine II course builds on the physician-patient relationship from Foundations in Medicine I. This course serves to integrate your other medical school experiences with the development of the heart and soul of the physician. It takes the core idea of what you think a physician should be and expand upon the idea to develop the physician you will become. It includes Sexual History taking, medical ethics, Growth & Development, service learning, preventive medicine, human behavior and Nutrition as well as other topics and issues important for contemporary medicine. The course uses large and small group discussions.

*Clerkships:*

**Internal Medicine**

The Internal Medicine Clerkship is designed to give the students experience diagnosing, treating, and caring for adult hospitalized patients. All students are placed on an inpatient general internal medicine team that includes residents and faculty. Student are expected to be active members of the team and contribute to patient care every day. Students are exposed to a variety of internal medicine patients, with no particular subspecialty emphasized over another. Students are expected to see patients everyday, write progress notes on each patient, present his or her patients on rounds, engage in active discussion regarding diagnosis and management with the team, and participate in the administrative duties necessary for patient care. The greatest emphasis is placed upon meeting the needs of the patient. Particular emphasis is placed on the physical exam, proper patient documentation, oral presentations, clinical reasoning, and professionalism. All students complete the clerkship with a fundamental understanding of the role of the Internist and the diseases that he or she treats.

**Obstetrics & Gynecology**

The Obstetrics and Gynecology clerkships provides diverse experiences in women's health in a variety of primary and tertiary health care systems. Our primary goal is to cultivate student interest in the unique aspects of women's healthcare. The department's commitment in training includes providing them with the very best instruction in the technical aspects of the specialty. The department also strives to instill a spirit of compassion for women of all races and economic status.

The course curriculum has been adapted from a national curriculum developed by the Association of Professors of Gynecology and Obstetrics (APGO). The eight-week course is divided into two four-week segments: Obstetrics and Gynecology. Clinical training is offered at Tulane University Hospital and Clinic, Tulane-Lakeside Hospital, The Ochsner Foundation Hospital, and Huey P. Long Hospital in Pineville, Louisiana. The clinical experience is supplemented by a series of lectures and small preceptor groups. Students are evaluated on their clinical performance by faculty and residents (50%) and on their fund of knowledge by taking the National Board of Medical Examiners Obstetrics and Gynecology Exam (50%). All students are assigned 4 weeks on a general OBGYN team. They will be responsible for both inpatient & outpatient experiences in Obstetrics & Gynecology- including Gyn surgeries, pre-operative & post-operative care, obstetrical patients-postpartum, laboring, and antepartum, and often outpatient clinics. The experiences vary depending on site assigned. Sites include: HPL, Tulane Lakeside, University Hospital, and various Community Preceptors.

### **Surgery**

The Surgery Clerkship rotation is primarily an inpatient-based experience designed to familiarize the student with acute and elective surgical decision making processes. However, to the extent that much of the preoperative and postoperative management is now carried out in the outpatient setting, students will as well be expected to participate in this phase of care. A team of surgery house officers and at least one attending surgeon-preceptor will staff each general surgery service, on which medical students will rotate. These personnel will provide ample opportunities for “on the job” experience relative to the discipline of Medicine in general and surgery in particular. During the course of the general surgery rotation, you are to keep a concise log of all patients for whom you were given primarily responsibility. Specific data to be recorded are: primary diagnosis, whether management occurred on an inpatient or outpatient basis, operation (if any), and complications.

### **Pediatrics**

The Core Pediatric Clerkship is an 8 week clinical rotation that is designed to provide an introductory experience in the care of children for junior or senior medical students. The goals of the clerkship are to 1) encourage students to pursue a career involving the care of children, 2) provide students a firm foundation upon which to pursue additional graduate education in pediatrics, 3) provide students who will pursue primarily non-pediatric careers the core knowledge they need about the care of children, and 4) encourage the continued development of professional values and attitudes among all students. The curriculum is based on a national curriculum that is designed to assist students in acquiring basic knowledge of common and uncommon but significant pediatric disorders through both clinical and didactic learning experiences. All students spend time in general and specialty ambulatory clinics, general and specialty oriented inpatient ward services, and the well-baby and neonatal

intensive care nurseries. A focus of the clerkship is the development of competency in performing an appropriate history and physical examination on children of different ages.

### **Family Medicine**

During this 6-week experience, students will have an opportunity to join a community-based Family Practice and to learn about primary care practice through a structured, yet "real world" clinical experience with a mentor. Students will live in the community and largely adopt their preceptor's schedule. This clerkship offers students a unique variety of opportunities different from other third-year clerkships including:

- working one-on-one with an experienced physician mentor, typically without other students or residents.
- experience in the type of ambulatory setting where a majority of the nation's health care is delivered. Students often have the opportunity for follow-up and continuity of care with ambulatory patients over several visits, and many of these patients have years and generations of continuity relationship with the preceptor.
- the challenge of seeing presenting signs and symptoms that are often vague, undifferentiated, and early, as well as patients presenting with multiple needs.
- daily repetition in history taking, the focused physical exam, and common procedural skills.
- a rural emphasis at many sites.
- service as ambassadors, through professionalism and contributions to the host practice and community, reflecting on Tulane throughout the region.

The Clerkship is possible due to a network of volunteer Family Physicians who enthusiastically give of their time and experience to welcome and mentor students in their practice and community. Preceptors are Board Certified Family Physicians, located across Louisiana, south Mississippi, south Alabama and the Florida panhandle. They have participated in an orientation, site visits by Faculty, and/or training workshops regarding the Clerkship, and have been oriented to the course goals and activities. Many are experienced teachers with years of office-based teaching. In exchange for their efforts, preceptors receive the benefit of contact with bright doctors-to-be, a Tulane Faculty appointment, access to continuing education, workshops on office-based teaching, and a preceptor newsletter.

### **Neurology**

The neurology clerkship is designed to provide students with basic skills in diagnosis and treatment applicable to patients across all specialties, particularly those in primary care

practices. Students are assigned to a variety of in-patient and out-patient experiences. Hospital Sites: TUHC, University, Ochsner, TU Clinic and VA Clinic, Culicchia Neurological Group, Advanced Neurological Center (ANC), Individual Faculty, Neurology, and Out-of-region

### **Psychiatry**

The psychiatry clerkship is designed to provide students with basic skills in diagnosis and treatment applicable to patients across all specialties, particularly those in primary care practices. There are a variety of local and regional sites in which the students are assigned for their clinical experience. In addition, the approach to patient care in a chemical dependency program is observed by all students for two days during each block. Each student will also have an outpatient psychiatric experience. Attendance is expected at the weekly didactics and grand rounds which are scheduled on Fridays.

### **Int. Med. Specialty Clinics**

Welcome to the Internal Medicine Clerkship! Be prepared to learn more about being a physician than at any other time during medical school. The next eight weeks will be both physically and mentally challenging, but you will reap the rewards of your hard work with vast gains of insight and knowledge. You will witness amazing pathology and help treat the most complicated and challenging patients. You will be at the bedside everyday examining, listening to, and healing patients. You will work with us do great things for the people of New Orleans. You will learn from Tulane's best residents and teaching faculty. You will learn how to think like a physician and solve medical mysteries. More than ever, you will come to understand the sick condition and the limits of healthcare. You will understand the true value of caring for your patients, even when there is no treatment to make them better. There will be long days and long nights, but you will discover stamina you never thought you had. Make the most of these next eight weeks and immerse yourself fully into the world of Internal Medicine and our patients. I assure you that you will get back your investment of time and energy tenfold. We are grateful to have you help us in our mission to serve the people of this great city. Get ready for an intense, but meaningful experience. I look forward to meeting you on the first day of the block!

### **Sub-Internship**

Sub-Internships provide the student with experience and preparation for inpatient medical care, similar to that of a first year house officer and can be done in Medicine, Surgery, Pediatrics, Family Medicine, or Obstetrics and Gynecology. When students are performing their Sub-Internship, regardless of department, they should act in all capacities as an intern, albeit with a smaller number of patients and greater supervision. The goals of the sub-internship are for students to

1. Be the "first evaluator" of patients

2. Perform complete history and physical examinations on new admissions
3. Independently establish a differential diagnosis
4. Write admitting and daily patient diagnostic and therapeutic orders, under the supervision of a resident and/or attending physician
5. Evaluate patients on a daily basis on morning rounds, and serve as the principle care giver, under the direct supervision of a resident and attending physician

### **Emergency Medicine**

Emergency Medicine (EM) is a broad, complex discipline with a wealth of patient encounters unmatched by most other specialties. Regardless of their future career choice, students will face unexpected acute medical emergencies in their professional or personal lives. Evaluation of the undifferentiated patient – that is, figuring out who is truly “sick” or “not sick” – is one of the most elusive yet important skills for any physician. Through this rotation, we aim to teach basic skills in acute medical care, including simple and common procedures, and provide you with an evidence-based foundation for approaching patient care. All of the ACGME core competencies - patient care, professionalism, medical knowledge, interpersonal & communication skills, practice-based learning and systems-based practice, should be encountered and tested while on the EM rotation.

### **Radiology**

All students are required to complete a two week experience in diagnostic imaging and its role in patient care. Students attend lectures and spend time in several of the imaging areas within the radiology department and interact with the radiologist as the results are interpreted and dictated. This experience offers opportunity to correlate patient clinical presentation and findings with the results from the appropriate diagnostic imaging exam(s). During the two weeks, students are required to complete an assigned programmed text on the principles of chest Roentgenology. This requirement can be met through a 2 or 4 week radiology course at any accredited academic health science center.

### **Outpatient Surgery**

All students are required to complete 2 weeks in the outpatient surgery setting. Two week electives at any accredited academic health center that meets the following objectives will also satisfy this requirement. During this time we endeavor to broaden the students experience in evaluating surgical patients and to increase their understanding of the different environments in which surgery is performed.

## **Community Health**

The new Tulane Community Health Clerkship is a four-week, non-clinical rotation which aims to educate students about the social determinants of health. These are the non-medical aspects of patients' lives - such as education, housing, employment, language, environment, nutrition, safety – that have a impact on the health of an individual. While other clerkships focus primarily on disease processes, medications and treatments, which impact the health of individuals largely irrespective of the individual, the focus on social determinants will highlight the distinction between health and healthcare. Students will participate in didactic sessions consisting of core readings, group discussions, talks and reflective writing assignments. In the final week of the rotation students will have a chance to apply what they have learned in a clinical setting through observation of patient-doctor encounters. Students will spend the majority of their time working with a community partner organization which will give them opportunities to make connections between health and its social determinants.

# Inventory of Sustainability Courses

## Newcomb Tulane College

### Fall 2013-Spring 2014

“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.

Draft list of TIDES courses compiled by Colleen Large, SLA – 2016 by reviewing the Tulane Course Catalog posted at <http://tulane.edu/college/tides/upload/Course-Catalogue-2013-2014.pdf> (display courses for this department). Draft list of Colloquia, Teacher Certification and Preparation, and Newcomb Scholars courses compiled by Liz Davey from the Tulane Course Catalog and the Honors Program website at <http://honors.tulane.edu/web/default.asp?id=Courses>. Service Learning courses added by Colleen Large and Liz Davey from lists obtained from the Center for Public Service. The draft list was sent to Dean James MacLaren in July 2014.

- **TIDES**

- **Sustainability Courses:** no sustainability courses offered
- **Course that include sustainability:**
  - **TIDB 1010 More Than Just Business; What is Management?** (Service Learning- Mandatory, Fall 2013) TIDB 1010 introduces students to the business world by critically examining the art of management. The course focuses on the question: why do people work together and how? The objective of TIDB 101 is to introduce students to basic business concepts, to develop a plan for their field of study, as well as to have fun in the process. The first year Career Management Center Sessions will be offered as part of the course.

- **TIDB 1020 Law and Order: Pre- Law** (Service Learning- Mandatory, Fall 2013, Fall 2012) In Henry VI, Shakespeare wrote, “The first thing we do, let’s kill all the lawyers.” What did he mean? For better or worse, “all the lawyers” have avoided that fate since Shakespeare wrote that line. Why? From the largest corporate mergers to simple adoptions, and from public policy to the enactment of criminal laws, the need for lawyers is increasing because the law is a central part of our daily lives and the bedrock of a free society. Although occasionally the press might indicate otherwise, lawyers are members of a profession and they get respect, but is being a lawyer really like the popular portrayals on television shows such as Law and Order or in a John Grisham novel? TIDB-1020 will help you explore how one becomes a lawyer and what it is like to operate in the legal profession. The class is not designed to provide legal training. You will learn little, if any, substantive law. Instead you will become familiar with the “nuts and bolts” of law school and the legal profession. Hopefully, the class will assist students in their decision regarding the pursuit of a law degree. The course attempts to give students a glimpse into the lives of law students, lawyers and the profession in general. The course will not push students to the field or away from it, just introduce them to it. Time permitting, the class will visit the historic Louisiana Supreme Court and the Louisiana Law Library, as well as view a portion of an actual trial or motions in a Louisiana District Court.
- **TIDB 1110 More Than Just Business; Business Leadership** (Service Learning- Mandatory, Spring 2014, Fall 2012) Our economic system and our society need leaders, but how are those leaders born? Our youngest leaders matured in the glow of computer screens; our oldest in the shadow of the Depression and World War II. This class will examine how era and values shaped leaders from these two disparate groups affectionately labeled geeks and geezers. During the journey, we hope to discover something more profound: the process through which leaders of any era emerge.
- **TIDE 1000 Leadership, Policy, Power and Change** (Service Learning- Mandatory, Fall 2013, Fall 2012) Are leaders born or bred? How do leaders and their leadership styles impact change? How does one develop the courage and wisdom to lead and promote change effectively? This TIDE provides an opportunity to examine the nature of leadership, its impact on the change process, and the underlying dynamics of power, politics, and conflict. Over the course of the



academic year, this TIDE focuses on developing an interdisciplinary understanding of the theories and practices of organizational and community leadership. As a TIDE member, you will actively study the theories that emerge from a variety of fields and reflect on their practical, political, and ethical assumptions as well as on their implications in a variety of settings. Through readings, classroom discussions, interviews with local leaders, and a group initiative, you will gain a greater appreciation for the issues that affect leaders and the components of successful leadership.

- **TIDE 1012 Working for Change: New Orleans Leadership, Innovation & Public Policy:** This course focuses on the structure, functions and processes of developing and advancing public policy. It will delve deeper into how to become a leader in creating innovative policy that positively influences the community and how to successfully partner with the community and advocacy groups to implement solutions. Students will learn from top local leaders who work to transform New Orleans and the entire nation through innovative policies and practices. They will explore how these leaders made it to where they are today, how they developed priorities based on the community's needs, what important policy changes they have implemented and what changes they would like to make in the future. The course will also include a field trip to a legislative committee meeting or a Board of Elementary and Secondary Education (BESE) meeting.
- **TIDE 1020 Cities & the Urban Environment:** Focusing on selections from the seminal work "The Death and Life of Great American Cities" by Jane Jacobs, we will explore and discuss its relevance to the city of New Orleans. We will also look directly at what is currently happening in the city of New Orleans via field studies, guest presentations and movies. Selected neighborhoods of New Orleans will be explored as vehicles for looking at the social, political, and economic life of cities. By focusing on particular and local examples we will, in effect, also be addressing urban issues that are both more general and global. You will be invited to learn how to 'see' (observe) the many aspects of the city, be introduced to tools for the analysis of city form and behavior, and be asked to draw conclusions from what you have read and your experiences.
- **TIDE1034 New Orleans the Lay of the Land:** This one-credit course focuses on the geography of New Orleans and how the city's location on the Mississippi Delta has shaped its development. Students will learn

about the physical characteristics of New Orleans and the features it shares with other deltaic cities. The course will examine the New Orleans landscape prior to its development, and then explore early Native Americans and European settlers and how they used the land. The course will then analyze how draining, filling, and leveeing the land allowed New Orleans to grow. Students will also learn about how this growth exposed the city to increased risks posed by sea level rise, storms, and coastal erosion—and the measures in place or planned to address these risks. Students will also learn about urban design ideas that are suitable to a deltaic landscape. An archeologist will talk about the historic landscape of New Orleans and a coastal restoration specialist will discuss projects to protect the city from flooding. In addition, students will visit a large-scale, post-Katrina flood control project and also tour a wetland restoration project designed and carried out by community groups.

- **TIDE 1090 Who Dat, Fan Up, and Geaux** (Service Learning- Mandatory, Spring 2013, Fall 2012) Founded in 1718, the city of New Orleans has a long and rich history with sports. From the rise of social class-driven sports such as rowing and billiards to the New Orleans Saints' revival of the city post-Hurricane Katrina in 2006, sports has been as integral to the area as food, music, and Mardi Gras. In this course, we will explore general sports-related topics and examine actual case studies related to New Orleans' sports scene. More than simply 'talking sports,' students will study issues from political, economic, and social viewpoints and also gain an understanding of the rich sports heritage found here in New Orleans. Readings and discussions, field trips, and guest speakers will aid students to understand both historical accounts and modern day subjects associated with sports such as governmental involvement, public financing, and community development. Students will participate in a mandatory service learning component with Soccer in the Streets program intended to help rebuild an accessible, happening and healthy soccer community - a place where kids can express themselves, play together and get fit. By participating in activities with the Soccer in the Streets program students will deepen their understanding of the political, economic, and social ramifications of sports on a local level by making correlations to sports and its impacts on the city's youth, infrastructure, civic pride, crime reduction efforts, poverty eradication, and other areas, and gain an awareness of their role as a citizen in the city of New Orleans.
- **TIDE 1110 NOLA Path to Change** (Service Learning- Mandatory, Fall 2013)

Students will learn about the public school system in New Orleans—how and why it is consistently ranked as one of the lowest performing of US urban districts and what leaders, activists and other Tulane students are doing to change it. Students will lend a hand to renewal efforts by assisting in readying schools for classes. This will give them first hand access to what going to school is really like in New Orleans. This class will serve as excellent preparation for students who wish to volunteer in schools while at Tulane or who are interested in pursuing careers in education.

- **TIDE 1180 The Management & Prevention Of Epidemic Disease: “WHEN GLOBAL IS LOCAL: THE NATURE, IMPACT, MANAGEMENT & PREVENTION OF EPIDEMIC DISEASE”** examines disease as a social event in an evolving global community. Population growth, societal aging, urbanization, rapid transportation, economic interdependence and emerging infectious disease have expanded community vulnerability far beyond what could have been imagined only a few generations ago.
- **TIDE 1220 New Orleans & Hurricanes: Past, Present & Future:** This course will explore the events leading up to Hurricane Katrina, from a geological and historical perspective and explore why New Orleans is at risk from future hurricanes and the steps being taken to protect the city from future events. Although sociological, cultural, and political aspects of the response to the Katrina disaster and recovery will be touched upon, the main emphasis will be placed on historic, scientific and engineering aspects of Katrina and the systems designed to protect the city from hurricanes.
- **TIDE 1370 A Running Conversation** (Service Learning- Mandatory, Fall 2013, Spring 2013, Fall 2012) Running may have begun as an evolutionary adaptation (Saber Tooth Tigers were fast), but what is the point of running today? This TIDES course, conducted on the run, explores the city while exploring running from a variety of perspectives. In each class session, instructors and students will cover three to seven miles (building up from the first class) at a conversational pace. Guest speakers/runners will join the class to share their expertise and experience on a variety of aspects of running—from physiological adaptations and the mythical (or not) “runner’s high,” to the philosophy and history of running. Students will learn about the local off-campus running community and be encouraged to participate in local races. All classes will start off campus, in locations such as Audubon Park, City Park (end of the streetcar line),

and the French Quarter (end of the streetcar line in the other direction). So, lace up and run to this TIDES.

- **TIDE 1500 Irish in New Orleans** (Service Learning- Mandatory, Fall 2013, Fall 2012) This course aims to introduce students to the Irish influence in shaping New Orleans' development as well as character. Antebellum New Orleans held many attractions for Irish immigrants and they came to this city by the tens of thousands. Upon arrival the Irish immediately set about creating their own communities. Strong familial ties denoted these neighborhoods as did the Churches they built to serve their needs. Life was not easy in New Orleans as epidemics were rife, however, the Irish managed successfully to carve out a life for themselves, one that added yet another colorful dimension to the complex multi-faceted spirit of New Orleans.
- **TIDE 1520 Medieval New Orleans** (Service Learning- Mandatory, Fall 2012) This TIDES Seminar will explore, largely by way of class trips around campus and the city and discussions based on selected readings, the influence and ongoing presence of medieval material culture and medieval ideas and attitudes in New Orleans (and, to some extent, in Southern culture in general). We'll be looking at--and handling--real medieval manuscripts housed in the Rare Books Room, Jones Hall, discussing medieval architectural styles revived in Tulane buildings, experiencing medieval music by New Orleans' Musica de Camera in the setting of faux medieval chapel, pilgrimaging around the city in search of actual relics (the bones of saints), and delving into medieval influences on pre-Lenten festivals such as Mardi Gras and on such distinctively New Orleanian foodstuffs as gumbo and "turduckin." We'll also read excerpts from two novels that, respectively, "recovered" the Middle Ages in the 19th c. and then satirized the influence of romantic ideas about the period on Southern culture: Sir Walter Scott's *Ivanhoe* and Mark Twain's *A Connecticut Yankee in King Arthur's Court*. And if we have time, we'll watch films of these two novels, which suggest how America Hollywood-ized medieval experience, to bring it in line with the kind of 19th c. survivals of the Middle Ages typical of New Orleans itself.
- **TIDE 1570 Going Green in New Orleans:** This course is designed to expose students to various renewable and non-conventional energy sources for electricity production, as well as green building practices, in the U.S., with emphasis on New Orleans and rebuilding efforts. It will include major renewable energy sources for electricity generation (wind,

solar, hydroelectricity) covering the technology, best U.S. resources and applications, and costs and key factors for implementation, such as state and local policies. Special emphasis in the TIDES course will be put on resources local to New Orleans (solar) and will include a field trip to view solar installations, a green rebuilding construction project, a building re-use center, and a green building resource center.

▪ **TIDE 1610 Understanding the Persistence of Social Problems in America:**

The purpose of this course is to examine the persistence of social problems (e.g., poverty, substance abuse, criminal activity, chronic community violence) in America. Students will learn that we typically single out individual social problems for study but that this parceling out of problems one at a time is an artificial distinction and does not mirror reality. Specifically, students will learn that social problems tend to co-exist in the same family systems and that people who are indigent also tend to live in neighborhoods that are characterized by substance abuse, crime, violence, gangs and prostitution and have schools that under perform. Students will visit two community-based social service agencies in the New Orleans community to meet and talk with community residents to discover firsthand what it is like to live in these New Orleans neighborhoods.

- **TIDE 1690 Community Engagement in Urban Design:** The course will focus on the concept of community design within our southern region. Students will explore the relationship between design and the public sector, including the guidelines one is allowed to work within when developing new buildings and larger developments. For nearly 20 years, the Tulane Regional Urban Design Center has engaged local and regional governments and communities in order to help improve our built environment. Implementing design guidelines to control the quality of development and building interpretive centers to tell the stories of these cities have been the hallmarks of the TRUDC. Students will learn how each project seeks to bring quality design to small communities that do not have the funds to develop such programs on their own. In Natchez, MS, students will visit the site of the second largest slave market in the deep south, where nothing but a kiosk stands to remind us of its incredible and dark history. We will study ongoing work to create a museum or interpretive center on the site, and visit some of the magnificent historical homes and sites throughout Natchez. In Mandeville, LA, students will visit the oldest unaltered Jazz Hall in the

world, constructed in 1895: the Dew Drop Inn. They will attend a special concert at the Dew Drop, learn of the building's history, and discover methods used to tell the story of such a historic place. Students will also be introduced to public sector design through the presentation of larger scale projects we have directed in Shanghai, Nanjing, Zhenjiang, and Beijing, China. A comparison of concepts and issues at both scales will be developed in open discussion format.

- **TIDE 1740 Citizenship and Health Communities:** The Classic Greek model of citizenship includes rights reserved by the citizen such as voting, and responsibilities demanded by the state such as conscription. Jeffersonian ideals of citizenship were constructed within framework with an implicit understanding that every citizen would be able to “pull their own weight” and that civic society would naturally exist among such citizens. However, the modern era has shown us that complications unforeseen by Jefferson and the Founders have created social environments where people are deprived of the opportunity to achieve at an equitable level while other people are able to live comfortable lives divorced from traditional modes of civic engagement. This class will explore Robert Putnam's concept of “social capital” while asking students to consider whether modern citizenship may also include an optional set of responsibilities to share in a greater commitment to the society through civic engagement which builds a social capital which benefits all citizenry. Students will engage in a service-learning project at a local elementary school which will culminate in a basic public health education activity/presentation for school children. The instructor will join them during service dates. (Service Learning- Fall 2013, Fall 2012)
- **TIDE 1760 Narratives of New Orleans: A Digital Storytelling Project** (Service Learning- Mandatory, Fall 2013, Fall 2012) Participants in this TIDES course will be introduced to the principles of online narrative and storytelling in the context of the exploration of New Orleans culture. We will begin our investigation of New Orleans by looking at the historic and demographic realities that have led to our current cultural moment; from there we will examine the portrayal of the city in film and literature including an examination of the new series Treme. We will take our investigations out into the city for tours of the neighborhoods and samples of New Orleans music and food. Throughout the course we will be interested in how and why the stories that we hear are preserved and retold and what aspects of narration make for compelling tales. This

course will culminate in the creation of individual digital stories detailing each student's ideas about his or her relation to the ongoing narrative of New Orleans.

- **TIDE 1810 Non-Profit Organizations & Community Engagement in New Orleans:** Hurricane Katrina brought unprecedented damage to the city of New Orleans and to the Gulf Coast region. The response to the disaster on the part of federal, state and local governments has been criticized in many quarters, with a great deal of justification. At the same time, thousands of volunteers have come to New Orleans in the past 3 years to perform critical services in the city's recovery, from building housing to offering mental health counseling. Of course, these volunteers would have little to do without the organization provided by the many non-profit agencies in the city that have responded to the crisis. In this course, we will examine how the non-profit community has sought to help in the recovery from Hurricane Katrina. We will focus on the goals of non-profit agencies, learn about their sources of funding and volunteers, and also examine the degree to which their goals are supported by state and local government. (Service Learning- Mandatory, Fall 2013, Fall 2012)
- **TIDE 1960 Architecture & Disaster: Making Change Positive:** Architects are the problem-solvers of the built world. Using their design skills, advanced technologies and new systems for organization, architects affect how the physical world unfolds. Class sessions address post-disaster rebuilding with a focus on the solutions presented by architects. Topics include environmentally-sensitive design, emergency housing, addressing place and culture, and international aid through the lens of post-disaster design work. The class will have field trips to the 9th ward, Central City, and Hollygrove Market and Farm in New Orleans, and feature guest lecturers from Architecture For Humanity and the New Orleans Food and Farm Network. Two service learning events will satisfy 20 hours of required service learning. This class references work from a number of different disciplines in an effort to cast a broad net around this diverse and multi-faceted issue. Architecture, Urban Planning, Community Activism, Environmental Studies, Urban Farming, Landscape Architecture and Engineering are among the many disciplines that will inform this learning.
- **TIDES 2220 Women and Literature in New Orleans** (Service Learning, Mandatory, Fall 2012)

- **Colloquia**

- **COLQ 1010 Freshman Seminar: Community, Polity, and Citizenship** (Fall 2014, Spring 2014, Spring 2013)
- **COLQ H2010 - Honors Sophomore Colloquium**, “Responding to the Challenge of Climate Change,” Fall 2012: How do we know what we know about climate change? How do we understand the responses of different communities to it? What are the most significant steps we can take to reduce greenhouse gas emissions? This course features guest lectures from faculty across the university, sharing the approaches their disciplines bring to understanding the challenge of global climate change. The course considers the impacts of climate change and the reports of the Intergovernmental Panel on Climate Change; considers cultural and social perspectives on climate change; and considers solutions proposed and created by policy makers, designers, engineers and managers. You will learn how to assess the climate impact of a business or institution and how to assess measures to reduce emissions. The course includes a field trip to visit sustainable rebuilding and clean energy projects in the New Orleans area. For the course’s final essay assignment, you will be asked to develop a prospectus for an honors thesis project relating to climate change. By providing a multidisciplinary overview and introducing you to work underway in departments across the university, this course seeks to help you identify your own research agenda—your own response to climate change.
- **COLQ 3040** (“The Legacies of Katrina,” Spring 2014; Global Youth Cultures, Fall 2013)
- **COLQ 3050** (“Saving Coastal Louisiana: Science, Stakeholders and Politics,” Fall 2014; “The Natural World in Ancient and Modern Thought,” Spring 2014)
- **COLQ 4120 - The Grand Canyon Colloquium** This is a May term multi-disciplinary course with emphasis on geology of the Grand Canyon and adjacent Colorado plateau. Course culminates with a 188 mile week-long rafting trip down the Colorado River through Marble and Grand Canyon.
- **COLQ 4140 - The Natural History of Mesoamerica** Geologic history of Mesoamerica, archaeology of Mesoamerica, history of the conquest and colonial period, flora and economic botany of the region.

- **Teacher Preparation and Certification**

- **EDLA 2000 - Education in a Diverse Society (Service Learning, Spring 2014, Fall 2013, Spring 2013, Fall 2012)** This is an introductory course for those preparing for certification to teach. This course examines the historical, philosophical, sociological, psychological, organizational and socio-cultural bases



of American education and the political influences as they relate to contemporary issues in education in the United States. It is designed to assist students in determining if they want to pursue teaching as a career, and it helps prospective teachers to gain a valid and comprehensive knowledge of what is involved in a teaching career. Emphasis is placed upon reflection, inquiry and personal involvement in planning an effective and successful career in education.

- **EDLA 2890 - Service Learning in Public Schools** This course provides opportunities for observation and participation for students who are exploring an interest in teacher certification. Students observe and participate in a variety of school and classroom settings, including urban, suburban, and inner city schools for a total of twenty hours. Students meet for debriefing sessions during the semester and complete a final project.
- **EDUC 3000 - Emergent Literacy (Service Learning, Spring 2014, Fall 2012)** This course introduces prospective teachers to children's speech and language development, recognition and development of readiness skills, the overall scope of emergent literacy issues, and appropriate methodologies for building the communication skills of young children. Students will learn approaches and strategies in the six core areas of literacy: phonemic awareness, phonics, fluency, vocabulary, comprehension, and writing. This course requires a minimum of twenty service learning hours in the Reading Buddy program at a public elementary school in grades PK-3.
- **EDLA 3160 Child & Adolescent Lit (Service Learning, Spring 2014, Spring 2013)** This course is designed to provide prospective educators with an overview of the field of children's literature with a focus on works appropriate for children and young adults. The history, philosophy, significant authors and texts, and major genres of children's literature will be explored. There is a twenty-hour service learning requirement for this course, which will provide candidates with direct experience with selecting, developing and using appropriate books to meet the needs of diverse groups of learners. Course readings, projects and field experience will be differentiated according to candidates' chosen certification area.
- **EDUC 3500 - Meth Early Childhood Education (Service Learning, Fall 2012)** This course will assist prospective teachers in gaining a valid and comprehensive knowledge of what is involved in early childhood language arts, social studies, and arts instruction. Emphasis is placed upon reflection, inquiry, and personal involvement in planning an effective and successful career in early childhood, and developing an understanding of how children develop and learn successfully. Current trends, issues, developmental theories, research, and teaching methods related to the education of young children in language arts,

social studies, and the arts will be explored and applied through fifty hours of field-based experiences.

- **EDUC 3801 - Methods of Early Childhood Reading Instruction (Service Learning, Fall 2013)** This course provides the necessary foundational knowledge of early reading and writing processes and familiarizes certification candidates with the practices, methods, and curricular materials to support instruction in multiple literacies. A variety of assessment strategies for planning and evaluating the effectiveness of literacy instruction are explored in the class and applied in the classroom setting in the forty hour required practicum. Candidates will analyze the interrelationships among assessment, instruction, and materials and their effects on the development of a literacy environment that fosters reading, writing, listening, speaking and the effective use of technology. Readings and assignments will be differentiated according to the candidate's area of certification.
- **EDUC 3802 - Methods of Secondary Reading Instruction (Service Learning, Fall 2013)** This course provides the necessary foundational knowledge of secondary reading and writing processes and familiarizes certification candidates with the practices, methods, and curricular materials to support instruction in multiple literacies across various content areas. A variety of assessment strategies for planning and evaluating the effectiveness of literacy instruction are explored in the class and applied in the classroom setting in the forty hour required practicum. Candidates will analyze the interrelationships among assessment, instruction, and materials and their effects on the development of a literacy environment that fosters reading, writing, listening, speaking and the effective use of technology. Readings and assignments will be differentiated according to the candidate's area of certification.
- **EDUC 3810: Reading Practicum (Service Learning, Spring 2013)** This course provides the necessary foundational knowledge of secondary reading and writing processes and familiarizes certification candidates with the practices, methods, and curricular materials to support instruction in multiple literacies across various content areas. A variety of assessment strategies for planning and evaluating the effectiveness of literacy instruction are explored in the class and applied in the classroom setting in the forty hour required practicum. Candidates will analyze the interrelationships among assessment, instruction, and materials and their effects on the development of a literacy environment that fosters reading, writing, listening, speaking and the effective use of technology. Readings and assignments will be differentiated according to the candidate's area of certification.
- **EDUC 3820 39321 Practicum SEC Reading (Service Learning, Spring 2014, Spring 2013, Fall 2012)** Under the supervision of a public school

teacher, certification candidates work with one student implementing the diagnostic and prescriptive strategies learned in class and with larger groups implementing large group instructional strategies. Students fulfill forty hours of clinical/laboratory experiences in a secondary reading classroom in a supervised practicum. The clinical/field experience will enable students to apply the theoretical principles of academic course work to effective teaching practices.

- **EDUC 3901: Methods Teaching Math/Sci (Service Learning, Spring 2013)**  
This course will prepare prospective teachers to teach science and mathematics in the early childhood (ages three through eight) setting. Theories and methodologies will be explored. Special attention will be given to developmentally appropriate activities, and a great emphasis will be placed on integrating subject matter and utilizing manipulatives. Technology issues will also be covered.
- **EDUC 5090 Methods II Social (Service Learning, Spring 2014, Spring 2013)** A seminar and practicum course providing opportunities for secondary teacher candidates to acquire skills in teaching methodologies and strategies specific to secondary social studies instruction. Topics include organization of subject matter, weekly and unit lesson planning, development of assessments, utilizing information technology for instruction, and working with diverse populations of students. Course activities include observation in college classrooms, conferences with content field specialists, teaching in a secondary classroom, discussion/reflections, demonstration of effective use of standards documents, inquiry activities and a review of effective pedagogical and school improvement literature. The course requires fifty clock hours of field experience in a middle or high school classroom.
- **EDUC 5010 - Secondary Education Methods I (Service Learning, Fall 2013, Fall 2012)** This course focuses on prominent methodological issues and the development of core teaching skills. Students will analyze different instructional methods; design comprehensive unit and lesson plans using the Understanding by Design model; develop integrated technology strategies and skills in assessment for learning and differentiated instruction. Emphasis is placed on development of skills of self-analysis, reflection, and research based decision-making. Students will interpret and demonstrate their understanding and general teaching practices through fifty hours of field experience in a middle or high school setting.
- **EDUC 5100 Methods II Science (Service Learning, Spring 2014, Spring 2013)** A seminar and practicum course providing opportunities for secondary teacher candidates to acquire skills in teaching methodologies and strategies specific to secondary science instruction in biology, chemistry, physics or general science. Topics include organization of subject matter, weekly and unit lesson planning, development of assessments, utilizing information technology

for instruction, and working with diverse populations of students. Course activities include observation in college classrooms, conferences with content field specialists, and teaching in a secondary classroom, discussion/reflections, demonstration of effective use of standards documents, inquiry activities and a review of effective pedagogical and school improvement literature. This course requires fifty hours of field experience in a middle or high school classroom.

- **EDUC 5110 Methods II English (Service Learning, Spring 2014, Spring 2013)** A seminar and practicum course providing opportunities for secondary teacher candidates to acquire skills in teaching methodologies and strategies specific to secondary language arts instruction. Topics include organization of subject matter, weekly and unit lesson planning, development of assessments, utilizing information technology for instruction, and working with diverse populations of students. Course activities include observation in college classrooms, conferences with content field specialists, and teaching in a secondary classroom, discussion/reflections, demonstration of effective use of standards documents, inquiry activities and a review of effective pedagogical and school improvement literature. This course requires fifty hours of field experience in a middle or high school classroom.
- **EDUC 5120 Methods II Math (Service Learning, Spring 2014, Spring 2013)** A seminar and practicum course providing opportunities for secondary teacher candidates to acquire skills in teaching methodologies and strategies specific to secondary mathematics instruction. Topics include organization of subject matter, weekly and unit lesson planning, development of assessments, utilizing information technology for instruction, and working with diverse populations of students. Course activities include observation in college classrooms, conferences with content field specialists, and teaching in a secondary classroom, discussion/reflections, demonstration of effective use of standards documents, inquiry activities and a review of effective pedagogical and school improvement literature. This course requires fifty hours of field experience in a middle or high school classroom.

# Inventory of Sustainability Courses

School of Public Health and Tropical Medicine

Courses Offered Fall 2013-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.

Draft list of undergraduate courses compiled by Cheyenne Ligon, SPHTM – 2016, by reviewing the Tulane Course Catalog posted at <http://www.sph.tulane.edu/publichealth/bsph/bsph-courses.cfm>. Undergraduate courses including Service Learning credits added by Colleen Large, SLA – 2016, from lists obtained from Center for Public Service. Draft list of graduate courses compiled by student Molly Vaux, SPHTM Masters’ candidate, by reviewing the “Courses” pages of each department on the School of Public Health and Tropical Medicine website. The list was sent to Interim Dean LuAnn White for review in June 2014.

## *Undergraduate Courses*

- **Sustainability Courses:**
  - No sustainability courses are offered at this point.
- **Courses That Include Sustainability:**
  - **SPHU 1010 Introduction to Public Health: Epidemics, Revolutions, and Response**

Students are introduced to the concepts and practice of public health in the U.S. and internationally by tracing its historical evolution. Classic public health problems and their resolution will be discussed in the context of the broader contemporary social environment. The latter part of the course is focused on

public health practice in both the U.S. and developing countries, with a consideration of the structure, function, and financing of public health organizations. The many different roles for public health professionals in these organizations also are described. (Service Learning- Optional, Spring 2014, Fall 2013, Spring 2013, Fall 2012)

○ **SPHU 1020 The Cell, the Individual, and the Community**

This course provides a foundation of knowledge about the human body in health and disease. It gives an overview of important concepts on the biological mechanisms of disease at the cellular, individual, and population/community levels. The course will focus on a natural progression in the development of health and disease, moving from a discussion of the cell, to the individual, and finally, to specific infectious or chronic disease states and processes. The role of the community in public health will be emphasized. This course is designed to provide a good foundation in the mechanisms of health and disease. Furthermore, each lecture will offer insights into current public health topics and research trends. Each lecture will address the following: 1) specific mechanisms of health and disease; 2) topics of special public health importance, and 3) a scientific update on research in the news

○ **SPHU 3110 Local Solutions to Global Problems**

Students begin to integrate their understanding of public health science in this applied problem-solving course that brings together the elements of program development and rigorous evaluation. The course develops the concepts of problem assessment, strategic approaches to program planning, and evaluation of public health programs.(Service Learning- Optional, Spring 2014, Fall 2013)

○ **SPHU 3120 From Biology to Policy: Issues and Strategies in Public Health**

Focusing on a small number of specific health problems of global public health importance, this course traces the relationships among the biologic, sociologic, economic, and political factors involved in the identification, prevention and treatment of the health problem. The course helps students understand the dynamic tension that exists between various stakeholders involved in the disease intervention process and how these tensions play out in the public and global policy arena. The course will be transdisciplinary, emphasizing the connections between the biologic nature of disease and the social, economic and political context in which policy for dealing with disease is developed. Examples of diseases that may be addressed are AIDS, tuberculosis, heart disease, and breast cancer.

○ **SPHU 3150 Global to Local Environmental Health**

The course is designed to identify environmental issues regarding various

environmental media. Fundamental concepts addressing these issues and potential solutions will be covered. Related experiences from global to local and personal perspectives will be presented. Interrelationships between ecological and human health will be emphasized.

- **SPHU 3300 Sustainable Nutrition** (Service Learning- Optional, Spring 2014)
- **SPHU 4210 Health and Environmental Risk Assessment**  
The course covers the principles of human health and ecological risk assessment. The National Academy of Sciences model framework for risk assessment (hazard identification, dose response assessment, exposure analysis, and risk characterization) is used to explain environmental risks of long-term exposure of humans and wildlife to air pollution and chemicals in food and drinking water. The interaction of scientific methods with focus on toxicology and regulatory requirements will be reviewed. Case studies focus on current environmental pollution issues such as exposure to lead paint, mercury in fish, arsenic from smelters and petrochemical industrial emissions. Specific topics to be covered detail include: health and ecological effects toxicology and environmental epidemiology; qualitative and quantitative risk assessment methods; cancer risk models; regulatory toxicology; risk communication; reproductive risk assessment; endocrine disruption; different approaches to risk assessment by federal, state and international agencies; political and economic aspects of risk management; information resources, and field trips to state regulatory agencies.
- **SPHU 4300 Public Health Communications** (Service Learning- Optional, Spring 2014, Fall 2013)

## *Graduate Courses*

### **Department: Biostatistics and Bioinformatics**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**

### **BIOS 6350 ENVIRONMENTAL BIOSTATISTICS**

The objective of this course is the application of statistical methods to the collection and analysis of environmental data. The course is divided into three parts. Part 1 deals with field sampling designs along with methods used to estimate the mean, total amount, sampling errors of the mean and total amount as well as sample size and power calculations for each sampling design. Part 2

deals with a broad range of statistical techniques relating to environmental data. Part 3 deals with linking environmental data to various health indices. The focus will be on numerical computation and interpretation of results of statistical application using SAS.

### **BINF 7600: NUTRITIONAL GENOMICS FOR DISEASE PREVENTION AND INTERVENTION**

The course is a comprehensive overview of nutrigenetics/nutrigenomics and their application for disease prevention and intervention. The lecture will address how the nutrigenomics and nutrigenetics knowledge may potentially lead to personalized diet to prevent and improve nutritionally related diseases, such as osteoporosis, cancer, obesity, type 2 diabetes, cardiovascular disease, and inflammation disease. Current and emerging tools for nutrigenetics/nutrigenomics research will also be introduced.

#### **Department: Epidemiology**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**

### **EPID 6750 OUTBREAK EPIDEMIOLOGY**

This course is designed to provide students with the knowledge and skills required for the investigation, control and prevention of disease outbreaks in a variety of settings and due to a variety of infectious agents. Students will explore and practice the approaches used to investigate disease outbreaks, and examine local and global efforts to monitor, control and mitigate the effects of infectious disease outbreaks.

### **EPID 7090 EPIDEMIOLOGY OF INFECTIOUS DISEASES**

This course provides students with the knowledge and skills required for the investigation, control, and prevention of a variety of infectious diseases. Students will explore the characteristics of a range of specific disease agents, compare their impact on populations, practice approaches used to investigate disease outbreaks, and examine local and global efforts to monitor, control, and/or eradicate selected infectious diseases. Zoonotic diseases are included in the course.



**Department: Global Community Health and Behavioral Sciences**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**

**GCHB 6030 SOCIAL AND BEHAVIORAL ASPECTS OF GLOBAL HEALTH**

This course covers the behavioral, social, and cultural aspects of health and disease. Students learn how behavioral and social theories are relevant to health promotion and disease prevention efforts, and in behavior based safety efforts. They also learn how factors that protect or erode health operate at multiple levels (including individual, community, societal, and global levels), and how interventions are developed to improve health by addressing critical factors at each of these levels. The course also addresses the roles of culture, race, and ethnicity in the conceptualization of health and illness.

**GCHB 6100 INTRODUCTION TO PUBLIC HEALTH POLICY AND PRACTICE**

This course introduces students to the broad context of public health practice, including the mission, core functions, structure, policy role, program activities, and collaborative endeavors of public health agencies, as well as the value conflicts inherent in public health. Theoretical and practical perspectives are presented to illustrate contemporary strategies for health promotion, and how public health works at the state and national levels. Critical health issues are examined from a practice perspective to stimulate classroom discussion of both the problem and the public health system's efforts directed toward the solution of the problem.

**GCHB 6110 PLANNING OF HEALTH EDUCATION PROGRAMS**

This course is designed to provide skills in planning and developing health education interventions for behavior change at the individual, family or social network levels of practice. Emphasis is placed on applying program design principles to the development of educational interventions. It is structured in a lecture-discussion format. Given its skill development focus, the course includes weekly homework assignments and the development of a health education program plan.

**GCHB 6120 MONITORING AND EVALUATION OF HEALTH EDUCATION AND**

## **COMMUNICATION PROGRAMS**

This course introduces students to the concepts and functions of evaluation and will teach them some basic skills in monitoring and evaluation as they apply to health education and communication programs specifically. This is an introductory course designed for students focusing on implementation of programs. Students are not expected to have any background in research methods or evaluation. Monitoring and evaluating programs are vital skills and steps to provide reasoning and answers of why the program failed or succeeded. A lot of the reasons why a program fails is that it is not sustainable- in this course it stresses the importance of this dimension.

## **GCHB 6140 DEVELOPING LEADERSHIP AND COMMUNICATION SKILLS IN PUBLIC HEALTH**

This course combines practical, skills-based exercises with strategic thinking approaches to personal, professional, and organizational leadership development. Leadership: The ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals. This course will aid the student to master several of the public health cross cutting competencies objectives related to leadership, communication and professionalism. In keeping with the spirit of personal development, each student will develop a unique set of goals for the course tailored to their own personal leadership development. This class is best suited for students in their first or second semester of coursework as many assignments pertain to planning active learning and advancement in their studies at Tulane.

## **GCHB 6160 INTRODUCTION TO MANAGEMENT OF COMMUNITY BASED ORGANIZATIONS**

This course introduces students to managerial aspects of community base organizations and processes to be followed in an effort to establish such an organization suitable to a targeted community. Topics and activities focus on managerial concepts and applications related to starting and developing a community organization: planning, staffing, recruiting, budgeting, strategic planning, fundraising, marketing and tax management.

## **GCHB 6220 COMMUNITY ORGANIZATION**

This course emphasizes community organization as a major educational approach to community

dynamics, social change, and community participation in addressing health problems. The course explores methods for identifying and analyzing community health problems and their causes. Participants will examine the role of individuals, community institutions, and public health practitioners in effecting solutions to community health problems. The course stresses advancement both in theoretical knowledge in areas of community organization and community change, and in the application of community organization skills such as needs assessment

### **GCHB 6230 COLLABORATIVE COMPETENCY AS A TOOL FOR CAPACITY BUILDING**

This course is designed to provide field experience at Birthing Project USA, a community-based international maternal and child health organization serving Africa, Latin America and the US, including New Orleans. Emphasis is placed on working collaboratively with local (US and International) communities, applying principles of Community Based Participatory Research and integrating concept of social entrepreneurship into health program planning, implementation and evaluation. This course also addresses the roles of culture, race and ethnicity, gender and age in the determinants of power, leadership and decision-making and their impact on health status. Students will receive experience, support and constructive feedback to develop skills in working in communities in which they are not culturally competent.

### **GCHB 6350 APPLICATIONS OF SCHOOL HEALTH PROGRAMS**

This course is designed to introduce students to the unique benefits and challenges of conducting health education/health promotion within school settings (elementary, middle and high schools). The eight components of coordinated school health will be addressed, particularly risk reduction and health promotion through assessment, policy development, environmental change, and health education.

### **GCHB 6410 CLINICAL AND CULTURAL ISSUES OF REPRODUCTIVE HEALTH**

Designed to acquaint the student with the fundamental clinical issues of obstetrics to maximize the student's potential for learning in subsequent maternal and child health courses. Public health issues will be integrated throughout the course to familiarize the student with non-clinical issues that impact the delivery of obstetrical care to women.

### **GCHB 6420 BEST PRACTICES IN WOMEN'S HEALTH**

Designed to acquaint the student with the health care of women from puberty through the elder years. It will be taught through lectures supplemented with readings and will use a discussion format. It will address health care from the clinical and delivery system perspectives, and include aspects of female biological function in health and disease, treatment and prevention, and maternity and prenatal care. A significant portion of the course will be directed to economic, political, social, and cultural aspects of women's health care, and will consider health care needs and standards of care.

### **GCHB 6500 VIOLENCE AS A PUBLIC HEALTH PROBLEM**

This course is designed to give an overview of the problem of violence as viewed from a public health perspective. We will look at the epidemiology of violence (scope, causes, risk factors, and consequences) alongside public health approaches to the problem. The course aims to balance a review of the problem with ideas and evidence for solutions. Local academic and community leaders in the field will lend their expertise to help students understand and address violence as a public health problem

### **GCHB 6610 COMMUNITY NUTRITION**

This course introduces the student to community nutrition in community agencies and to the role of the nutritionist in the delivery of nutrition services.

### **GCHB 6750 NUTRITION ASSESSMENT AND MONITORING**

This course offers a thorough review of the tools used for the assessment of nutritional status of populations. Topics include anthropometrical, biochemical, and socioeconomic indicators of nutritional status; methods for the collection, analysis, and interpretation of dietary data; measurement of household food security; and the use of data from nutrition monitoring and surveillance sources.

### **GCHB 6760 PUBLIC NUTRITION: POLICIES AND PROGRAMS**

The purpose of the course is to provide students with methods and understanding for contributing to the design of programs and supporting policies for reducing malnutrition in populations in developing countries. This means learning about experiences in specific countries, and generalizations from these, in recent successful efforts to reduce malnutrition. The student will

then be better equipped to work with governments, PVOs, and international organizations, in helping these to design and implement more effective programs in the future; and to teach others to do so.

### **GCHB 6770 FOOD AND NUTRITION POLICY**

This course surveys domestic policies and programs that affect nutrition at the population level. Subjects include: dietary policy, including the politics of the food guide pyramid; food labeling policy; food access policy, including the U.S. food assistance programs; food safety and food supply policies; the obesity epidemic, including the role of the food industry; environmental determinants of nutrition outcomes and efforts to improve them; actors and agencies involved in making policy; and nutrition advocacy.

### **GCHB 6780 THE DOUBLE BURDEN OF MALNUTRITION**

The purpose of the course is to familiarize students with the concepts of the Double Burden of Malnutrition (DBM: the co-existence of over- and under-nutrition, both contributing to disease, and acting as risk factors for each other), as well as to engaging them in understanding how to prevent it and mitigate its consequences across the life course, especially in Low and Middle Income Countries (LMICS). Students will learn the various definitions of the DBM, how to measure the problem, as well as to understand its causes and consequences from a life-course perspective. Students will also explore ways to resolve DBM problems through developing case studies on specific aspects of the DBM in selected LMICs

### **GCHB 6800 TRAINING METHODOLOGIES FOR HEALTH PROFESSIONALS IN DEVELOPING COUNTRIES**

An introductory course intended for health professionals who will be responsible for designing and carrying out short-term training courses for paramedical and village-level personnel in primary health care in developing countries. Such elements of training programs as trainee selection, needs assessment, selection of content, behavioral objectives, course design, training methodology, and processes of evaluation will be reviewed. Emphasis will be given to the use of participatory training techniques, which are especially important when trainees have limited educational backgrounds.

## **GCHB 6820 PROGRAM PLANNING, RESOURCE DEVELOPMENT, AND GRANTMANSHIP**

The course is designed to assist the student in acquiring the ability to plan and develop an educational or health promotion project. The course will provide the student with the necessary tools which will enable him/her to identify sources of funding, utilizing the Internet and other methods, and to write a successful grant proposal. Emphasis will be placed on writing goals and objectives and on the preparation of an evaluation plan and budget.

## **GCHB 7090 ADVANCED NUTRITION ANALYSIS**

Planning policies and programs to improve nutrition in populations requires appropriate assessment and analysis. This course covers the process of acquiring, handling, and analyzing data, from a conceptual through to a practical hands on approach, with particular emphasis on programmatic decisions in low and middle income countries. Outcome data (mainly for general malnutrition, with reference also to micronutrient malnutrition), program data (coverage, targeting, etc), differentials and trends, and advanced analytical techniques addressing confounding, interactions, and causality are included.

## **GCHB 7710 PUBLIC NUTRITION: ADVANCED ANALYSIS**

Planning policies and programs to improve nutrition in populations requires appropriate assessment and analysis. This course covers the process of acquiring, handling, and analyzing data, from a conceptual through to a practical hands on approach, for decisions at different levels of organization for policy and program planning, with particular emphasis on community based programs in poor countries. Outcome data (general and micronutrient malnutrition), program data (coverage, targeting, etc.), differentials and trends, and advanced analytical techniques addressing confounding, interactions, and causality are included in relation to decisions on action

## **GCHB 8750 Social Determinants of Health I: Concepts, Theory and Interventions**

The purpose of this course is to provide students with advanced conceptual knowledge of major social determinants of health. Students will gain from the course an understanding of social science theoretical models which guide investigations of the social determinants of health, the empirical etiological connections between social determinants and health outcomes, and interventions meant to affect such social determinants. Students in the course will synthesize

such knowledge and apply it to a health issue of their choice, suggesting next steps in programming to address social determinants of their chosen health issue.

**Department:** Global Environmental Health Sciences

- **Sustainability courses:**

**GEHS 6030 SURVEY OF ENVIRONMENTAL HEALTH**

This course is designed as a survey course which introduces students to basic environmental health topics and it fulfills the school's core requirement. The course focuses on environmental factors impacting human health and the environment. Sources of these factors, methods of identification, recognition, evaluation and regulatory framework control are discussed. Factors might include health hazards associated with contaminated water, food and air, vectors of disease, exposure to toxic chemicals, environmental justice, regulations, and safety in the work place.

**GEHS 6040 ENVIRONMENTAL HEALTH FOR DEVELOPING COUNTRIES**

This course is intended for students interested in understanding international environmental health problems, especially in developing countries. Global environmental health topics with a focus on developing countries are discussed. Topics include rural water supply and treatment, human waste collection and disposal, food protection, insect and rodent control, solid waste collection and disposal, and pesticide use and abuse. Specific problems in represented countries will also be presented and discussed. Selected Field Trips will compliment material discussed in class. In the Field Portion: Upon the completion of the field visits, students will be able to relate what was discussed in class to what was observed in the field.

**GEHS 6100 FUNDAMENTALS OF ENVIRONMENTAL CONTAMINANTS**

The course is designed to identify, characterize and evaluate environmental contaminants as they relate to human health. Topics include biological, chemical and physical contaminants in air, food, soil and water. The behavior of these chemicals will be discussed. Integrating appropriate methods of their control will also be addressed.

## **GEHS 6110 GLOBAL CLIMATE CHANGE ISSUES IN PUBLIC HEALTH POLICY & GOVERNANCE**

The objective of the course is to provide students with a thorough understanding of global climate change (GCC) phenomenon, the public health issues associated with GCC, and the role of policy and governance in tackling this problem. In line with this objective, the course examines the scientific, political and socio economic factors influencing public health policy development, adaptation, and compliance in response to the global climate change problem. The course also analyzes the current policy and governance intervention models, and sheds light on direction for the future.

## **GEHS 6400 ELEMENTS OF ENVIRONMENTAL HEALTH**

This course is designed for students majoring in Global Environmental Health Sciences/Developing Countries. It covers topics in environmental practices in public health including: environmental pollution (its sources), public health significance and methods of control. Quality of food and food products, milk and dairy products, vector and rodent control, schools, housing and recreational waters are discussed in depth.

## **GEHS 6410 WATER AND SANITATION FIELD OPERATIONS**

This course is designed for students who will be working in areas, especially in developing countries, where contaminated water and improper sanitation are the cause of serious health problems. In this course, fundamental concepts will be taken from the classroom to field installations. The course will emphasize the design and construction of water systems (wells, springs, rain collection systems) and building individual of human waste disposal systems.

## **GEHS 6510 WATER QUALITY MANAGEMENT**

The course presents the basic concepts concerning policy, evaluation, and implementation of pertinent water quality management issues. Topics of focus include: water quality standards and criteria; principles of water quality management; regulatory considerations; limnological aspects; eutrophication; ecotoxicology; diffuse pollution and global aspects of sustainable water quality control strategies

## **GEHS 6550 ENVIRONMENTAL HEALTH MANAGEMENT**

This course explains the fundamentals of environmental health and how they fit into the larger



context of public health security. It highlights the elementary science of environmental exposure of humans to toxic chemicals and microbes, and in this way provides a context and basis for preventative policy and management responses to environmental health problems. The course discusses current environmental health issues, policy development processes, policy tools and environmental laws – their weaknesses and strengths. It also introduces students to environmental management systems and practices. Students are given case-study based assignments to encourage their skill development in applied environmental health management.

### **GEHS 6590 AIR POLLUTION**

This course covers the following topics: structure, composition, and physical characteristics of the atmosphere and its various layers; pollutant behavior in the atmosphere; global, regional, and community air pollutants; indoor air quality; effects of air pollutants on the atmosphere, vegetation, animals, and materials; human health effects of exposure to air pollutants; standards and regulations pertaining to air pollution; atmospheric dispersion modeling techniques; and control of particulate matter and gaseous air pollutants

- **Courses that include sustainability:**

### **GEHS 6310 CANCER: CAUSES, TREATMENT, AND DISPARITIES**

This is an introductory course that covers basic aspects of biology, treatment, epidemiology, psychosocial factors, ethics, health disparities, cultural competence and population diversity issues within the framework of cancer.

### **GEHS 6470 MANAGEMENT OF NATURAL RESOURCES**

This course is designed to introduce students to the relevance of sustainable management of natural resources to public health. This is accomplished by identifying problems of natural resources use, examining a number of natural resources management policy tools and laws, and applying them to public health benefits. Ecosystem services and the management of air, water, wetland, agricultural land, forest, global climate change and ozone depletion are some of the topics covered. Students are given case-study based assignments to encourage their skill development in applied natural resources management for better public health protection.

### **GEHS 6500 TOXIC & HAZARDOUS WASTE MANAGEMENT**

This course addresses the current/future trends and background in Toxic and Hazardous Waste Management. The lecture portion of this course covers the methods for identifying, testing and managing of medical, toxic, hazardous waste, municipal sludge, manures and other waste residuals. It includes topics such as Waste Minimization, Hazardous Waste Treatment, Residuals Management, RI/FS Studies, Emergency Response, Coastal Restoration Wetlands and pertinent guest lecturers. In addition, regulations concerning classification, transportation, treatment and abandon sites will be covered, and field trips to municipal recycling center, infectious waste incinerator, landfill operational site, wetlands restoration research center and hazardous waste treatment facility. This is an introductory course which is open to non majors. It is offered during the fall of each year.

### **GEHS 6520 FUNDAMENTS OF ENVIRONMENTAL CHEMISTRY**

Lectures cover the basic concepts of water chemistry including: concentrations, solubility, absorption, kinetics, gas law, phase relationships, and colloidal chemistry. The laboratory portion of the course includes wet chemistry for water quality analyses pertinent to environmental health sciences, such as coagulation, water softening, chlorination, biochemical oxygen demand, chemical oxygen demand, and nutrient analysis. The background provided is necessary preparation for course work in the following tracks: developing countries and resource management (water quality management, toxic and hazardous waste management and natural resource management).

### **GEHS 6540 OCCUPATIONAL HEALTH**

This course will address the most important health disorders affecting people as a result of their work: respiratory diseases, musculoskeletal disorders such as those caused by overexertion or repeated exertion, cancer, hearing loss, skin disorders and occupational stress. Focusing on identifying and preventing work-related diseases, the course will commence with an introduction to scientific method, and the application of scientific method, particularly epidemiology, to the critical evaluation of the relationship between work exposures and the occurrence of disease. General principles of toxicology will also be studied. Major occupational disorders will be introduced as examples following the scientific method section.

### **GEHS 6560: ENVIRONMENTAL MICROBIOLOGY**

This course emphasizes the significance of microbes of public health significance in the environment. Their detection, initiation of disease host response, detection of disease, will also be discussed. Finally, the biology of the organism, their epidemiology and prevention, if disease is presented. Major groups of enteric bacteria, along with RNA and DNA virus are discussed.

### **GEHS 6600 PRINCIPLES OF TOXICOLOGY**

This course focuses on the fundamentals of toxicology and the mechanisms by which environmental and occupational chemical agents affect human health. The principles and mechanisms will be approached in three areas: 1) General principles: Route of exposure; dose response; absorption, distribution, storage, metabolism and excretion; 2) Effects on target organs: liver, kidney, blood, respiratory system and nervous system; and 3) Application of the principles of toxicology using: solvents, pesticides and metals. At the end of this course, the student will be able to apply the principles of toxicology for compounds found in the environment and workplace.

### **GEHS 6610 TOXICOLOGY OF ENVIRONMENTAL AGENTS**

Prerequisite(s): ENHS 6600 The actions of toxicants are studied in detail. Mechanisms of toxicity and extension of this knowledge to general classes of toxicants is emphasized. Students are expected to use current toxicological literature in this course.

### **GEHS 6620 PHYSICAL AGENTS & ERGONOMIC HAZARDS IN THE WORKPLACE**

Problems associated with occupational exposure to temperature extremes, abnormal pressure, noise, mechanical vibration, non-ionizing radiation, and cumulative trauma/ergonomics are discussed in lecture sessions. The fundamental physics, health effects, and occurrence of these agents, along with methods for evaluating the extent of exposure and approaches to controlling them are discussed in lectures and appropriate measurement instrumentation is demonstrated. A laboratory session on noise measurement is included. Applicable exposure standards, regulations, and guidelines are covered in detail.

### **GEHS 6680 RISK COMMUNICATION**

This course is designed to improve written and oral communication skills and to provide hands on experience in the art of two-way communication of environmental issues between scientists

and managers, policy makers and the public. Discussion topics include: Principles of communication theory, message development and target audience identification, public perceptions of health risks, community perspective and listening to communities, communicating the news media and policy makers are covered. Written and oral presentation exercises include fact sheets, press releases, mock public meeting, policy briefing papers, presenting and debating environmental findings. Each student will develop, present and critique oral presentations and written materials.

### **GEHS 6720 PRINCIPLES OF INDUSTRIAL HYGIENE**

This course provides the student with an introduction into the field of Industrial Hygiene. Topics covered include an overview and historical perspective of Industrial Hygiene, anatomy and physiology of the skin and lungs, occupational diseases and inhalation toxicology, chemical agents, biohazards, ergonomics, indoor air quality, ventilation systems, lab safety, personal protective equipment, Hazard Communication and other OSHA standards. Examples from case studies work experience will be discussed. The course also allows for discussion of topics of interest to the class.

### **GEHS 6760 ENVIRONMENTAL ETHICS**

This course introduces students to the ethical issues in environmental resource management and the environmental health outcomes. It debates the various ethical theories on human relationship to environmental resources, and offers critical examinations of the ethical basis of a variety of environmental management policies and approaches. Utilizing a case study approach, it examines some practical ethical failures and successes in environmental stewardship. The course discusses the APHA code of ethics and explains the benefits of the code to environmental public health professionalism and practice.

### **GEHS 6910 ENVIRONMENTAL ASPECTS OF DISASTER RESPONSE**

This course examines the fundamentals of the environmental health and consequence management infrastructure through the lens of a disaster situation. Environmental health challenges that arise during emergencies are explored and operational models unique to disasters are developed.

### **GEHS 6930 POPULATIONS ISSUES IN DISASTER MANAGEMENT: SHELTER, ACUTE CARE, IMMUNIZATION, FORENSICS**

The United States is among other global communities that attempt to prepare its citizens for potential mass casualty events such as natural disasters, terrorism, or a pandemic flu outbreak. This course introduces disaster theory and overviews the United States' National Response Framework. Core population health issues that present during the management of disasters are examined. Developing preparedness at the local level is emphasized. Fundamental concepts of emergency management and leadership are discussed.

### **GEHS 6940 ENVIRONMENTAL ASPECTS OF DISASTER RECOVERY**

This course addresses the process of disaster recovery as the most costly and complex phase of the disaster cycle. The content focuses on critical outcome standards guiding actions during the recovery phase of a disaster to achieve community preparedness.

### **GEHS 6960 PUBLIC HEALTH LAW**

Population-based preventative health intervention is a major focus of public health. Public health law speaks to the legal aspects of delivering this intervention to the society. This course introduces students to the functions and outcomes of public health law from local to global, and provides a hands-on legal tool for public health protection and practice. It covers a variety of topics such as the public health powers of the federal, state and local governments; civil liberties in matters such as quarantine, isolation and mandated medical testing; access to healthcare; liability of healthcare workers; and international law on the duties and rights of countries to control the spread of infectious diseases

### **GEHS 7020 WASTEWATER MANAGEMENT AND TREATMENT**

Theory and application of wastewater treatment concepts is presented stressing holistic waste management. Focus is given to product life cycle analysis, pretreatment and biological treatment of industrial wastes. Wastewater characterization, pretreatment methods, treatment kinetics and unit operation are addressed as well as methods of toxicity reduction, nutrient removal and procedures for residuals management.

### **GEHS 7030 WATER TREATMENT AND SUPPLY**

Prerequisite(s): ENHS 6520 The course is concerned with water quality criteria and standards, hydrologic and hydraulic aspects of water supply, theory and operation of water treatment processes, analysis and design of water treatment facilities, and fundamentals of industrial water treatment (boilers, cooling systems and corrosion inhibition and scale control). Unit operations including gas transfer, sedimentation, filtration, coagulation, adsorption, disinfection, ion exchange and desalinization are also addressed

### **GEHS 7400 FIELD AND LABORATORY APPLICATIONS OF ENVIRONMENTAL HEALTH PRACTICES**

Other Prerequisite(s): ENHS 6030, ENHS 6400 This course consists of field and laboratory work dealing with the identification, assessment and isolation of environmental health problems. It is designed to provide the students an opportunity to observe and work with real-life settings of environmental health problems in the field, i.e. food establishments, jails, schools, water, sewage, etc. Students conduct environmental health exercise and make analysis of problems situations on-site. Written reports of each exercise are required. All reports will be discussed and methods of remedies for environmental health violation corrections will also be discussed.

### **GEHS 7440 ENVIRONMENTAL CANCER RISK ASSESSMENT (3)**

Prerequisite(s): ENHS 6600. The course covers the principles of risk assessment for environmental cancer. The basic model framework for risk assessment (hazard identification, dose response assessment, exposure analysis, and risk characterization) is used to determine and explain cancer risks of human body in response to environmental hazards carried by air, food and water. The interaction of scientific methods with focus on toxicology and regulatory requirements will be reviewed. Case studies focus on current environmental pollution issues such as exposures to vehicle exhaust, dust mixture, arsenic from smelters and petrochemical industrial emissions. Cellular and molecular toxicology and environmental epidemiology will be used as major tools for risk assessment process. Qualitative and quantitative risk assessment methods as well as cancer risk models will be incorporated into the case studies. Field trips to workplaces where suspected carcinogens are released will be organized and a scientific report is required to analyze cancer risks in selected workplaces.

## **GEHS 7450 BIOMONITORING OF ENVIRONMENTAL AND OCCUPATIONAL POLLUTANTS**

Prerequisite(s): ENHS 6600 Humans are continually exposed chemical compounds (e.g., pharmaceuticals, disinfectants, soaps and detergents, as well as the by-products of combustion and other pollutants). Chemicals are absorbed through eating, breathing, drinking, and through contact with our surroundings. Although scientists have long understood that our bodies absorb tiny amounts of chemical substances simply by interacting with our environment, today's technology allows researchers to detect and measure trace concentrations of many environmental substances in the body. The measurement of trace compounds in humans is referred to as biological monitoring, or biomonitoring. Biomonitoring usually involves the analysis of blood, urine or other body tissues/fluids.

## **GEHS 7500 AIR SAMPLING AND ANALYSIS**

Prerequisite(s): BIOS 6030 The principles and techniques for measuring and evaluating airborne contaminants in the work and community environments are presented in lectures and practiced in laboratory sessions. Covered topics include air flow measurements, aerosol science, particulate sampling with and without size separation, optical microscopy, active and passive sampling of gases and vapors, direct reading instruments, stack sampling, atmospheric dispersion modeling, and sampling strategy and statistical data analysis.

## **GEHS 7530 ENVIRONMENTAL UNIT OPERATIONS**

Prerequisite(s): ENHS 6520; ENHS 7020; ENHS 7030 The course is designed for environmental science and engineering application of unit processes for water and wastewater treatment. Techniques for prototype design from laboratory and pilot plant studies; wastewater characterization including toxicity screening evaluations; treatability analysis; kinetics of biological and physical chemical processes are presented.

## **GEHS 7620 HEALTH RISK ASSESSMENT**

Principles of quantitative human health risk assessment. This course develops the qualitative and quantitative skills necessary to evaluate the probability of health effects from exposure to environmental contaminants. Basic concepts of qualitative and quantitative risk assessment are demonstrated with practical case studies. Emphasis is placed on hazard identification, dose-

response evaluation, exposure assessment, and risk characterization. Integration of risk assessment with risk management and communicating risks to the public are discussed. Regulatory aspects of risk assessment in the promulgation of environmental standards are presented.

### **GEHS 7750 ENVIRONMENTAL POLICY**

This course introduces students to the concepts of public health policy with an emphasis on environmental health. The course describes the relationship among public health science, policy and practice and demonstrates the application of this relationship through a series of real cases in environmental health. The curriculum includes an analysis of the key national environmental health laws, policies, regulations and statutes in the context of public health. Through "hands-on" experience, students examine the policy implications of contemporary environmental public health problems

### **GEHS 7930 SPECIAL NEEDS IN DISASTER RESPONSE**

Prerequisite(s): ENHS 6910 This course characterizes the special needs of vulnerable populations in a crises environment as well as the special needs imposed on a population at large in the evolution of a disaster. The course also how to most effectively apply available resources to maximize community and individual survival under extraordinary circumstances

### **GEHS 7950 PSYCHOSOCIAL INTERVENTIONS IN DISASTER OR CRISIS**

Other prerequisite(s): for public health students ENHS 6950 or instructor's permission The course covers the development and application of both brief solution-focused and crisis intervention methods within the context of biopsychosocial resolution in healthy human development and social functioning. Emphasis is placed on practical application of techniques in situations such as natural disaster, death, traumatic injury or illness, pandemics, violent crime, terrorism, suicide, chronic physical and mental conditions, and severe family dysfunction. The clinical-community approach is demonstrated through case-based learning and simulations. Prerequisites for SW students: Methods I and Methods II.

**Department: Global Health Systems and Development**



- **Sustainability courses: none.**
- **Courses that include sustainability:**

### **GHSD 6010 COMPARATIVE HEALTH SYSTEMS**

Health systems around the world are facing the dual challenge of ensuring continued improvement in population health in an environment of rapidly increasing demand with limited availability of societal and consequently healthcare resources. Despite these common concerns of health systems worldwide, no two healthcare systems are identical. This course introduces an approach for comparative analysis with a focus on assessing performance of diverse health systems. Systematic comparative analysis employing quantitative information can identify concerns and policy options for the health sector in general. A set of common indicators for benchmarking among health systems will also be discussed. Health systems of seven different countries will be presented to illustrate the diversity of global systems. The case studies will be drawn from the national classification scheme developed by the World Bank; including high income developed countries (USA and UK); high income primary product exporters (Saudi Arabia); upper middle income countries (Mexico and Cuba); lower middle income countries (China); and low income countries (Rwanda). Recent health reform initiatives will also be discussed. The World Health Organization's building block approach will be used to understand the inter-linkages among different components of the system and the effects of reforms on system-wide outcomes. Performance measures of health systems will be developed by using the six building blocks of a contemporary healthcare system as identified by W.H.O.

### **GHSD 6050 HEALTH SYSTEMS CONCEPTS**

Health Systems Concepts is a graduate-level course that introduces you to the historical development, current structure and operation, and future direction of the U.S. health care system. The course serves as a foundation for understanding the characteristics and complexity of a sector of our economy that currently makes up over 17% of our Gross Domestic Product. The material in the course provides an overview of the ways in which health is produced and supplied through public health activity and health care delivery systems, the factors that determine the allocation of health care resources and the establishment of priorities, and the relationship of health care costs to measurable benefits. The course content enables you

to assess organized efforts to influence health delivery and policy formulation, the impact of these efforts on you as a manager and leader of your health care organization, and the role of societal values and individual behaviors on health system performance, reform efforts, and the health status of our population.

### **GHSD 6110 HEALTH ECONOMICS FOR DEVELOPING COUNTRIES**

This course provides an introduction to the principles of designing and evaluating health systems strengthening strategies in developing countries. The course first presents an overview of health system constraints to scaling up priority health care services in low-income and middle-income settings. The course then provides an overview of the health systems policy process, including problem definition, diagnosis, policy development, implementation and evaluation. Finally, the course provides an overview of policy options to improve health systems performance, with a focus on financial, payment, and organizational strategies. Specific tools and methods for assessing problems and evaluating the impact of reform initiatives are introduced. To illustrate the issues and approaches, case studies are used and discussed throughout the course.

### **GHSD 6140 LEADERSHIP FOR CLINICAL IMPROVEMENT**

This course is open to all students who are seeking future opportunities in executive, managerial, public health, or other health care leadership roles. The course offers students the knowledge, skills, and personal mastery tools that are a prerequisite to assuming leadership positions in the delivery of health services that improve the health status of the individuals and populations. Building on the perspective of clinical education and practice, the student begins his or her leadership journey, integrating and implementing the key structures and processes leading to clinical process improvement and the improvement of health outcomes. By grounding fundamental principles of organizational learning in experimental activities, this course enhances the student's mastery of the core competencies-visioning, dialogue, quality management and measures, systems thinking, personal and team learning, effective health care design, clinical change, and organizational transformation.

### **GHSD 6170 QUALITY MANAGEMENT IN HEALTH CARE**

This course introduces the student of health systems management to areas of continuous process improvement and healthcare quality management. The course offers the concepts and tools

required to examine, evaluate, and implement the key structures and processes of quality improvement programs in health care organizations. An integrative approach to improvement and organizational learning is taken, combining topics and methods from diverse improvement approaches in the development of an organization-wide commitment to continuous improvement. Through case analysis, the course emphasizes practical applications that prepare the participants to use the theory and techniques of quality improvement in situations with complex clinical and managerial implications. Course topics include measurement systems, quality improvement tools, and the design of programs for organizational learning.

### **GHSD 6190 ETHICAL CONCERNS OF HEALTH CARE MANAGERS**

Everyone involved in health care today, to be effective both individually and as a member of health care teams, needs to be well grounded in the ethical issues and dilemmas involved in health care delivery, the effect of these issues on policy making for health care institutions, and the ethical principles and theories available for decision making. Through their study of these subjects, students also develop better understanding of their own bases for making ethical decisions, including identification and sources of presuppositions and biases.

### **GHSD 6210 HEALTH LAW AND REGULATION**

Introduction to a wide range of topics in the area of health law and regulation including a number of relevant statutes. Students learn to recognize potential legal problems in various health care settings, identify the issues and rights that are implicated, and propose solutions or plans of action. They also learn to differentiate between legal problems and problems which can more appropriately be solved in other ways. There is an emphasis on formulating analyses clearly, both orally and in writing. Among the subject areas covered in the first two-thirds of the course are licensing, professional liability, confidentiality, informed consent, professional relationships, access issues, and antitrust. The last third of the course covers the legal aspects of a variety of bioethical issues.

### **GHSD 6220 PROGRAM SKILLS IN CRISIS AND TRANSITION SETTINGS**

This course is designed to equip students with a set of skills related to the assessment and analysis of the social, economic, and policy aspects of complex political emergencies, as well as post-conflict/transitional settings. The course covers selected topics in preparedness, response,

and transition in complex political emergencies, and their effects upon the civilian populations and the agencies that seek to assist them. Students develop skills in the following areas: information management, program operations management, and policy and context analysis. In terms of information management, students develop the capacity to adapt surveys to conflict-affected settings and utilize a series of rapid assessment approaches and participatory rural appraisal techniques for data collection. Students also learn to identify and utilize the principal components of crisis prevention and early warning information systems. In terms of program operations management, students develop skills in the construction of a logistics management system appropriate for emergency settings, and learn how to develop key programs of particular importance in post-conflict and transitional settings. In terms of policy and context analysis, students are equipped with analytical skills related to assessing potential harmful effects of humanitarian assistance, international political aspects of humanitarian work, international humanitarian law, and opportunities for promoting conflict resolution, capacity building, and development through humanitarian assistance.

### **GHSD 6250 DESIGN AND IMPLEMENTATION OF GLOBAL HEALTH INTERVENTIONS**

This course focuses on fundamental programming skills that can be applied to a variety of global health interventions focused on specific topics such as: disaster and emergency response, nutrition, child wellbeing, HIV/AIDS, infectious disease/malaria, reproductive health, etc... Students will acquire conceptual and practical tools to conduct situation analysis, conceptualize program/project frameworks, identify and manage human and financial resources required to successfully implement programs, and identify and develop necessary operational plans and procedures for Global Health interventions. Partnering and community-based approaches are the cornerstones of successful interventions. Therefore this course emphasizes participation, teamwork, and collaboration as essential programming skills.

### **GHSD 6280 EVALUATION OF PROGRAM INTERVENTIONS IN GLOBAL HEALTH**

This course provides students with basic concepts, principles, and practices for the evaluation of public health programs. This course focuses on the evaluation of important public health topics including malaria, HIV/AIDS, Tb, and Reproductive health programs. The course is intended to 1) provide an introduction to program evaluation, 2) provide basic professional skills for

developing evaluation plans, and 3) provide a foundation for more specialized classes offered in the areas of data analysis, sampling, epidemiology, and operations research.

### **GHSD 6450 HEALTH ECONOMICS**

This course introduces the student to the basic economic concepts and analytical methods used to address issues concerning the efficient and effective production of health and health services in a market economy, with an emphasis on the U.S. health system. The course applies tools of analysis to the behavior of the consumer/patient as well as to physician, hospital, health insurance, pharmaceutical, and long term care organizations and industries. The role of government in the production of health and the economic aspects of health reform are also explored.

### **GHSD 6760 HEALTH SYSTEMS STRENGTHENING: INTERNATIONAL FAMILY PLANNING**

The concept of health systems strengthening is fundamental to the delivery of health services in the developing world. The WHO framework outlines six building blocks for health systems; governance, health financing, service delivery, human resources, commodities management, and health information systems. Through this course, students will master these concepts as they apply to the "re-emerging area" of international family planning. Whereas the concepts of health systems strengthening generalize to other health topics, the focus on family planning will allow students to gain in-depth knowledge and experience in using key tools relevant to this field. This course will be especially useful to students interested in managing social development programs in the international context, especially in the area of reproductive health.

### **GHSD 6850 POPULATION AND ENVIRONMENT THEORY**

This course entails a critical examination of major social science approaches (demography, anthropology, economics) to the understanding of relationships between population dynamics, environmental change, and development policies; and a broad survey of global environmental concerns (and their relationship to population dynamics) and proposed solutions. The main approaches which influence social science research and policy today are surveyed: Malthusian theories, Boserupian population-induced intensification, and mediated modes such as policies, structural constraints, and environmental change. Students survey conceptual models and seek

evidence from empirical research on major concerns: food, forests, and biological diversity, urban and industrial issues, and climate change. Projects which integrate reproductive health and conservation concerns into practical, community-based interventions are examined. Techniques and data needs for researching population-environment interactions are briefly surveyed. A final segment focuses on Guatemala and the interrelated impacts on land, forests, biological diversity, and urban infrastructure of population dynamics, development policies, and historical inequities. GHSD 6850 is recommended for students interested in working in developing countries in reproductive health, environmental health, population policy, or development.

### **GHSD 7020 COMMUNICATIONS RESEARCH FOR HIV/AIDS FAMILY PLANNING AND HEALTH**

Prerequisites: BIOS 6240 or a working knowledge of SPSS. This course constitutes a practical introduction to the research methodologies used in planning a communication program for promoting desirable health behaviors, designing appropriate messages, pre-testing communications and evaluating program effectiveness. Most examples and data sets will involve international family planning and sexual risk behaviors, but will be applicable to other areas of public health. Lectures will be combined with exercises in which students carry out communication pretests, conduct and analyze the results of focus groups and do secondary analysis of existing communication data sets using statistical software. These skills are basic to the systematic approach in designing, implementing, and evaluating a health communication program.

### **GHSD 7120 MONITORING AND EVALUATING MATERNAL AND CHILD HEALTH PROGRAMS IN DEVELOPING COUNTRIES**

This course is designed to serve the purpose of (1) providing students with an understanding of the context and design of the main interventions to improve maternal and child health in developing countries, (2) developing professional skills in the use of quantitative analytical tools and technologies to appropriately monitor and evaluate maternal and child health programs in developing countries, and (3) increasing students' abilities to use monitoring and evaluation results to improve the planning and delivery of maternal and child health services in developing countries.

## **GHSD 7140 MONITORING AND EVALUATION OF HIV/AIDS PROGRAMS**

This course focuses on the monitoring and evaluation of HIV/AIDS programs. The course is intended to (1) provide an introduction to HIV/AIDS prevention, care, and treatment programs; (2) strengthen skills in the application of tools for global and national level monitoring of the HIV epidemic and response; (3) provide a foundation for monitoring and evaluating specific HIV/AIDS programmatic areas (prevention, testing and counseling, treatment, community and home-based care, tuberculosis/HIV integration, orphans and vulnerable children, most-at-risk populations, and behavior change communication); and (4) demonstrate how M&E findings are used to prioritize options for improving the national HIV/AIDS response.

## **GHSD 7200 DEVELOPING ISSUES: THEORY AND MEASUREMENT**

Prerequisite: GHSD 6040 or equivalent introduction to international development

This course critically reviews major theories, concepts and debates about social, human and economic development in the developing world. These concepts are useful to public health researchers and practitioners aiming to advance human well-being. We compare and contrast major development theories: economic growth, modernization, dependency, neoliberalism, sustainable development, human development, and human rights approaches. Then we address contemporary, critical perspectives that are reshaping development practice: the Capabilities Approach, Human Rights, and Post-Development thought. These challenge notions of: poverty, participation, gender, culture, technology, globalization, sustainability, foreign aid, and development actors/institutions. Insights from critical research on development agencies and projects show how theories, worldviews and assumptions translate into real "development" programs and projects that have often unexpected, unintended outcomes. The course is required for all doctoral students. It will be helpful for the reflective public health student who wants a broad, interdisciplinary, critical overview of current trends in development theory and its implications for practice.

## **GHSD 7210 SURVEY DATA ANALYSIS IN FAMILY PLANNING AND REPRODUCTIVE HEALTH RESEARCH**

Prerequisite: BIOS 6030 Introductory Biostatistics, EPI 6030 Epidemiological Methods I, GHSD 6270 and 6280 Monitoring and Evaluation of Program Interventions in Global Health (can be taken concurrently); no previous experience with Stata is required. This course is intended for

advanced Masters students and doctoral students. The course will introduce students to a number of key concepts and measures used in the monitoring and evaluation of family planning and reproductive health programs. Students will gain an understanding of a variety of reproductive health and health service indicators, data sources and their strengths and limitations. This course also provides basic hands-on quantitative skills that are essential in conducting monitoring and evaluation exercises in family planning and reproductive health programs. Students will learn how to use the Stata statistical software package to manage and analyze survey data and to construct reproductive health indicators. Students will also learn to interpret and present quantitative data, using graphs and tables, in ways that are suitable for scientific manuscripts.

### **GHSD 7960 APPLIED INTERDISCIPLINARY THEORY FOR GLOBAL HEALTH RESEARCH**

Through readings and discussion of theory, students explore the nature of health, human behavior and social and behavioral change. This exploration is intended to assist students in the process of developing their doctoral dissertation proposal, with emphasis on the theoretical basis and conceptual model for their chosen area of investigation. The course will take a critical and multidisciplinary perspective to the task of integrating and applying interdisciplinary theoretical frameworks to address research questions. The course will emphasize how theories, worldviews and assumptions are used to develop and support research projects that will guide: 1) empirical research approaches (quantitative, qualitative and mixed methods approaches) and 2) the design and assessment of public health programs, policies, and other interventions. This course critically reviews several major theoretical frameworks applied to global health such as the determinants of health outcomes, the structure and performance of health related organizations, and the causes of health-seeking behaviors. GHSD 8020 is a required course for doctoral students in this department. Good academic standing and permission of the instructors are prerequisites for this doctoral level course.

#### **Department: Tropical Medicine**

- **Sustainability courses:** no sustainability courses offered
- **Courses that include sustainability:**



### **TRMD 6010 BIOLOGICAL BASIS OF DISEASE**

*Offered in Fall, Spring, and Summer.* This course provides a foundation of knowledge about the human body in health and disease. It gives an overview of important concepts of the biological mechanisms of disease at the cellular, individual, and societal levels. At the cellular level, the course summarizes DNA and cellular function, genomics, immunology, and vaccination. At the individual and societal levels, the course addresses the most important infectious and non-infectious causes of death worldwide, providing background on their pathophysiology, clinical aspects, patterns of disease occurrence, risk factors, and methods of prevention.

### **TRMD 6100 HEALTH AND HUMAN RIGHTS**

*Offered in Spring and Summer.* This course is designed to provide a forum for discussion of pertinent issues in global health and human rights and to motivate students to become active advocates for their resolution. Students will participate in daily discussions with local and national experts in public health, clinical medicine, and health sciences research who are also strong advocates for human rights. The speakers will stress the importance of addressing the underlying social, political, and economic factors influencing health. Speakers will give examples from their background and the motivations for their career choices and discuss the skills and strategies necessary to become effective advocates for health and human rights.

### **TRMD 6350 DISEASE PREVENTION AND CONTROL IN DEVELOPING COUNTRIES**

*Offered in Fall and Spring.* This course is designed to prepare students to recognize and contribute effectively to the public health needs of communities in developing countries. It includes four broad content areas: (1) concepts of disease prevention and control with special reference to developing countries, including types of surveillance, monitoring and control strategies, (2) analysis of community needs, and provision of basic preventative services; (3) prevention and control of important endemic diseases such as malaria, tuberculosis, vaccine-preventable diseases; and (4) other topics such as special needs populations, disaster/refugee health programs, sources of information, and local and international organizations and programs. The course will emphasize practical rather than theoretical considerations based on the needs of the practitioner working under relatively resource-poor conditions.

### **TRMD 6420 TROPICAL VIROLOGY**

*Offered in Spring.* This course covers the broad area of virology with an emphasis on viruses of public health concern in developing and tropical countries. Both historically problematic and emerging viruses are covered. Topics include the molecular biology, epidemiology, and pathology of selected viruses. Focus is placed on developing an understanding of the molecular aspects of the viral life cycle that give rise to transmission and pathogenic characteristics, especially in the context of the co-evolution of the virus and host. Additional topics include the interactions between the virus and host immune response, as well as viral control and the development of vaccines and anti-viral pharmaceuticals.

### **TRMD 6450 TUBERCULOSIS: GLOBAL TRENDS AND INTERACTIONS WITH HIV**

*Offered in Spring.* This course is designed as an overview of tuberculosis and the challenges posed by the dual epidemics of TB and HIV. The course comprises a series of lectures and case studies. Guest faculty are recognized experts in this area and bring extensive experience and case study material to the course. Field activities including a visit to the Wetmore Tuberculosis Clinic at Charity Hospital and a visit to the Tuberculosis Control Program at the Office of Public Health are offered. The course includes three broad content areas – basic concepts of tuberculosis disease and epidemiology, clinical manifestations and management; challenges posed by the interactions of Tuberculosis and HIV infection and global initiatives to integrate TB and HIV control programs; and issues in tuberculosis control with special reference to multidrug resistance, social aspects, and program strategies. The biological, clinical and programmatic perspectives gained from this course will assist students in interpretation and critique of programs and policies related to tuberculosis control.

### **TRMD 7800 ADVANCED MEDICAL ENTOMOLOGY**

*Offered in Spring. Prerequisite: TRMD 606.* This is an advanced level course that emphasizes relationships between arthropods and the pathogens they transmit. Lectures and weekly readings from the primary literature will focus on aspects of vector-pathogen interactions and ideas at the forefront of research to better understand the ecology and epidemiology of pathogen transmission. Designed for biologists and health professionals who will be involved with U.S. and international agencies responsible for tropical medicine research and disease control. A \$50.00 lab fee is assessed for this course.

**TRMD 7820 MALARIA**

*Offered in Spring.* This is an advanced course which provides a rigorous approach to the basic and applied issues related to malaria. Areas covered in detail include malaria epidemiology and control strategies, parasite-vector relationships, vector control, cell biology, and biochemistry of the parasite red cell interaction, drug action and resistance mechanisms, parasite genetics and cell biology, and the immunologic aspects of malaria, including asexual and sexual stage candidate vaccine antigens. At the conclusion of the semester, students are expected to critically review current strategies and suggest and defend appropriate alternatives.

# Inventory of Sustainability Courses

School of Science and Engineering

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.**

Undergraduate courses are numbered 1000-4999. Graduate courses are numbered 5000 and above.

Draft list compiled by Colleen Large, SLA – 2016, by reviewing the Tulane Course Catalog posted at <http://catalog.tulane.edu/content.php?catoid=41&navoid=1639>. Some definitions were found in the schedule of courses through Gibson. Service Learning courses added by Colleen Large from lists obtained from Center for Public Service. The draft list was sent by Dean Altiero to SSE Chairs for review in June 2014.

- **Biological Chemistry**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability:** no courses that include sustainability offered
- **Biomedical Engineering**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability:**
    - **BMEN 2310 Product & Experimental Design** (Service Learning, Optional, Fall 2013): The objective of this course is to introduce students to the design process as they are starting their engineering studies. Through team projects geared toward translating bench research into product development, students will be challenged to begin thinking critically and applying physical fundamentals to complex systems. Weekly lectures will highlight phases of the design process, including problem identification, conceptual design, and early prototyping. Additionally, in the context of

product and experimental design, students will gain experience with computer aided design and be provided an introduction to statistics.

- **BMEN 2311 Product & Experimental Design Lab** (Service Learning, Optional, Fall 2012)
- **BMEN 4031 Team Design Project I Lab** (Service Learning- Optional, Fall 2012): Techniques and experience in the solution of constrained and open-ended design problems. Lecture topics include all aspects of the design process, including goal setting, idea generation, prototyping, fabrication, and product and evaluation. Also included are technical presentation, project planning and management. Included as needed are other topics such as standards, fastening and joining, motors and control, esthetics and finish. Each team will design and construct a device or system to assist an individual with a disability. These designs are presented in a public show during the second semester.
- **BMEN 4040 Team Design Project II** (Service Learning- Mandatory, Spring 2014, Spring 2013): Techniques and experience in the solution of constrained and open-ended design problems. Lecture topics include all aspects of the design process, including goal setting, idea generation, prototyping, fabrication, and product and evaluation. Also included are technical presentation, project planning and management. Included as needed are other topics such as standards, fastening and joining, motors and control, esthetics and finish. Each team will design and construct a device or system to assist an individual with a disability. These designs are presented in a public show during the second semester.
- **BMEN 4890 Team Design** (Service Learning, Optional, Fall 2013): The required BMEN 4030/4040 design sequence is centered on the design and construction of a device or system to assist an individual with a disability or a group servicing such individuals. As an option, students may choose to supplement their interaction with their clients with a service learning component that follows Tulane's guidelines for service learning courses and specifically requires: Completing at least 40 hours in a community setting during the semester; keeping a journal of weekly activities that will allow the student to describe and evaluate his/her experiences with the activity; and creating a product that can be evaluated as part of the course grade (e.g., a review paper on an issue relevant to the service activity, or some product of value to the site).
- **SCEN 1010 Communicating Science** (Service Learning- Mandatory, Spring 2014, Fall 2013, Spring 2013): As the high schools in New Orleans rebuild, one of their many challenges is the uneven level of preparation among students entering the 9th grade. At the New Orleans Charter High School

for Science and Math (SciHi), founded by two Tulane professors, the students are motivated but the disparities in their backgrounds are enormous. In this course, we learn how to help high school students who've fallen behind, both academically and by understanding the origins of their difficulty. Then we apply that knowledge by working with the students and also fulfilling one of the Tulane Center for Public Service requirements. The service, a minimum of 30 hours over the course of a semester, can take the form of teaching, tutoring, assisting with in-class exercises, and always includes acting as a mentor and role model to the SciHi students.

- **SCEN 3020 Leadership in Lego Robotics** (Service Learning- Mandatory, Fall 2012): Students will learn about leadership techniques using the FIRST Lego League (FLL) middle-school robotics program as a platform. Completion of SCEN1020 (previously SCEN101) Communicating Science FLL or previous robotics experience is a prerequisite. Through various activities engaging middle school students, their teachers, and Tulane students in SCEN 1020, participants will have the opportunity to develop skills in leadership, teamwork, and project management. Students will also learn about education pedagogy and have the opportunity to promote STEM (science, technology, engineering, and math) education in New Orleans.
- **Cell and Molecular Biology**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability:**
    - **CELL 1010 Intro to Cell and Molecular Biology** (Service Learning- Optional, Fall 2013): A study of phenomenology and fundamental concepts that apply to all living systems. Major topics include: cell biology, physiology, genetics, and development.
    - **CELL 3210 Cellular Physiology** (Service Learning- Optional, Fall 2013, Fall 2012): A survey of vertebrate anatomy and physiology emphasizing the cellular and molecular basis of organ function. This course emphasizes modern experimental approaches for exploring physiological functions of a variety of organ systems.
    - **CELL 4340 Neurobiology of Disease** (Service Learning- Optional, Spring 2014, Spring 2013): Advanced course on the higher neural functions of the nervous system and neurological diseases resulting from disruption of these functions. An emphasis is placed on the physiology of the nervous system and neural dysfunction caused by inherited and acquired

diseases. Topics range from motor control and neuromuscular diseases to high cognitive function and dementia.

- **Chemical and Biomolecular Engineering**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability**
    - **CENG 3020 Neurobiology of Disease** (Service Learning- Mandatory, Spring 2013): This course satisfies the university's public-service requirement. Topics include public outreach, application of engineering principles to community issues, and educating the community on scientific and engineering issues.
- **Chemistry**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability:**
    - **CHEM 1080 Chemistry Outreach in New Orleans** (Service Learning- Optional, Spring 2014, Spring 2013): The chemistry of solutions, equilibrium, thermodynamics, electrochemistry, kinetics.
    - **CHEM 2500 Environmental Chemistry:** An overview of the many aspects of environmental chemistry. Topics include: aquatic chemistry, including water pollution and water treatment; atmospheric chemistry, air pollution and major threats to the global atmosphere; geochemistry and soil chemistry; nature, sources, and environmental chemistry of hazardous wastes; and toxicology chemistry.
    - **CHEM 3915 Chemistry in the Community** (Service Learning- Mandatory, Spring 2014, Spring 2013)
- **Computer Science**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability:**
    - **COSC 3000 C++ Programming for Science and Engineering** (Service Learning, Optional, Fall 2013) This course presents the fundamentals of the C++ programming language. It covers development of computer-based solutions in C++, using object-oriented and event-driven techniques, and accessing databases with open database connectivity.
- **Earth and Environmental Sciences**
  - **Sustainability Courses:**
    - **EENS 1300 Earth as a Living Planet:** An introduction to the interaction of earth systems and man; anthropogenic impacts of population growth and economic development; renewable and non-renewable resources, air, water and soil pollution and mitigation; ecosystems and biological

diversity; and environmental problem solving using the scientific method. Students develop a holistic understanding of environmental science using class discussions and laboratories to reinforce basic scientific principles. (Service Learning- Optional, Spring 2014, Fall 2013, Fall 2012)

- **EENS 3600 The Science of Climate Change:** This course emphasizes the scientific basis for anthropogenic climate change. Students will learn the physics behind the climate system, how climate has changed in the past and reasons why contemporary climate change is different, the scientific basis for anthropogenic climate change theory and how scientists use models to predict future climate. The course will also provide an overview of the physical, ecological, biological, social and economic impacts of climate change. Finally, students will examine various mitigation and adaptation strategies which society can employ in a warmer world.
  - **EENS 3720 Infrastructure of Sustainable Urban Environments:** Selected elements of the urban physical infrastructure serve as starting points to illustrate concepts from underlying science fields. The central question is “What makes a sustainable city work?” Specifically, the course introduces and reinforces key concepts from physics, chemistry, microbiology and environmental science. The course is divided into four segments, each including a field trip to a site in the New Orleans area that will provide opportunities for experimental learning and first-hand observation of relevant physical phenomena. (Service Learning- Optional, Spring 2013)
- **Course that include sustainability:**
    - **EENS 2020 Environmental Geology:** The interaction of humans and their geologic environment. A study of Earth processes and their action on rocks, soil, fluids, and life in ways that either affect or control the human environment. The effect of humans on their environment with consideration of the feedback between Earth processes and human activities. Lectures and field trips.
    - **EENS 2070 Weather and Climate:** An introduction to the Earth’s atmosphere with particular emphasis on weather and climate. Topics covered include: heating and cooling of the atmosphere; atmospheric circulation and wind; air masses and cyclonic storms; tropical weather and hurricanes; and global climates and climatic change.
    - **EENS 2080 Extreme Weather:** This course is designed to give students a fundamental understanding of severe weather and its impact on man and the environment. Students focus on life cycles of thunderstorms, tornadoes, hurricanes, blizzards, and ice storms, as well as the impacts of temperature and precipitation extremes.



- **EENS 3050 Natural Disasters:** An examination of the causes and effects of natural disasters, such as earthquakes, volcanic eruptions, landslides, subsidence, coastal erosion, flooding, severe weather (including hurricanes), and meteorite impacts. Also includes a discussion of options available to mitigate disasters.
- **EENS 3550 Shark Paleobiology** (Service Learning- Mandatory, Fall 2013, Fall 2012): This course examines the processes and patterns of shark speciation, diversification, macroevolution, and extinction within the framework of developing a problem-based learning activity using shark teeth for a K-12 classroom. Particular emphasis is placed on the systematics and functional morphology of shark teeth.
- **EENS 4040 Coastal Marine Geology:** Geomorphic features of estuarine, coastal, and continental shelf environments: erosional, depositional, and geochemical processes; field and laboratory methods; emphasis on dynamic coastal environments of the northern Gulf of Mexico. Offered summers only.
- **EENS 4260 Paleoclimatology:** Understanding past climate change is necessary to effectively predict the future of our planet, which is currently in a state of rapid transition. The main focus of the course is on the reconstruction and modeling of climates of the Quaternary, the past two million years of Earth's history. (Same as EBIO 6260).
- **EENS 4270 Major World River Systems:** Major rivers are important environmental features on Earth's surface in terms of their impact on humans and their vulnerability to negative impact by human activities. This course will explore natural river and watershed processes and how humans affect and are affected by these processes. Case studies from across the world will be explored.
- **EENS 4800 Air Pollution:** Provides both a conceptual and qualitative understanding of meteorology with major emphasis on air pollution. Overview of major air pollutants, including their sources, sinks, transformation, effects and related control technologies. Exploration of the meteorological basis for pollutant dispersion/transport.
- **EENS 6060 Natural Disasters:** An examination of the causes and effects of natural disasters, such as earthquakes, volcanic eruptions, landslides, subsidence, coastal erosion, flooding, severe weather (including hurricanes), and meteorite impacts. Also includes a discussion of options available to mitigate disasters.
- **EENS 6210 Global Biogeochemical Cycles:** An introduction to the global biogeochemical cycles in fresh water, marine, and terrestrial ecosystems. Emphasis will be placed on key environmental issues as they relate to perturbations of these global cycles.

- **EENS 6260 Paleoclimatology:** Understanding past climate change is necessary to effectively predict the future of our planet, which is currently in a state of rapid transition. The main focus of the course is on the reconstruction and modeling of climates of the Quaternary, the past two million years of Earth's history
  - **EENS 6270 Major World River Systems:** Major rivers are important environmental features on Earth's surface in terms of their impact on humans and their vulnerability to negative impact by human activities. This course will explore natural river and watershed processes and how humans affect and are affected by these processes. Case studies from across the world will be explored.
  - **EENS 6800 Air Pollution and Fundamentals of Modeling:** This course presents fundamental concepts associated with air pollution, its modeling and its control. The course discusses major air pollutants and their effects and provides insight into the meteorological basis for pollutant dispersion. IN a core portion, pollutant transport and dispersion modeling are introduced and students gain hands-on experience conducting their own air dispersion modeling with state- of-the art software. Finally major types if control devices are discussed with regard to their scientific basis and operating principles.
- **Ecology and Evolutionary Biology**
  - **Sustainability Courses:**
  - **EBIO H1040 Global Environmental Change:** An introduction to the physical and biological processes that regulate the function of the Earth system. The composition, formation, and stabilization of the Earth's atmosphere and ecosystem will be examined, emphasizing biological processes and ecosystem ecology. With an understanding of the historical rates and mechanisms of natural global change, the means by which human activities alter Earth system function at local to global scales will be explored, along with the consequences of and solutions to human-induced global change. Note: This course meets the college non-laboratory science requirement, but it cannot count toward any major or minor requirements in ecology and evolutionary biology. Students may receive credit for only one of EBIO 1040, 1050, or 2050.
  - **EBIO 1040 Global Environmental Change:** An introduction to the physical and biological processes that regulate the function of the Earth system. The composition, formation, and stabilization of the Earth's atmosphere and ecosystem will be examined, emphasizing biological processes and ecosystem ecology. With an understanding of the historical rates and mechanisms of natural global change, the means by which human

activities alter Earth system function at local to global scales will be explored, along with the consequences of and solutions to human-induced global change. Note: This course meets the college non-laboratory science requirement, but it cannot count toward any major or minor requirements in ecology and evolutionary biology. Students may receive credit for only one of EBIO 1040, 1050, or 2050.

- **EBIO 2050 Global Change Biology:** This course explores the biological basis of environmental issues and the changes occurring at a global scale, divided approximately into halves. The first half will provide a strong foundation in the interactions among biological and physical systems. The second half will be devoted to specific issues including global climate change, atmospheric pollution, community stability, habitat fragmentation, and loss of biodiversity. Changes that have occurred over geological time will be compared with changes in the modern industrial era. Note: Students may receive credit for only one EBIO 1040, 1050, or 2050.
  - **EBIO 2040 Conservation of Biological Diversity:** A consideration of biological diversity and its persistence, threats, human value, conservation efforts, and biological bases. Specific topics include extinction, global change, population viability, habitat loss and degradation, ecosystem management, restoration, agricultural ecosystems, economic and legal considerations, and the human population. (Service Learning- Optional, Spring 2014, Spring 2013)
  - **EBIO 3580 Urban Ecology:** Urban Ecology is the study of cities, including human inhabitants, as functioning ecosystems, supporting a complex web of life. In this course students will learn how basic ecological principles can be applied to the study of urban ecosystems and the effects of cities and urbanization on regional and global environments. Through a combination of lectures, readings and discussions, site visits and service learning, this course will provide an overview of interactions, at multiple scales, between the built environment and the natural environment with particular focus on New Orleans and the Gulf coast region. (Service Learning- Optional, Fall 2012)
- **Course that include sustainability:**
    - **EBIO 1010 - Diversity of Life:** Co-requisite: EBIO 1015. A survey of plant and animal life emphasizing the diversity among individuals, population, species, communities, and ecosystems.

- **EBIO 2010 Evolution in Human Health and Disease:** An introduction to the study of infectious and non-infectious human diseases from an evolutionary perspective.
- **EBIO 2060 Case Studies in Environmental Science:** This course uses case studies to introduce students to interdisciplinary aspects of environmental issues. Emphasis is placed on environmental topics along the Gulf Coast region; past topics have included wetland loss, mercury contamination, and hypoxia events in Louisiana coastal waters.
- **EBIO 2120 Climate Change, Biodiversity, and Tropical Forests:** This course is offered as part of the Stone Center for Latin American Studies' Summer in Costa Rica Program. Students may not register on-line for this course; they must register directly with the Stone Center Summer Program office. The course will introduce students to the structure and ecology of tropical forests. Students will be expected to integrate what they learn about the real social and economic causes of deforestation and grass roots efforts to revert it with the social, political, economic and biological logic of world climate change agreements and disagreements.
- **EBIO 2210 Insect Biology** (Service Learning- Optional, Fall 2013): Basic insect biology with an emphasis on insect interactions with humans and how insects fit into our culture.
- **EBIO 2330 Natural History of Louisiana** (Service Learning- Optional, Spring 2014, Spring 2013): A survey of terrestrial and aquatic ecosystems of southern Louisiana. Lectures cover the ecology of regional plant and animal communities, with special emphasis on environmental issues such as invasive species, hurricane disturbance, conservation and management. The geology, geography, history, and culture that contribute to the formation and maintenance of each ecosystem will also be examined, from barrier islands to upland forests.
- **EBIO 2600 Natural Resource Conservation Theory and Practice:** This course examines the theory and practice of natural resource preservation in the United States, and the agencies and organizations involved in this endeavor. Note: Students may not apply this course and EBIO 3600 toward the course requirements for the EE Biology major. (Service Learning, Mandatory, Spring 2013)
- **EBIO 3180 Plants and Human Affairs:** Since ancient times, people have relied on plants for food, clothing, shelter, medicines, and more. This course investigates some of the ways in which plants support and shape human life. Topics include: early ideas about plants and the origin of

plant lore; plant domestication and the rise of agriculture; plant products in commercial economies; cultural uses of plants; plants and the future of civilization.

- **EBIO 3290 Behavioral Ecology** (Service Learning- Optional, Fall 2013): This course addresses the ecological and evolutionary causes and consequences of animal behavior, using both proximate and ultimate approaches. Topics include sociality, mating systems, sexual selection, animal movement, signals, behavior and conservation, and cognition.
- **EBIO 3690 Experimental Animal Behavior** (Service Learning- Optional, Spring 2014): This course provides students the opportunity to design, implement, and write-up an independent research project related to behavioral ecology. Research will be conducted on live animals at the Audubon Zoo. The course will emphasize general principles of experimental design; the collection, organization and analysis of data; and written and oral presentation of results. The course consists of 3 hours of laboratory per week and 2 hours of seminar per week, all at the zoo.
- **EBIO 4230 Molecular Evolution and Ecology:** Molecular ecology employs principles of population genetics and phylogenetics to answer questions about organismal diversity, population dynamics, community assembly and macroecology. Having a foundation in molecular evolution and genomics allows for broad topical applications, including the study of infectious diseases, conservation of endangered species, organismal responses to global environmental change, and the evolutionary origins of biological diversity. Students will first learn the principles of molecular evolution, after which they will be introduced to the core techniques used to generate molecular data. Students will learn how molecular data can be developed and analyzed to address questions in ecology and evolutionary biology.
- **EBIO 4270 Population Ecology:** Principles of population dynamics in space and time, population regulation, and population interactions as determined from an integrated study of plants and animals, followed by exploration of the applicability of these principles to an understanding of the contemporary growth and control of the human population.
- **EBIO 6180 Plants and Human Affairs:** Since ancient times, people have relied on plants for food, clothing, shelter, medicines, and more. This course investigates some of the ways in which plants support and shape human life. Topics include: early ideas about plants and the origin of

plant lore; plant domestication and the rise of agriculture; plant products in commercial economies; cultural uses of plants; plants and the future of civilization.

- **EBIO 6260 Paleoclimatology:** Understanding past climatic variation is necessary to fully comprehend present and model future climate. The focus will be on climate change during the late Quaternary Period, with special emphasis on climate reconstruction methods. (Same as EENS 6260.)
  - **EBIO 6270 Population Ecology:** Principles of population dynamics in space and time, population regulation, and population interactions as determined from an integrated study of plants and animals, followed by exploration of the applicability of these principles to an understanding of the contemporary growth and control of the human population.
  - **EBIO 6580 Urban Ecology:** Urban Ecology is the study of cities, including human inhabitants, as functioning ecosystems, supporting a complex web of life. In this course students will learn how basic ecological principles can be applied to the study of urban ecosystems and the effects of cities and urbanization on regional and global environments. Through a combination of lectures, readings and discussions, site visits and service learning, this course will provide an overview of interactions, at multiple scales, between the build environment and the natural environment with particular focus on New Orleans and the Gulf coast region.
- **Engineering Science**
    - **Sustainability Courses:** no sustainability courses offered
    - **Course that include sustainability:** no courses that include sustainability offered
  - **Mathematics**
    - **Sustainability Courses:** no sustainability courses offered
    - **Course that include sustainability:** no courses that include sustainability offered
  - **Neuroscience**
    - **Sustainability Courses:** no sustainability courses offered
    - **Course that include sustainability**
      - **NSCI 4130/6130 Applied Neuroscience: Sport Related Brain Injury** (Service Learning- Mandatory, Spring 2014)
      - **NSCI 4530/6530 Psychopharmacology** (Service Learning- Optional, Fall 2013, Fall 2012): An introduction to the effects of psychoactive agents on the nervous system. Lectures emphasize the mechanisms by which drugs regulate neurotransmitter systems to alter psychological and physical states.

- **NSCI 4060/6060 Endocrinology** (Service Learning- Optional, Spring 2013): An introduction to the roles of steroid and peptide hormones in physiology and behavior. Lectures focus on the hormonal mechanisms that control reproductive and regulatory functions in human and infrahuman species.
  - **NSCI 6150 Neuroscience Methods** (Service Learning- Optional, Fall 2012): A lecture course exposing students to contemporary theories and techniques used in cellular and behavioral neuroscience by Tulane neuroscientists in their own research programs.
  - **NSCI 6910 Neuroscience Capstone Seminar: Applications of Neuroscience** (Service Learning, Optional, Fall 2013): This course is designed for senior neuroscience majors who have completed their core course requirements of Brain and Behavior, Cellular Neuroscience and Systems Neuroscience. It is designed to be a culminating experience in which students utilize and apply their skills and knowledge developed over the course of their major. This course will have three versions. One; Service and Application of Neuroscience will allow students to apply their knowledge of basic neuroscience in approved clinical or educational settings while providing service to the community. Second; Independent Research and Writing in Neuroscience this is for students to do independent research in the laboratory of a neuroscience faculty member and to complete a written assignment that includes a review of the pertinent neuroscience literature and/or a summary of the completed research. Third; Concepts and Applications this option is for students to participate in a combination of journal club/seminar series, in which students will present and discuss neuroscience research articles and attend neuroscience seminars presented by researchers from Tulane and other institutions.
- **Physics and Engineering Physics**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability**
    - **ENGP 2310: Product and Engineering Design** The objective of this course is to introduce students to the design process as they are starting their engineering studies. Through team projects geared toward translating bench research into product development, students will be challenged to begin thinking critically and applying physical fundamentals to complex systems. Weekly lectures will highlight phases of the design process, including problem identification, conceptual design, and early

prototyping. Additionally, in the context of product and experimental design, students will gain experience with computer aided design and be provided an introduction to statistics. Course restricted to ENGP and PHYS majors, or by permission of the instructors. *Note from instructor: In this course, we discuss sustainability as one of the important factors in engineering a new product. There are definitely societal benefits and applications of the work discussed in the class, even if the course is not primarily about sustainability. We also discuss many research areas related to sustainability as examples.*

- **ENGP-3910 Materials for Energy (also PHYS 3910 and PHYS-7310)** Lecture topics include Introduction to Energy & Power: Wide Range of Materials Applications; History of Energy: From Aristotle to Einstein; Review of Thermodynamics; Introduction to the Different Forms of Energy; Nanotechnology and Energy; The Sun: Photosynthesis, Geothermal and Photovoltaics and more.
  - **ENGP 3911 Kinetics of Material Systems (also PHYS 3911 and PHYS 7310)** This course explores materials and materials processes from the perspective of thermodynamics and kinetics. The thermodynamics aspect includes laws of thermodynamics, solution theory, and equilibrium phase diagrams. Thermodynamics provides the driving forces and energetic considerations and there are no implied time or length scales. The kinetics aspect includes diffusion, phase transformations, and nucleation and growth, the development of microstructure, dislocations, and microstructure. The kinetics involves rates and time, transformations limited by the slowest step; length and time scales are critical.
  - **ENGP 4320 Senior Engineering Design** (Service Learning- Mandatory, Spring 2014, Spring 2013): Design project taken in the fourth year of study with student teams.
  - **PHYS 2910 Introduction to Physics Pedagogy** (Service Learning, Mandatory, Fall 2013, Spring 2013): Introduction to the theory and practice of teaching physics courses through workshops, observations and assisting teachers at local schools with lectures and/or classroom demonstrations.
  - **PHYS-3910-01 Materials for Energy** Special topics in physics depending upon faculty and student interest.
- **Psychology**
    - **Sustainability Courses:** no sustainability courses offered



- **Course that include sustainability**
  - **PSYC 3200 Educational Psychology** (Service Learning- Mandatory, Fall 2013, Fall 2012): Examines psychological principles applied to educational practices with special emphasis on cognition. Its purpose is to help adults working with children to understand better the relationship between applied educational practices and psychological principles and research. Includes observational assignments in schools.
  - **PSYC 3310 Introduction to African American Psychology** (Service Learning- Optional, Spring 2013): A study of a wide range of topics relating to psychology generally, and African Americans specifically. Topics include personality, education, psychological assessment, racism, psychology in communities, and research.
  - **PSYC 6610 Culture, Social Identity, and Intergroup Relations** (Service Learning- Mandatory, Spring 2014): By arrangement with department.

# Inventory of Sustainability Courses

## School of Social Work

### 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.

Draft list compiled by Colleen Large, SLA – 2016, by reviewing the Tulane Course Catalog posted at <http://catalog.tulane.edu/content.php?catoid=39&navoid=1045> (display courses for this school/college). Service Learning courses added by Colleen Large from lists obtained from Center for Public Service. This draft list was sent to Dean Marks for review in June 2014.

#### **PART 1: Department:**

- **Social Work**
  - **Sustainability Courses:** no sustainability courses offered
  - **Course that include sustainability:**

#### **SOWK 2000 - Introduction to Social Policy & Practice**

This course examines the processes that influence the development of social policy and social services. Included are legislative and political processes, models of policy analysis, service delivery and policy implementation. Effects of these on people are considered from global, political, economic and social policy perspectives. This course is developed around the general proposition that social workers utilize knowledge and skills to carry out roles and functions critical for practice. Such knowledge and skills include the application of social policy analysis, the legislative process, the role and impact of politics and political choice on the quality of life

of people, and the effect of economic-social policy decision and judicial actions on social services. In addition, the course examines the variability of the common and uncommon attributes of service delivery systems.

### **SOWK 2120 - Social Work Interventions with Children & Youth**

This course is designed to provide students with an overview of social work intervention services from historical, theoretical, and practice perspectives. Services to children and their families are divided into support services which enhance family life, supplemental services that help struggling families to maintain or regain their functioning, and substitute services that provide for the child on a temporary or permanent basis when the family cannot do so. Each service is considered in terms of need, rationale, provision of service, diverse populations, consumer views of service, and social trends that may affect future provision of the service.

### **SOWK 2220 - Drug Abuse: Univ. & Innercity (Booze, Pot, Coke, & Crystal Meth: PolyDrug Abuse Among College & Inner-City Residents)**

This course is designed to explore the epidemiology, prevalence, and culture of embeddedness of polydrug use and abuse among college students and inner-city residents. Students will compare and contrast the sociopolitical, sociocognitive, legal, and economic processes that contribute to high risk health behaviors in college and inner-city communities. Participants will develop an understanding of how one's family, friends and current systemic anti-drug initiatives come to shape high-risk health behavior patterns. Panel presentations by former polydrug users from each community will be held with a focus on developing creative solutions for a growing problem.

### **SOWK 2230 - Guns and Gangs: At Risk Youth in the Inner City**

Unlike adult crimes, most juvenile delinquency is committed in groups. The aim of this course is to examine national and local gang dynamics within the context of weapon availability, drug markets, turf issues, and the economy. The rapidly changing social variables of race, social class, migration, and immigration are explored relative to gang membership, chronic gang problems, and solutions.

### **SOWK 2320 - Tibet: Social Welfare, Social Movement and Social Change**

This course examines the Tibetan refugee life and the struggle to preserve their culture and way of life. We will also analyze the transformation of Tibet in the Western imagination and appropriation of Tibetan culture and their consequences for Tibetan people. How does the Tibetan refugee life affect the democratization of Tibetan society and internationalization of Tibetan issue? In order to answer these questions, we will explore a history of social movements taking place in Tibetan communities and on international platforms. Our study will

be rooted in a broad variety of literary genres including historical accounts, autobiographies, and documentary films.

### **SOWK 2500 Community Organizing for Social Change: Theories and Methods**

This course employs an interdisciplinary approach to the practice of community organizing. Drawing on classical and contemporary texts, students will engage in the works of Alinsky, Freire, Pharr, Piven and Cloward and others. Narratives of people of color and other oppressed groups organizing for social change will be emphasized. Student learning includes applying community organizing theories and methods through practical engagement in the most current issues in post-Katrina New Orleans such as environmental problems, housing advocacy, race relations, education and other issues pertinent to community development.

### **SOWK 3000 - Civic Engagement and Leadership**

In this course students with previous experience in service learning or community service will have an opportunity to enhance their knowledge of civic engagement and strengthen their leadership skills. There are two major goals of the course. The first goal is to enhance students' knowledge, strengths and abilities to facilitate university-community partnerships. The second goal is to foster a life-long commitment to civic engagement and democratic leadership. A combination of lecture, guest speakers, discussion, group exercises and a community-based project will be used in this course. Students who satisfactorily complete this course will be eligible for future leadership opportunities with the Center for Public Service. Note: This course has a service-learning component and is a prerequisite for Center for Public Service student leadership positions. (Service Learning- Mandatory, Fall 2013, Fall 2012)

### **DRLS 6710 Food Security Information Systems and Logistics (DRL Summer Institute, Italy)**

This course offers a unique opportunity to interact with logistics and information systems experts from the UN and international civil society. Learning is reinforced by field visits to the organizations and the UNHRD where students can learn how these systems support ongoing responses around the world.

### **DRLS 6720 Food Security and Food Aid in Humanitarian Context (DRL Summer Institute, Italy)**

This course complements lectures, readings, and lab work with generous opportunities to interact with professionals from UN Agencies and international civil society. Guest lectures by experts and field visits to the principle UN Agencies are an important part of this course.

### **DRLS 6730 Food Security and Resilience (DRL Summer Institute, Italy)**

This course will examine the impact of disaster and crisis on food security and nutrition outcomes and the role of policy and programs in enhancing the ability of communities and

households to manage food security related risk. Students in the course will spend the first 10-days of the course in study core elements of food security resiliency in lectures, guest lectures, seminar format and a practical policy/program review activity. FAO's 5-year strategic plan includes a strategic objective on resilience and during the final days of the course students will be able to visit FAO and discuss concepts from the course with the foremost experts in the field.

### **SOWK 7120 Social Welfare History and Policy**

The course focuses on both the historical development of American social welfare policy and the practice of policy analysis in relation to contemporary social welfare policies. Issues central to understanding American social welfare policy such as poverty, racism, sexism, globalization, privatization and faith-based policies are addressed in this course.

### **SOWK 7130 Diversity and Social Justice**

This course addresses concerns about social justice and populations-at-risk. A clinical-community approach is used to teach foundational concepts, theories, and topics related to human diversity, oppression and social justice. The meta-emotional themes of Connection/Disconnection, Power/Diminishment, Purpose/Invisibility, provide a relationship-centered framework to understand diversity and social justice for social work practice. The course structure consists of small class sections designed to support a psychologically safe environment for students to learn the skills necessary for having 'tough conversations' related to diversity and social justice. These discussions - led by two faculty from diverse social groups - center on issues related to age, social class, culture, ethnicity, race, gender, gender orientation, and disabilities. A strengths perspective is used to understand how different social behaviors and policies support and/or oppress individuals, families, groups, and communities. Student Learning Partners are used throughout the course to provide opportunities to understand our unique cultural selves and appreciate difference and diversity in others. Students will be able to visit FAO and discuss concepts from the course with the foremost experts in the field.

### **SOWK 7230 Community Organization and Policy Advocacy**

This methods course addresses community organization which is a form of social work practice that works through collective response to structural inequities. Through organizing – mobilizing people to combine their resources to act strategically on behalf of common interests – social workers aim for social change found through collective human potential. Through policy practice and policy advocacy, a social worker can transform the desires of community into laws and regulations that help achieve the goal of social and economic justice. Policy practice is an integral element of social work as practiced in all settings—at the local, state, and national levels, as well as within micro, mezzo, and macro levels of intervention.

### **SOWK 7080 Crisis Interventions and Brief Psychosocial Treatment**

The course covers the theoretical development, practical application, and empirical evidence for psychosocial interventions within the context of social and environmental health disasters. Emphasis is placed on rapid, appropriate responses to mitigate the harmful effects of psychosocial trauma on individuals, families, organizations, and communities. The integrative clinical-community approach is demonstrated through highly interactive case-based learning in real-world situations such as natural disaster, environmental health crises, death, traumatic injury or illness, PTSD, violent crime, and terrorism. Particular instruction is provided on short term mental health interventions, such as psychological first aid and nontraditional psychotherapeutic techniques. Students will justify and apply appropriate psychosocial interventions on the micro, mezzo, or macro levels.

**SOWK 7600 Public Advocacy: Ensuring the Rights of Marginalized Persons** Advocacy is an important tool to promote social justice and social equity including the well-being of underprivileged groups and individuals. By the end of this course students will have developed advocacy skills applicable to different social issues with government, the judiciary, politicians, the media, and civil society. Students will learn the concept of advocacy in a systematic manner and be exposed to different advocacy efforts employed in a variety of sectors and regions. Students will gain the skills in issue framing, alliance building, and planning campaigns to compose effective people centered advocacy.

### **SOWK 7700 Global Perspectives in Social Work Practice**

Social workers, whether working within the US or abroad, can benefit from having an understanding of the nature of global interdependence, how this interdependence impacts communities locally and globally and ways in which social workers can effect positive change. Focusing on globalization, indigenization, human rights, and social development, students will study the theories and ethics underlying current global social work practice and learn about strategies and programs which address key issues faced by many developed, developing and least developed countries.

### **SOWK 7830 Principles of International Social Work: Field Expedition to India**

This class directly addresses the essential relationship between self-awareness, personal growth and professional practice. It incorporates practice methods and community development theory and practice to address the needs of the growing community of Tibetan refugees in the foothills of the Himalayan Mountains. Culturally competent community development and practice is a central tenet and incorporates the integrity and worth of individuals and communities with diverse backgrounds. As an advanced elective, students will have a profound opportunity to integrate classroom learning with field experiences in their

application of knowledge, skills, values and ethics to community development and multi-cultural practice in an international arena.

**SOWK 7830 Principles of International Social Work: Field Expedition to South Africa**

This distinctive study abroad class provides students the opportunity to be exposed to social justice challenges and issues from a South African perspective. This class incorporates various global social work practice methods and community development approaches to address the needs of socio-economic marginalized populations in Post-Apartheid South Africa. As an advanced elective, students will have an opportunity to integrate classroom learning with field experiences through the application of knowledge, skills, values and ethics of community development and multi-cultural practice in an international arena.