URBAN STUDIES (URB-UY)

URB-UY LV1XF URB level 1 Transfer (0 Credits)

URB level 1 Transfer **Grading:** Transfer Grades

Repeatable for additional credit: Yes

URB-UY LV2XF URB Level 2 Transfer (0 Credits)

URB Level 2 Transfer Grading: Transfer Grades

Repeatable for additional credit: Yes

URB-UY LV3XF URB Level 3 Transfer (0 Credits)

URB Level 3 Transfer Grading: Transfer Grades

Repeatable for additional credit: Yes

URB-UY 391X Independent Study in SUE (1-8 Credits)

Typically offered Fall and Spring

Independent study in Sustainable Urban Environments. Topics to be decided by the instructor. | Prerequisites: Instructor's Permission.

Grading: Ugrd Tandon Graded Repeatable for additional credit: Yes

URB-UY 401X SUE Global Experience (1-4 Credits)

Typically offered Summer and January terms

In the course, students will learn about urban sustainability issues abroad. They will also plan the research project to be conducted abroad during J term. The class is open only to students who plan to also participate in the abroad research project. MUST pay activity fee deposit prior to the start of semester.

Grading: Ugrd Tandon Graded Repeatable for additional credit: Yes

URB-UY 2004 GLOBAL PERSPECTIVES ON URBAN SUSTAINABILITY (4

Typically offered Fall and Spring

This course will give students a grounding in urban sustainability issues as they apply locally and globally, with an emphasis on case studies of problems and attempts at solutions in many different urban sites. The course materials address the broad range of social, cultural. technical, historical, political and technical issues that are part of urban sustainability.

Grading: Ugrd Tandon Graded Repeatable for additional credit: No

URB-UY 2024 Design of Cities (4 Credits)

This course helps students examine cities from different perspectives, and to understand the design principles that create effective city spaces and how the city is a dynamic force, always changing through the impact of individuals and organizations. The class focuses on the role of historical, physical and social context in making sense of cities and how city problems can be identified, presented to others and addressed in various ways (through psychological and sociological studies, literature, art, etc.). Students complete a team-based project that involves the study of an innovative development project within the city and how it relates to its physical and social context. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded Repeatable for additional credit: No

URB-UY 2024W Design of Cities (4 Credits)

Typically offered Spring

This course helps students examine cities from different perspectives, and to understand the design principles that create effective city spaces and how the city is a dynamic force, always changing through the impact of individuals and organizations. The class focuses on the role of historical, physical and social context in making sense of cities and how city problems can be identified, presented to others and addressed in various ways (through psychological and sociological studies, literature, art, etc.). Students complete a team-based project that involves the study of an innovative development project within the city and how it relates to its physical and social context. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded Repeatable for additional credit: No

URB-UY 2034 Humans in the Urban Environment (4 Credits)

Typically offered occasionally

In an increasingly urban dominated world, the environmental and ecological underpinnings of the human species help us understand why and how permanent settlements and cities evolve. The course covers basic environmental and ecological relationships, including geological, climatological, biomes, population growth models and carrying capacity. Receiving special emphasis are those ecosystems most important to humans throughout prehistory and history. The development of agriculture, increased human resource productivity and the resulting increase in population density is discussed as an underlying basis for developing and maintaining urban population areas. Also included is a discussion of changes in human social organization and psychology necessary for urban living. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded Repeatable for additional credit: No

URB-UY 2044 Methods for Studying Urban Environment (4 Credits)

Typically offered Spring

This course provides students with a foundation for understanding and using social science research methods to study urban environments. In this course, students will gain an understanding of quantitative and qualitative approaches to social science research. They will be introduced to a range of data collection methods that are used to study urban environments and also t strategies for data analysis. The course will involve a group research project with a real world client, as well as lectures, discussions, a group presentation and paper, exams, readings and several assignments. | Prerequisites: Completion of first year writing requirements

Grading: Ugrd Tandon Graded Repeatable for additional credit: No

URB-UY 2054 Introduction to Urban Policy (4 Credits)

Typically offered Spring

The purpose of this course is to introduce students to the process and some of the major substantive issues in urban policy and politics in the United States, with some transnational contrasts. These include some of the basic issues of any political system: how cities function as part of a global urban network; the structure of decision-making, the allocation of resources and delivery of services. | Prerequisite: Completion of first year writing requirements

Grading: Ugrd Tandon Graded Repeatable for additional credit: No

URB-UY 2054W Introduction to Urban Policy (4 Credits)

Typically offered Fall and Spring

The purpose of this course is to introduce students to the process and some of the major substantive issues in urban policy and politics in the United States, with some transnational contrasts. These include some of the basic issues of any political system: how cities function as part of a global urban network; the structure of decision-making, the allocation of resources and delivery of services. | Prerequisite: Completion of first year writing requirements

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2064 Introduction of Urban Planning (4 Credits)

Typically offered Spring

Introduction to Urban Planning explores planning precedents (the "big ideas") including the City Beautiful movement, Garden Cities, Modernism, and the New Urbanism; examines contemporary planning practices including zoning, transportation-oriented development, citizen participation, affordable housing, and land preservation; and explores "planning without planners" including suburban sprawl, self-built shanty towns/slums, and historic preservation. A case study approach will be used for all concepts (including field trips to iconic planned communities in New York City). | Prerequisite(s): Completion of first year writing requirements

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2114 Geographic Information Systems (4 Credits)

Typically offered Spring

Geographic Information Systems are computer systems for the storage, retrieval, analysis, and display of geographic data, that is data about features and phenomena on the surface of the earth. This course will introduce the students to GIS through hands-on computer exercises, as well as readings and lectures about cartography, tools, data, and the social impacts of GIS. GIS projects start with data and move through analysis to cartographic display. Pedagogically, we will be starting at the end moving backward to data and analysis. | Note: This course cannot be used to satisfy Humanities/Social Science requirements for majors outside of the TCS department. | Prerequisite: EXPOS-UA 1 or EXPOS-UA 4

Grading: Ugrd Tandon Graded Repeatable for additional credit: No Prerequisites: EXPOS-UA 1 or EXPOS-UA 4.

URB-UY 2184 Beyond Oil: Fueling Tomorrow's Vehicles (4 Credits)

Typically offered Fall and Spring

This course explores the alternatives to oil that vehicle manufacturers are pursuing in their desire to wean away from oil and its mercurial price swings. Students will be required to choose two of these alternative approaches and prepare white papers on each, covering the technology, advantages, limitations or drawbacks, cost saving, environmental impact and likelihood of success in the market place. The focus will be on biofuels, hybrids, the fuel cell, natural gas, hydrogen, the electric car. Satisfies an HuSS Elective. | Prerequisites: Completion of first year writing requirements.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2184W Beyond Oil: Fueling Tomorrow's Vehicles (4 Credits)

Typically offered Fall and Spring

This course explores the alternatives to oil that vehicle manufacturers are pursuing in their desire to wean away from oil and its mercurial price swings. Students will be required to choose two of these alternative approaches and prepare white papers on each, covering the technology, advantages, limitations or drawbacks, cost saving, environmental impact and likelihood of success in the market place. The focus will be on biofuels, hybrids, the fuel cell, natural gas, hydrogen, the electric car. Satisfies an HuSS Elective. | Prerequisites: Completion of first year writing requirements.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2194 Writing About Nature & the Environment (4 Credits)

In this course, students explore today's major environmental and ecological issues and write a number of pieces that discuss causes and possible solutions. Each article is based on a literature search and on interviews with professionals. Class critiques of articles are an integral part of the learning process. Topics include global warming, renewable energy, health and the environment, environmental law and biodiversity. Authors of the best pieces are encouraged to submit them for publication. | Prerequisites: Completion of first year writing requirements. Corequisites: None. Notes: Satisfies a HuSS elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2194W Writing About the Nature and Environment (4 Credits)

Typically offered Spring

In this course, students explore today's major environmental and ecological issues and write a number of pieces that discuss causes and possible solutions. Each article is based on a literature search and on interviews with professionals. Class critiques of articles are an integral part of the learning process. Topics include global warming, renewable energy, health and the environment, environmental law and biodiversity. Authors of the best pieces are encouraged to submit them for publication. | Prerequisites: Completion of first year writing requirements. Corequisites: None. Notes: Satisfies a HuSS elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2224 Natural Environment of New York City (4 Credits)

Typically offered Fall and Spring

New York is one of the world's great cities and, like others, rests on a foundation of the natural environment. The geology and geographic history of the greater New York area is discussed—from plate tectonic origins through the recent (and ongoing) Ice Age, including the formation of river systems and the port. Also considered in detail is the evolution of ecological relationships, including human, throughout this time. Other topics include the changing climate through past epochs as well as today and their impact on the modern city. Also covered are current environmental challenges, such as water supply and quality, air quality, waste disposal and global effects, including atmospheric and ocean warming. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2234 Natural Environmental Catastrophes & Cities (4 Credits)

Typically offered Spring

Cities are extremely complex physical and human systems that can be severely disrupted by acute human-caused events such as war. However, the natural world can also have a severe impact on cities over brief intervals. This course concerns itself with four well-known phenomena that can and have influenced the evelopment, sustainability and even the survival of cities. Meteorological catastrophes, such as hurricanes, cyclones and typhoons, are discussed in detail. Also covered are less violent but equally destructive flooding by river and ocean; earthquake damage and its relationship to population density and the permanence of towns and cities throughout history; and volcanic eruptions, which, though rare, have disrupted cities and determined their initial locations. Finally, biological catastrophes, both macro and micro, such as pestilence and infestations, are discussed. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 2334 Introduction of Environmental Sciences (4 Credits)

Typically offered Fall and Spring

This course addresses the basic processes, as studied by the physical, biological sciences, and behavioral that determine the nature of the physical environment and how it affects life on earth. Topics include the physical environment (Lithosphere, Hydrosphere, Atmosphere, climate); the biological environment (biological systems, biodiversity, population dynamics, ecology) and modern environmental problems, including resource shortages (such as water and energy), diseases, soil, water and air pollution, climate change and their relationship to political and economic issues. Note: This course cannot be used to satisfy Humanities/Social Science requirements for majors outside of the TCS department. | Prerequisites: Completion of first year writing requirements.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 3014 Directed Study in SUE (4 Credits)

Typically offered Fall and Spring

Directed study supervised by a faculty adviser in Humanities and Social Sciences. Students, guided by a faculty adviser, are exposed to foundational research techniques. Library research, written and oral reports are required. | Prerequisites: EXPOS-UA 1 or EXPOS-UA 4. Notes: Does not satisfy a HuSS Elective.

Grading: Ugrd Tandon Graded
Repeatable for additional credit: No
Prerequisites: EXPOS-UA 1 or EXPOS-UA 4.

URB-UY 3034 Evidence-Based Design (4 Credits)

Typically offered Fall and Spring

Designers—at the product, building, neighborhood or urban level—necessarily base their work on the perceived needs and desires of users and clients. Historically, these understandings have come from past practice, close interactions with clients or designer intuition. In recent years, however, design researchers have accumulated enough information to provide an empirical base upon which to base many design decisions. This class reviews the evidence for design, particularly as it relates to well-studied settings, such as health care, corrections and neighborhood design. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 3034W Evidence-Based Design (4 Credits)

Typically offered occasionally

Designers—at the product, building, neighborhood or urban level—necessarily base their work on the perceived needs and desires of users and clients. Historically, these understandings have come from past practice, close interactions with clients or designer intuition. In recent years, however, design researchers have accumulated enough information to provide an empirical base upon which to base many design decisions. This class reviews the evidence for design, particularly as it relates to well-studied settings, such as health care, corrections and neighborhood design. | Prerequisites: Completion of first year writing requirements. Co-requisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 3044 Green Cities (4 Credits)

Typically offered Fall

This course will provide students with an understanding of different types of green spaces that exist in urban areas, such as parks, urban forestry and agriculture, and sustainable streetscapes. It will explore how the greening of cities may incorporate various green infrastructure designs and techniques, and will examine the benefits that green places in cities provide to urban inhabitants as well as the city itself. Although some focus will be on New York City places and policies, the course will also explore greening techniques, designs and policies in other cities in the United States and internationally. Students will learn about public policies that impact the implementation of greening initiatives and how the physical environment affects the quality of life for individuals and communities. | Prerequisite: EXPOS-UA 1 or EXPOS-UA 4.

Grading: Ugrd Tandon Graded
Repeatable for additional credit: No
Prerequisites: EXPOS-UA 1 or EXPOS-UA 4.

URB-UY 3044W GREEN CITIES (4 Credits)

Typically offered Fall

This course will provide students with an understanding of different types of green spaces that exist in urban areas, such as parks, urban forestry and agriculture, and sustainable streetscapes. It will explore how the greening of cities may incorporate various green infrastructure designs and techniques, and will examine the benefits that green places in cities provide to urban inhabitants as well as the city itself. Although some focus will be on New York City places and policies, the course will also explore greening techniques, designs and policies in other cities in the United States and internationally. Students will learn about public policies that impact the implementation of greening initiatives and how the physical environment affects the quality of life for individuals and communities.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 3113 CASE STUDIES IN SUSTAINABILITY(ANCIENT EGYPT & MESOAMERICA) (3 Credits)

Today, many societies are addressing whether their lifestyles and standard of living are environmentally sustainable or not. This course examines a few societies, some now much changed from what they once were, that also faced such questions. Ancient Egypt, arguably Earth's oldest civilization, developed along the Nile River. The agricultural surpluses supported a large population and freed many from farming to be artisans, clerks, lawyers, soldiers and rulers. This course describes the rise and flourishing of ancient Egypt and its social relationships, culture and customs. It also covers the rise of Egyptian cities, warfare and empire building. In contrast, the Mayans of Central America produced a complex civilization that had declined even before Europeans arrived. Victims of resource depletion, the Maya no longer live in their great cities. The history and relationships of these two cultures to their environments illustrate the fate of civilizations based on resource availability and sustainability. | Prerequisites: URB-UY 2033 or URB-UY 2023W. Corequisites: None. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

Prerequisites: (URB-UY 2034 with a Minimum Grade of D OR URB-

UY 2024W with a Minimum Grade of D).

URB-UY 3214 Cities in Developing Countries (4 Credits)

Typically offered Spring

This course will examine different facets of cities in developing countries. It will address common problems in developing urban regions, gaining an understanding of common settlement patterns and urban systems by region. It will also focus on specific issues in representative cities of the regions studied. Specific issues will include water and sanitation, health, transportation and infrastructure, historic preservation, disaster risk reduction and housing initiatives. Cases will include representative cities from Asia, Africa, the Middle East, Latin America and the Caribbean. | Prerequisite(s): Completion of first year writing requirements

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 3234 Planning for Healthy Cities (4 Credits)

Typically offered occasionally

This course is designed to introduce students to the role of the built environment in promoting community health, focusing on the neighborhood scale. Although urban planning and public health are closely related in their history and their goals, these fields are typically taught and practiced independently. The course will examine health issues that can be influence by urban planning, and will explore the role of transportation, land use planning, urban design, community development, and environmental policy, to promote public health. |

Prerequisites: Completion of first year writing requirements

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 3314 Hist & Design of Urban Parks (4 Credits)

Typically offered occasionally

Today, urban parks have become an integral feature of most modern cities. This course describes the origins of urban parks—from private urban-palace gardens to the large, open "natural" public parks so critical to urban life today. The design of these parks, from formal Italian and French gardens to British Landscape gardens, is discussed. The course also examines the changing view of nature in Europe and America, from the Renaissance to the present, and how park design was influenced by this evolving view. The design was strongly influenced by the changing view of nature's psychological, spiritual and even supposedly medical benefits, and by the need for "parks for the people" as an expression of the new democratic spirit in a changing world. This course also includes two of New York City's most famous parks, Central Park in Manhattan and Prospect Park in Brooklyn. | Prerequisites: Completion of first year writing requirements

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

Prerequisites: (EN-UY 1013W OR EXPOS-UA 1 OR EXPOS-UA 4) AND (HUSS-UY 1023W OR EXPOS-UA 2 with a Minimum Grade of D OR EXPOS-UA 9).

URB-UY 3354 Urban Impact Assessment (4 Credits)

Impact assessment is an international, interdisciplinary field of knowledge and practice for anticipating the conditions of change and managing their consequences in order to enhance everyone's quality of life. Two phrases can describe its essence: "comprehensive and integrated" and "proactive and creative." Urban impact assessment applies that knowledge at the urban scale, ranging from local to global. Coupled with the recent innovation of "sustainability assessment," it aims to advance the proposition of urban sustainability. This course also explores the dimensions and proportions of that prospect by applying urban impact assessment methodology to a variety of cases at hand. | Prerequisites: EXPOS-UA 1 or EXPOS-UA 4. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No **Prerequisites:** EXPOS-UA 1 or EXPOS-UA 4.

URB-UY 3832 Special Topics in Sustainable Urban Environments (2 Credits)

Typically offered Fall

Special topics in Sustainable Urban Environments at the 3000 level, to be decided by instructor. | Prerequisites: EXPOS-UA 1 or EXPOS-UA 4. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded

Repeatable for additional credit: No

Prerequisites: EXPOS-UA 1 or EXPOS-UA 4.

URB-UY 3834 Special Topics in Sustainable Urban Environments (4 Credits)

Typically offered Fall and Spring

Special topics in Sustainable Urban Environments at the 3000 level, to be decided by instructor. | Prerequisites: Completion of first year writing

requirements. Notes: Satisfies a HuSS Elective. **Grading:** Ugrd Tandon Graded

Repeatable for additional credit: Yes

URB-UY 3834W Special Topics in Sustainable Urban Environments (4 Credits)

Typically offered occasionally

Special topics in Sustainable Urban Environments at the 3000 level, to be decided by instructor. | Prerequisites: Completion of first year writing requirements. Notes: Satisfies a HuSS Elective.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** Yes

URB-UY 4012 Capstone Project I (2 Credits)

Typically offered Fall and Spring

The capstone is a project course that presents SUE students with an opportunity to translate previous coursework into an applied research project. This is a real-world based course in which students identify, research, and propose solutions to a multidisciplinary urban issue. The field research will be supported by library and on-line research and will culminate in a written report and an oral presentation. Can not take if already taken URB-UY 4024. | Prerequisite: URB-UY 2044

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No **Prerequisites:** URB-UY 2044.

URB-UY 4014 Study Abroad (4 Credits)

Typically offered occasionally

For SUE majors only. The study-abroad is a semester-long course at a foreign institution. Students must maintain a course-load equivalent of 12 credits during this semester. | Prerequisites: Junior/Senior status and permission of SUE faculty adviser. Co-requisites: None. Notes: Does not satisfy a HuSS Elective.

Grading: Ugrd Tandon Graded
Repeatable for additional credit: No

URB-UY 4022 Capstone Project II (2 Credits)

Typically offered Fall and Spring

The capstone is a project course that presents SUE students with an opportunity to translate previous coursework into an applied research project. This is a real-world based course in which students identify, research, and propose solutions to a multidisciplinary urban issue. The field research will be supported by library and on-line research and will culminate in a written report and an oral presentation. Can not take if already taken URB-UY 4024. | Prerequisite: URB-UY 2044 and URB-UY 4012

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

Prerequisites: URB-UY 2044 and URB-UY 4012.
URB-UY 4024 Capstone Project (4 Credits)

Typically offered Spring

The capstone is a research project that presents SUE students with an opportunity to translate previous coursework into an applied research effort. This is a real-world based course in which students work in teams to identify, research, and propose solutions to a multidisciplinary urban issue, supervised by an SUE faculty member in weekly class discussions. The field research should be supported by library research and culminates in a written and oral report. | Prerequisites: Senior Status, permission of SUE faculty advisor. Note: Does not satisfy a humanities and social sciences elective.

Grading: Ugrd Tandon Graded
Repeatable for additional credit: No

URB-UY 4034 Internship (4 Credits)

Typically offered occasionally

Students may undertake an internship for academic credit with an appropriate private, public, or non-profit agency or firm. The internship is an opportunity to extend learning outside of the classroom into a real world setting, and to explore career options tied to the major. Students complete 140 hours at the internship site and attend occasional class meetings. The course involves completing a learning contract, regular reflections, assignments, and a final presentation. | Prerequisite: IDM/SUE/STS majors only. Permission of instructor required.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** No

URB-UY 4443 GUIDED READINGS IN SUSTAINABLE URBAN ENVIRONMENTS (3 Credits)

Typically offered Fall and Spring

This course, supervised by faculty, covers selected problems in sustainable urban environments and involves guided reading and/or research on topics to be arranged. The course is for mature students seeking specialized independent study under tutorial guidance. |
Prerequisites: URB-UY 2033 or URB-UY 2023. Co-requisites: None. Notes:

Satisfies a HuSS Elective. **Grading:** Ugrd Tandon Graded **Repeatable for additional credit:** No

Prerequisites: (URB-UY 2034 with a Minimum Grade of D OR URB-UY 2024W with a Minimum Grade of D.

URB-UY 4504 Advanced Seminar in Urban Studies (4 Credits)

Typically offered Fall, Spring, and Summer terms

The Advanced Seminar is a writing- and research-intensive course that will explore in-depth a topic in Technology, Culture, and Society, requiring practice of both writing and research skills. Topics vary by section; see Albert for detailed topic descriptions. | Prerequisite: (EXPOS-UA 1, EXPOS-UA 4, EXPOS-UA 5, EXPOS-UA 9, ASPP-UT 2, WREX-UF 101 or WRCI-UF 102) and one TCS elective course and Junior/Senior standing.

Grading: Ugrd Tandon Graded **Repeatable for additional credit:** Yes

Prerequisites: EXPOS-UA 1, EXPOS-UA 4, EXPOS-UA 5, EXPOS-UA 9, ASPP-UT 2, WREX-UF 101 or WRCI-UF 102 and Junior/Senior standing.