PROGRAMS + COURSE DESCRIPTIONS 2007-2008.
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# UNIVERSITY OF MICHIGAN URBAN + REGIONAL PLANNING PROGRAM 

## PROGRAMS + COURSE DESCRIPTIONS 2007-2008

This bulletin provides an overview of policies, procedures, degree options, and courses for the $\mathrm{U}-\mathrm{M}$ urban + regional planning program. This document is available for download from the Taubman College website at http://www.tcaup.umich.edu/ bulletin/. If you are planning to visit campus, tour the facilities, and meet with faculty, we encourage you to contact the college in advance of your visit.

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## NONDISCRIMINATION POLICY STATEMENT

The University of Michigan, as an equal opportunityl affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. The University of Michigan is committed to a policy of nondiscrimination and equal opportunity for all persons regardless of race, sex*, color, religion, creed, national origin or ancestry, age, marital status, sexual orientation, disability, or Vietnam-era veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity and Title IX/Section 504 Coordinator, Office of Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, (734) 763-0235, TY (734) 647-1388. For other University of Michigan information call (734) 764-1817. *Includes gender identity and gender expression

## A. ALFRED TAUBMAN COLLEGE OF ARCHITECTURE

 + URBAN PLANNING POLICY STATEMENT FOR STUDENTS WITH IMPAIRMENTSThe college desires to meet the educational needs of all persons, including those with physical or perceptual limitations, who are interested in the study of architecture, urban planning and/or urban design. The college will advise any applicant and develop, for both the prospective student and the program, a realistic assessment of all issues and circumstances that might be encountered in undertaking the program and fulfiling the degree requirements.

## CAMPUS SAFETY

Each year, the University of Michigan prepares an "Annual Security Report" and publishes it in the Campus Safety Handbook. The report, which is issued each October 1, contains detailed information on campus safety and security policies, procedures, and programs, including information on: emergency services, security telephone numbers, sexual assault policy, stalking laws, handling obscene phone calls, sexual harassment policy, dealing with workplace violence and threats, police agencies, health services, counseling services, safe transportation after dark, safety tips, and alcohol and drug policies and programs. The report also includes statistics concerning crimes on campus. If you would like to receive a complete copy, visit the University of Michigan Department of Public Safety website at http://www.umich.edu/~safety/ or call (734) 763-3434.
A. Alfred Taubman College of Architecture + Urban Planning strives for accuracy in this Bulletin, all policies, procedures, programs, and courses are subject to change without notice.

THE REGENTS OF THE UNIVERSITY OF MICHIGAN
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Mary Sue Coleman (exofficio)

## MESSAGE FROM THE PRESIDENT

We are a University rich in history, academic excellence and leadership. The heart of Michigan's success resides in our dedicated staff, robust student body and outstanding faculty members, including distinguished composers, novelists and poets, scientists, engineers, physicians, social scientists, artists, and filmmakers. The quality, breadth, and depth of this University's intellectual resources create a remarkable community of scholars - from our national leadership in the social sciences, medicine, engineering, law, and business to our community's robust cultural offerings. This is the Michigan Difference.

I am particularly enthusiastic about our campus-wide work in the life sciences, including the Life Sciences Institute, the Michigan Nanotechnology Institute for Medicine and the Biological Sciences, our cross-disciplinary research programs and our premier Medical School. As in so many fields, the benefits of Michigan's work in health care and life sciences research are felt across the state and around the world- fulfiling the mission and role of a great public university dedicated to advancing the public good.

Ours is a campus of remarkably wide-ranging experiences, cultures and opportunities. In the coming academic year, we will welcome the Royal Shakespeare Company for a campus residency, and celebrate creativity with the Year of Global Arts. The year will also see the University break ground on the new C.S. Mott Children's and Women's Hospital, as well as open the doors of the Walgreen Drama Center, a new building for the School of Public Health, and J oan and Sanford Weill Hall, home of the Gerald R. Ford School of Public Policy. Of course we will continue our many efforts to make the University's educational and research programs ever stronger and more meaningful.

The University of Michigan family shares a deep tradition. It is a tradition known to the new student who walks into her first history class, to the student-athlete who takes the field, and to our dedicated alumni around the world. We are called upon to be leaders, and to do our very best. I am grateful to work closely with the thousands of people who are part of this tradition and welcome those of you who want to learn more about it.


Mary Sue Coleman, President

## MESSAGE FROM THE DEAN

Taubman College is proud to be a part of the University of Michigan, a major international seat of learning, with multiple centers of academic excellence at the undergraduate, graduate, and doctoral levels. There is cutting edge research and scholarship in every academic field, including world-renowned faculty.

The College is committed to enduring values and emerging imperatives. There is a long and venerable tradition of design, scholarship, community service, and research. Modern architectural research, especially in building technology, was essentially founded at the University of Michigan in the middle of the last century. The long-term interest in design and tectonics is matched by a more recent interest in urbanism from both an urban planning and urban design perspective. Issues that compel us include aesthetics, social equity, sustainability, real estate development, globalism, and community design and planning, especially in nearby Detroit, where we have opened a design center.

Since receiving the largest endowment gift ever given a school of architecture and urban planning in 1999, we have hired many faculty members, started a Master of Urban Design Program and a Real Estate Development Certificate Program, mounted one of the world's most robust visiting professor programs, increased financial aid to students, opened new international programs, and enhanced our facilities. The number of student applicants and enrollees has increased, along with our curricular offerings and the size and caliber of our faculty and staff. In short, Taubman College is on a roll!

Our student body and faculty are composed of women and men of diverse backgrounds, from different regions of the state, the nation, and the world, as well as from different cultures and religions, races, and sexual orientations. We encourage and support lively inquiry and discourse on all issues that affect the built environment and the people who live in it. Together we work to maintain an atmosphere that strives to be simultaneously critical and tolerant, competitive and friendly, serious, and fun. We try to teach, research, practice, and serve in ways that have meaningful impact and true consequence to the community, society, and the world. Come join us and add your voice to this quest.


Douglas S. Kelbaugh FAIA, Dean

## A. ALFRED TAUBMAN COLLEGE OF ARCHITECTURE + URBAN PLANNING

## TCAUP INTRODUCTION

The condition of humanity is intimately connected to the environment in which we live. The primary mission at A. Alfred Taubman College of Architecture + Urban Planning is to prepare students for positions of responsibility within a wide spectrum of organizations and institutions whose goals are to improve the quality of our lives and environment.

In pursuit of the ideal, the college offers a complement of programs, ranging from pre-professional to post-professional education.

Taubman College at the University of Michigan has a long educational tradition that combines design and technology. Today, it continues to foster a broad view of architecture and urban and regional planning in the context of a major research university where interdisciplinary initiatives are encouraged and supported.

The programs of our College are distinct but united by concern for the physical, constructed aspects of our environment. Industrial production, respect for craft, and the desire to serve are deeply rooted in the region. The Architecture Program emphasizes the physical realization of ideas - where priority is placed not upon theory or practice in isolation, but in concrete and poetic possibilities of their integration. The hallmarks of a Taubman College education in architecture are integrated and comprehensive courses that value material sensibility and the process of building, as well as the history and theory of architecture and urbanism. The Doctoral Program in Architecture, one of the first established in the nation, develops these values and ideas at a more scholarly level, while fostering research.

Both the Urban + Regional Planning Program and the Urban Design Program give students the opportunity to do significant interdisciplinary work that emphasizes collaboration with local communities. This collegial community of inquiry is generously supported by the resources of the University of Michigan. Studying urban planning and urban design at Michigan prepares students for positions of leadership and management in public, private, and non-profit policy and planning organizations, as well as for careers in research and teaching.

The University of Michigan has one of the largest alumni groups in the world. A. Alfred Taubman College of Architecture + Urban Planning maintains close contact with over 6,000 graduates in 60 countries throughout the world. These close connections provide the college with opportunities for applied research and provide students with opportunities for internships and jobs.

The University of Michigan is one of the world's most distinguished universities and is widely recognized as an international resources for learning, teaching, research, and service. The University established its position as a leader in higher education over a century ago by laying the foundation for the modern research university. With more than 7,600 faculty and 54,000 students at three campuses, it is one of two public institutions consistently ranked among the nation's best universities.

## TCAUP mission

The A. Alfred Taubman College of Architecture and Urban Planning (TCAUP) seeks to improve the human condition through thoughtful, informed, strategic design and planning of the built environment.

Its academic programs address enduring and emerging issues, from the everyday to the unusual and from the local to the global. The college conducts innovative design and policy research at all scales of the environment and- through outreach, partnerships and activism - serves the community, the state, the nation, and the world, including the disadvantaged and under-represented.

In pursuit of these ideals for over 100 years, TCAUP offers students from the state, the country, and around the globe a complement of disciplinary and interdisciplinary degree
programs ranging from pre-professional to post-professional. Together, our committed and energetic faculty, staff and students form a diverse, creative, and dynamic community within the University of Michigan.

## TCAUP DEGREES

A. Alfred Taubman College of Architecture + Urban Planning offers the following degrees:

- Bachelor of Science in Architecture
- Master of Architecture (2 year program for students entering with a B.S. in architecture or equivalent degree)
- Master of Architecture (3 year program for students entering with a non-architectural baccalaureate degree)
- Master of Urban Planning (2 year program)
- Master of Urban Design (1 year program)
- Master of Science in Architecture (2-1/2 term program)
- J oint/Dual Master's degrees in:
- Architecture/Urban Planning
- Architecture/Urban Design
- Architecture/Business Administration
- Architecture/Engineering
- Urban Planning/Business Administration
- Urban Planning/Law
- Ph.D. in Architecture
- Ph.D. in Urban + Regional Planning
- Graduate Certificate in Real Estate Development


## TCAUP HISTORY

Courses in architecture were first offered at the University of M ichigan in 1876 by William Le Baron J enney. Architecture was recognized as a formal course of study in 1906 when a program was established in the Department of Engineering with Emil Lorch as chair.

Under his leadership, the program grew steadily in size and stature and, in 1913, the University granted the program departmental status and full control of its curriculum.

Lorch continued to shape the program and, in 1923, was instrumental in bringing Eliel Saarinen from Finland to teach at Michigan. In 1931, the college of Architecture was established as a separate entity with 370 students and 27 faculty members.

Wells Bennett succeeded Emil Lorch as director of the college in 1937 and became Dean a year later. In 1939, the college's name was changed to the college of Architecture and Design, the program in architecture was expanded to a five-year curriculum and landscape architecture was added. In the mid-1940s, Michigan was one of the few schools that considered research to be a necessary element of architectural education. By founding the Architecture Research Laboratory in 1948, the college took a pioneering step in integrating design, construction, technology, planning and research. A graduate program in urban planning- which awarded a Master of City Planning degree- was introduced in 1946. This program was one of the first of its kind in the country.

Visual arts courses, originally offered to advance the training of architects, began attracting students from other fields, leading to the creation of separate Departments of Art and Architecture in 1954. The College housed these two departments, along with the smaller Department of Landscape Architecture, for the next decade. In 1965, Landscape Architecture was moved to the School of Natural Resources as a result of its growing relationship to the earth sciences.

The five-year architecture program was modified to a two+two+two year program in 1967 and, in 1968, a Department of Urban Planning was created within the college of Architecture and Design. That same year, a university-wide Ph.D. Program in Urban and Regional Planning was established in the Office of the Vice President for Academic Affairs with faculty from 12 schools and colleges. In addition, Michigan became the first American school to offer a Doctorate of Architecture degree the following year. The introduction of the doctoral program was a natural development due to the history of architectural research at the college.

As the college continued to grow, proposals were developed to provide new facilities and, as part of the planning process, the educational and administrative structure of the college was reassessed. This led to the reorganization of the college of Architecture and Design into a College of Architecture and Urban Planning and a School of Art
in 1974. Two new programs, architecture and urban planning, replaced the former departments. At the same time, the research mission of the college was broadened and the Architecture Research Laboratory was reconstituted into the Architecture and Planning Research Laboratory. The new Art + Architecture Building, housing the college of Architecture and Urban Planning together with the School of Art and Design, opened for classes in 1974 on U-M's North Campus.

Although the college has remained in the same physical location since 1974, it continues to evolve. In 1982, a sociotechnical focus was added to the doctoral program in urban and regional planning which then became the Ph.D. Program in Urban, Technological, and Environmental Planning (UTEP ) and by 1989 the program was from Rackham Graduate School to the college. The Doctoral Program in Architecture was also modified in 1989 and the degree designation changed to a Ph.D., giving the college a more comprehensive program of professional and doctoral education in both architecture and urban planning. In 1992, the two individual programs in urban planning and UTEP were merged to form the Urban and Regional Planning Program (URP), which is now under a single chair with a coordinator of doctoral studies.

Since the mid-twentieth century, the college has been headed by Deans Philip N. Youtz (1957-1964), Reginald F. Malcolmson (1964-1974), Robert C. Metcalf (1974-1986), Robert M. Beckley (1987-1997), J ames C. Snyder (interim 1997-1998) and Douglas S. Kelbaugh appointed in 1998.

## TCAUP LECTURES, EXHIBITS, PUBLICATIONS, + CONFERENCES

The College has developed an ambitious program of lectures, exhibitions, publications, and conferences for the enrichment of students and local professionals. This includes the following annual events:

## RAOUL WALLENBERG LECTURE

Raoul Wallenberg, a 1935 graduate of the University of Michigan College of Architecture and Urban Planning, has been called one of this century's most outstanding heroes. In 1944, as First Secretary of the Swedish delegation in Budapest, he is credited with saving more than $100,000 \mathrm{~J}$ ews from death at the hands of the Nazis. The following
year, Wallenberg was captured by the Russians. Although his fate is unknown, rumors persist that he is held in Russia even today.

To honor and remember this outstanding alumnus, Sol King, a former classmate of Wallenberg's, initiated the Wallenberg Lecture Series in 1971. In 1976, an endowment was established to ensure that an annual lecture be offered in Wallenberg's honor focusing on architecture as a humane social art. The lecture annually honors an individual whose legendary acts of compassion exemplify the power of an individual to make a difference.

## J OHN DINKELOO MEMORIAL LECTURE

J ohn Dinkeloo graduated from the college in 1942 and became one of its most distinguished alumni. He was a gifted architect, an outstanding designer and an enthusiastic student of materials. He was also an inventor, who in the course of designing, developed the neoprene gasket, several different types of glass and cladding systems as well as pioneering the use of Corten and exposed steel. In many ways he epitomizes a spirit of inspired invention and design of which the college is extraordinarily proud.

As a partner of Eero Saarinen, he helped design a number of significant projects, including the J efferson Memorial Arch in St. Louis, the Morse and Stiles Colleges at Yale University, and the TWA Terminal at Kennedy Airport and the Dulles International Airport in Washington D.C. In 1961, he formed a partnership with Kevin Roche and went on to build a reputation of international standing with the design of projects such as the Oakland Museum, the headquarters for J ohn Deere and the Ford Foundation Building in New York.

The first Memorial Lecture was given in 1984 with the generous support of an endowment created by faculty and friends and through the help of John's widow, Thelma Dinkeloo. She has encouraged the college to look across the wide field of architecture and to search out designers who are working internationally to develop ideas and concepts with the same fervor that her late husband demonstrated.

GUIDO A. BINDA EXHIBIT AND LECTURE
The Guido A. Binda Lecture Series was established at the college in 1997 to bring special lecturers to campus on an annual basis for the benefit of students, faculty and the public. Alumnus Guido Binda, BSAA'31, maintained a distinguished architectural practice in western Michigan specializing in the design of public school buildings.

## CHARLES and RAY EAMES LECTURE

The Charles and Ray Eames Lecture Series is an annual event at the college which celebrates design and the Eames legacy. It is sponsored by Herman Miller, Inc. of Zeeland, Michigan, manufacturer of Eames furniture designs for almost 50 years. Nearly everyone has sat in a chair designed by the Eames but their influence goes far beyond the "potato chip" chair. Charles Eames came to the Cranbrook Academy of Art at the invitation of the famous Finnish architect Eliel Saarnien, who taught at U-M before his Cranbrook design responsibilities. At Cranbrook, where Charles and Ray met and married, Eames set up a department of experimental design in the late 1930s and early 1940s. Not only did the Eames influence furniture design, but they researched practical methods for molding plywood, aluminum, and wire chairs for mass production. They also created the first wave of multimedia presentations using multiple images and multi-sensory stimuli.

Internationally renowned architects, planners, designers, critics, and scholars who have recently lectured and exhibited at the college include:

- Michael Rotondi + Clark Stevens, ROTO Architects, Los Angeles
- J esse Reiser, Reiser + Umemoto, New York City
- Steven Holl, Architect, New York City
- Ben van Berkel, UN Studio, Amsterdam
- Lars Lerup, Dean, Rice School of Architecture, Houston
- Robert Mangurian + Mary-Ann Ray, Studiow orks, Los Angeles
- Glenn Murcutt, Architect, Sydney (2002 Pritzker Prize Laureate)
- Eric Owen Moss, Architect and Director, SCIArc, Los Angeles
- Franz Dieleman, Professor of Urban and Rural Geography, Utrecht University, Utrecht
- Lindy Roy, Architect, Roy Design, New York City
- Brian MacKay-Lyons, Architect, Halifax
- Max Bond, Architect, Davis Brody Bond Architects, New York City
- Farshid Moussavi/Alejandro Zaera Polo, Foreign Office Architects, London
- Dell Upton, Architecture Historian, UVA, Charlottesville
- Anthony Vidler, Dean, Cooper Union School of Architecture, New York City
- Mark Wamble/Dawn Finley, Architects, Interloop A/D, Houston
- Tod Williams/Billie Tsien, Architects, Tod Williams Billie Tsien and Associates, New York City
- Michael Speaks, Head, MR+D Program, SCIArc, Los Angeles
- Dave Hickey, Writer and Critic, Las Vegas
- Manuel Castells, Professor of Sociology and City and Regional Planning, University of California, Berkeley
- Manuel de Landa, Theorist, New York City

Exhibits of work from distinguished professionals rotate in our College galleries. In addition, there are exhibits of student and faculty work. The student exhibit is an annual event in keeping with the tradition established by former College Architecture Professor Eliel Saarinen. Work from the pre-architecture, undergraduate, and graduate design studios is exhibited. There is no better indicator of the quality of a program than the work of its students. Fundamental to the architectural design studio today, as well as during Saarinen's time, is the emphasis on critical discourse in the design process. Innumerable conversations and debates help form the final studio product, a process vital in detail and precision to the teaching of design. This annual exhibit represents a faculty and student body dedicated to the highest standards of excellence.

College publications encompass a diverse array of both faculty and student work. The College sponsors the Michigan Architecture Papers, a series of books that records the work of important practicing architects and events at the University of Michigan. Each year, a group of students under the direction of a faculty member produce Dimensions. This journal offers a reflection of what the students and faculty at Taubman College are thinking, and its effect on their production. It's a sideways glance into their collective activities of design, criticism, and research. Portico, the college's alumni newsletter, is published three times annually and reports College news and events, as well as alumni updates. Other College publications include a book about the annual Detroit Design Charrette and the Urban and Regional Research Collaborative's (URRC's) Working Paper Series.

Faculty and students also plan and organize educational conferences, symposia, and meetings that draw regional, national, and international audiences. Professionals and scholars from around the world regularly visit the college serving as critics, jurors, and seminar leaders. Individual faculty members conduct field trips to major urban centers and other notable sites and buildings as part of our instructional programs.

## TCAUP BUILDING DESIGN WORKSHOP

Since 1994, a series of design and build projects in the Architecture Program has helped to integrate the skills needed for successful design, construction, and professional practice. These projects are "real" in the sense that they require students to meet with clients and building officials internal and external to the University, understand the codes and laws that apply to their projects, generate alternatives based upon cost estimates and budgets, and monitor the process and timing of delivery. Often, the students are involved hands-on in the fabrication of projects from the initial generative conceptualization of the design. Recent projects have included "The Eraser Room," a small conference room in Taubman College with walls, floor, and conference table clad entirely in dry-erase board, U-M's Angell Hall Courtyard Computing Site and the Art + Architecture Building Faculty/Staff Lounge and IT Space.

## TCAUP OUTREACH

The Community Partnership Center gives students in Taubman College opportunities to provide planning and design assistance to nonprofit organizations in Detroit, Ann Arbor, and other Michigan communities. Through the outreach opportunities, students gain valuable experience while assisting neighborhoods in areas such as community development, physical planning, strategic planning, geographic information systems, parks planning, housing planning and design, economic development, and transportation projects.

There are several ways for students to get involved, gain hands-on experience, and contribute to community-building efforts underway at the University:

- Register for a capstone course in urban planning or take a community-based studio in architecture or urban design
- Work on a community-based professional project or planning thesis
- Participate in the annual Detroit Design Charrette
- Apply for membership in the Michigan Neighborhood AmeriCorps Program
- Apply for the HUD Community Development Work Study Program (reserved for incoming M.U.P. students only)
- Serve as an intern at a community-based organization
- J oin a research project that produces findings useful for planning and design practice


## U-M Detroit center and TCAUP Community design center

The University of Michigan is playing an active and visible role in the redevelopment of the American city by establishing its Detroit Center in the heart of that major city.

The new 12,000 square-foot U-M Detroit Center occupies the ground floor of Orchestra Place on Woodward Avenue near downtown. Taubman College's Dean Douglas Kelbaugh spearheaded the project, providing the vision and initiative to make it a reality. The new facility opened in September 2005 and will provide a home for dozens of longstanding programs and research projects while also offering space for an increasing number of University programs involving Detroit citizens and organizations. The facility will provide offices and space for classes, meetings, exhibitions, lectures, and collaborative work while serving as a home base for students and faculty working on projects in Detroit.

At the northern end of the facility, Taubman College will occupy 1,000 square feet of high bay studio space with its Community Design Center. The center is equipped with desks/workstations and a faculty office. This community workshop will offer low and no-cost planning and design services to community and neighborhood groups and organizations.

## TCAUP RESEARCH

Research at Taubman College of Architecture + Urban Planning has a rich and diverse history. Since the 1940s, when faculty conducted research on pre-fabricated housing, sponsored research activity has been an important part of the college's mission. Each of the academic programs encourages and supports the research and scholarly activities of its faculty and students. General areas of inquiry conducted in the college have included work in design research and building, environmental planning, building technology, facility
and energy management, human behavior and the environment, computer aided design, post-occupancy evaluation, policy planning, security planning, housing and facilities for special populations, geographic information systems, transportation studies, economic development, planning processes, international urban development, the study of built form and land use, and city and neighborhood design.

The Urban and Regional Research Collaborative (URRC) is an umbrella organization for urban and regional research within Taubman College. The URRC provides a forum for research synergy and exchange, as well as enhanced visibility for the college's urban and regional research.

In addition, the URRC provides collaborative space in the building for students and faculty working on research projects. Research under URRC concerns a wide range of topics. These include clusters of projects in environmental design and security as part of the Studies in Urban Security Group, transportation studies, urban economic development, urban design, urban and regional transformation in the U.S. and elsewhere in the world, and assessment of the quality of urban life.

Support for the research activities of the college comes from public agencies, business and industry, foundations, the University, special user groups, alumni , and corporations. Other partnerships with professional architects and planners are established for specific research endeavors.

## TCAUP CHARRETTES

A charrette is an intensive workshop where nationally renowned and local design experts work in teams with faculty and graduate students to produce design solutions to difficult urban problems. Up to 75 participants work for four or five days in an atmosphere of creative competition to develop specific design proposals. The effort culminates on the evening of the last day with a public presentation at a prominent venue in Detroit, to which all involved parties, including citizens, business leaders, the media, and public officials, are invited. Each of the teams includes 12-15 students from architecture, urban planning, landscape architecture, and art programs at U-M and other local institutions (e.g. Cass Tech, Detroit Mercy). Depending on the site and problem, economists, historians, community representatives, or public artists also participate.

During the balance of the winter term, college faculty members lead follow-up studios to develop the general concepts and specific downtown building projects in greater detail. The charrette work concludes with the preparation and publication of a book during the spring/summer. The book is widely distributed and available as a tool to help the public and private sectors refine and implement some of the proposed concepts. The charrette presentations are also made available on the college website: http://www.tcaup.umich.edu/charrette/.

Past charrettes have focused on the following areas:

- 2007-5D: Adding Three Dimensions to Downtown Detroit
- 2006-Aerotropolis
- 2005- Eastern Market and Beyond
- 2004 - West Riverfront
- 2003 - Reflecting the Riverfront
- 2002 - Detroit Downtown
- 2001 - Grand River Avenue
- 2000 - Michigan at Trumbull: Turning the Corner?
- 1999- Lower Cass: Corridor, Neighborhood, District?


## TCAUP FACILITIES + RESOURCES

The Art + Architecture Building provides nearly 240,000 square feet of space equally divided between two academic units of the University: A. Alfred Taubman College of Architecture + Urban Planning and the School of Art and Design. The building, opened in 1974, includes a range of excellent facilities including generous studio space, galleries, classrooms, well-equipped laboratories, a 150 -seat lecture hall, conference and seminar rooms, faculty and administrative offices, and extensive workshops arranged around a central courtyard. The design studio, three-fourths of an acre in area, is the largest in the country. The building conforms to all barrier-free design regulations and handicap parking is available.

Computer access is widely available and distributed throughout the building. The adjacent Duderstadt Center provides additional advanced technology and communications and houses the library collections for art, architecture, urban planning, and engineering; state-of-the-art laboratories for visualization, virtual reality, video, music, and dance; and an exhibit gallery.

## TCAUP ARCHITECTURE/PLANNING STUDIO

The architecture/planning studio, located on the third floor, offers 30,000 square feet of continuous workspace and is the largest academic studio in the world. The large, open plan is configured with modular workplaces for each student electing a studio course. All tables and storage units are movable in order to permit easy adaptation to a variety of class sizes, projects, and methods of instruction. Seminar rooms and flexible design review spaces are located at each end of the studio.

## TCAUP COMPUTING

Teaching and research computing resources are available for student use in various locations within the Art + Architecture Building

- The Art + Architecture Building supports wireless computing, allowing network and internet access from most points in the building for students, faculty, and staff
- The studio's network also allows students to bring their personal computers and access the college's shared resources from individual studio desks
- Faculty-designed, student-built computing clusters occupy each end of the design studio and are available to students 24 hours a day
- The University-supported public computing site on the second floor has additional computers that can be reserved for classroom use as well as on a drop-in basis for independent graphic and computer-aided design studies
- Additional computing labs support specialized functions and/or programs in the building. These facilities include building and environmental technology instruction and applications, Geographic Information Systems (GIS) research and instruction, and doctoral program research and instruction
- Students may also access other public computer sites on campus, including the Duderstadt Center across the street


## DUDERSTADT CENTER/LIBRARY

The Duderstadt Center, provides students with access on a drop-in basis to 360 computers running Solaris, dual-boot Windows XP/Linux, and Mac OS X. The Duderstadt Center also provides an incubator environment for faculty and students involved in projects exploring existing or emerging digital technology. The Duderstadt Center Programs staff, working with faculty and students, provides an array of resources in specialized facilities including the:

- 3D Lab, for creating multi-dimensional images using computer modeling and resources such as the GeoWall, 3D printer, render farm, and an Onyx-driven CAVE environment;
- Learning Technology Lab, for support with CourseTools and usability/accessibility testing for software and website development;
- Collaborative Technology Lab, which is developing the next generation of webbased instructional and research tools;
- Digital Media Tools Lab, which includes the Digital Asset Management System (DAMS) Living Lab, for exploring existing and emerging digital asset management technologies;
- Smart Studios - a group of video, audio, and electronic music recording studios, a media conversion facility, and digital video editing suites.

In addition, there are four sophisticated computer instruction classrooms and several meeting rooms, including two that are equipped for videoconferencing.

The Duderstadt Center houses the core library collections for Taubman College of Architecture and Urban Planning, the School of Art and Design and the college of Engineering. Located directly across Bonisteel Boulevard from the Art + Architecture Building, the library contains approximately 80,000 volumes relating to art, architecture, design, and urban planning alone. In addition the library collects over 400 journals in architecture, urban planning, and art. It is a place to meet with students from other colleges, explore new ideas, and find information addressing both the aesthetic and technical aspects of design. The facility includes a rare book collection with rare and limited-edition books and photographs and a visual resource collection with over $100,0035 \mathrm{~mm}$ slides, videos, and blueprints. The library provides access to an extensive array of online resources including catalogs, full-text journals, image databases, and the World Wide Web. Subject area librarians are happy to assist
students in their research. For help with resources related to architecture and urban planning contact Rebecca Price (rpw@umich.edu or (734) 647-5274) or visit the library webpage at http;//www. lib.umich.edu/ummu/.

The library at the Duderstadt Center is part of the University of Michigan's extensive library system, one of the largest research libraries in the world. The Harlan Hatcher Graduate Library is the University's primary research collection for the humanities and social sciences. The Graduate Library collection numbers approximately 2.5 million volumes including 10,000 journals and periodical subscriptions written in several hundred languages and covering a broad array of subject specialties. In addition, these collections are supported by strong holdings in U.S. and foreign government publications, an outstanding collection of maps and related materials, manuscripts and special collections, over 1.5 million items in microformat, and a strong collection of reference and bibliographic sources in print and machine-readable formats. More information on the University's library system is available at http://www.lib.umich.edu/.

During the academic year, the Duderstadt Center is open 24 hours a day, 7 days a week. For more information visit the website at http://www.ummu.umich.edu/.

## ART + ARCHITECTURE SHOP

The shop is a 6,000 square foot facility located on the first floor, in the southwest wing of the Art + Architecture Building. A fully equipped wood shop with several stations of the most common machines, the shop also has a good complement of plastics and metal working equipment and two CAD-driven laser cutters for wood, paper, and plastics. The shop staff of professional model makers oversee and guide all work in the shop and they conduct annual training programs for students. Shop hours extend into the evenings and part of the weekend for the convenience of students.

## TCAUP MEDIA CENTER

Located on the second floor of the Art + Architecture Building, the Media Center is a full-service retail digital printing, plotting, and copy center specially-equipped to cater to the needs of the college's architecture and planning students, faculty, and staff as well as clients from around the University.

The Media Center services include color copying and digital color printing, large format digital output up to 42 inches wide, and black and white copying and digital printing. The Media Center also provides a wide array of handwork services such as collating, folding, cutting, stapling, binding, and laminating.

Media Center staff assists customers with UPS, DHL, and other carriers for ground and overnight shipments and can assist with copyright clearance. Students and faculty may also reserve and check out audiovisual equipment at the Media Center.

The Media Center produces and sell course packs, college publications, copy cards, postage, and a large selection of office, art, drafting, mailing, and computer supplies as well as beverages and snack foods.

All major credit cards, cash, checks, and university accounts are accepted and Media Center hours extend into evenings and weekends for the convenience of students and faculty. Learn more at: http://www.tcaup.umich.edu/mediacenter/.

## TCAUP BUILDING TECHNOLOGY LABORATORY

The 7,000 square foot Building Technology Laboratory is a unique resource for class use in group assignments or demonstrations, individual investigation by students or faculty and research in teaching methods in the area of building technology. Within the BTL are specialized laboratories and areas:

## ACOUSTICS LABORATORY

Supports classroom demonstrations, technical measurements and research in architectural acoustics.

## BUILDING THERMAL UNIT SIMULATORS (BTUS)

The BTUS has test chambers with identical single zone building systems for heating and cooling. The computer-controlled environments allow for full-scale investigations of thermodynamic processes in areas such as heat transfer, mass thermal storage and comfort control. The system is also used for facility planning and design decision making.

## SKY SIMULATOR

A 30' diameter hemispherical dome structure, representing an artificial sky, is used to perform daylighting studies under simulated clear and cloudy conditions in all building types and computer validation.

SUN AND SOLAR ANGLE SIMULATOR
The simulator is used to demonstrate the correlation between the time of year and solar exposure of a building for a given location on the earth.

## MAPPING TABLE FOR WIND FLOW SIMULATION

The fluid mapping table uses water to simulate wind motion.

## WEATHER STATION

Fully equipped and located on the roof of the laboratory, it consists of photometric and radiation sensors for measuring horizontal, global and diffuse illuminances, and irradiances of the four cardinal orientations and zenith.

## FULL-SCALE PHOTOVOLTAIC SYSTEM

A 2.4 kW photovoltaic system on the roof demonstrates the technology, studies all aspects of roof integration and evaluates the utilization of generated electricity in the building to research potential technological implications, especially with regard to existing structures.

## FULL-SCALE SIMULATION LABORATORY

This simulation facility is used for the photometric study and evaluation of office and industrial lighting systems for design applications. It provides quantitative photometric information on how different lighting systems and design approaches affect the visual quality and comfort of typical work environments. The $40^{\prime} \times 50^{\prime}$ facility is capable
of controlling ceiling height, floor area and window size, allowing for the controlled simulation and study of ceiling integrated lighting, furniture, integrated task lighting, and window aperture daylighting systems. It is also used for lighting and daylighting computer algorithm validation.

DIGITAL FABRICATION LAB (FABLAB)
The fablab aids in the crossover between computer-aided design and advanced fabrication techniques. An extensive suite of software along with computer-driven hardware tools helps introduce basic concepts of manufacturing and construction for studio hands-on labs, small design projects, and research projects.
Hardware includes:

- CNC router: Mills 3D surfaces out of solid materials and cuts 2D profiles out of flat stock materials
- 3D digitizer: Digitally captures points and curves from physical artifacts
- Rapid prototyping 3D printer: Prints 3D models from digital files
- Laser cutters: The college shares two laser cutting machines with the School of Art \& Design for cutting flat stock materials such as cardboard, wood, plastic, and more


## STRUCTURAL TESTING EQUIPMENT

A test floor is available for structural analysis. A complete set of test fixtures is available to conduct property investigations in wood, metals, concrete, and mortar.

## COMPUTER LAB

Classroom instruction is supported with the latest hardware and software for acoustic, daylighting, and visualization of the luminous environment, thermal energy analysis, and structural and CAD applications.

TCAUP GEOGRAPHIC INFORMATION SYSTEMS (GIS) LABORATORY Since its inception in 1989, the Geographic Information Systems (GIS) Laboratory has developed into an integrated network of GIS hardware, software and data. The geographic focus of this effort is on the State of Michigan. The laboratory maintains statewide electronic data sets on streets, city, hydrography and demography. The lab is a teaching facility as well, serving up to 40 students per semester. This lab facility is
part of the larger University-wide system for support of spatial analysis, including the Map Library at the Harlan Hatcher Graduate Library. A recent multi-disciplinary initiative has been funded that will make GIS even stronger at the University of Michigan.

## TCAUP ENROLLMENT + STUDENT PROFILE-FALL 2006

ENROLLMENT
Undergraduate ..... 207
Graduate. ..... 346
Total ..... 553STUDENT PROFILE

|  | College-Wide | Undergraduate | Graduate |
| :--- | :--- | :--- | :--- |
| Women | $44 \%$ | $45 \%$ | $43 \%$ |
| Minorities | $17 \%$ | $28 \%$ | $11 \%$ |
| Michigan Residents | $50 \%$ | $72 \%$ | $37 \%$ |
| International Students | $19 \%$ | $6 \%$ | $27 \%$ |

## TCAUP STUDENT ORGANIZATIONS

There are several student organizations within the college. Each of these organizations has a mailbox near the faculty/staff lounge on the Art + Architecture building's second floor. APX, AIAS, and OAP have offices in the North Campus Commons.

## ALPHA RHO CHI (APX)

Alpha Rho Chi is a national professional architectural fraternity. The chapter has set as its goals: increasing members' awareness of different aspects of the profession, increasing contact with alumni, and sponsoring events in keeping with the chapter's goals.

## AMERICAN INSTITUTE OF ARCHITECTURE STUDENTS (AIAS)

The organization is composed of a national office and member chapters from all of the architecture colleges in the United States and one in Canada. The purpose of AIAS is to organize architecture students and combine their efforts to advance the science
and art of architecture. The mission of AIAS is to promote excellence in architectural education, training, and practice, and to foster an appreciation of architecture and related disciplines among all persons.

AIAS undertakes a variety of programs and services each year to achieve these goals by providing students with the opportunities to communicate and interact with each other about topics concerning education and professional design.

The main AIAS event of each academic year is "Forum." This event is a national convention held the week of Thanksgiving vacation in a host city. Representatives from every AIAS chapter in the United States are present for a week of education, lectures, sightseeing, and fun.

## ASIAN AMERICAN ARCHITECTURE STUDENTS' ASSOCIATION (ASIARCH)

AsiArch is for Asian American architecture students. The group sponsors events such as lectures, panel discussions, exhibits, competitons, and social events to promote lively discussions of diversity in student life as well as in professional practice.

THE ORGANIZATION OF AFRICANAMERICAN STUDENTS IN ART, ARCHITECTURE, AND PLANNING (OAP)
Formerly known as AfricanAmerican Students in Design (AASID), OAP was reorganized in 1990-91. Regular meetings - some with planned programs- are held throughout the year.

## ARCHITECTURAL REPRESENTATIVE COMMITTEE (ARC)

Through active participation in the architecture community at the University of Michigan, this independent student advisory board:

- Empowers students to determine the direction of their education
- Creates a recognizable channel through which students can express and act upon their academic, social, and global interests
- Fosters an open network of thought exchange within the architecture program, respecting every voice as equal
- Inspires every student to diversify, enrich, and strengthen his/her academic experience in the architecture program

Elected members of this student organization earn (1) course credit and can take a role on one of ARC's 11 different committees.

## URBAN PLANNING STUDENT ASSOCIATION (UPSA)

UPSA is open to participation by every urban planning student and strives to integrate student needs and views into the decision-making process within the Program. UPSA also organizes social events and works to form strong relationships among all urban planning students.

## TCAUP CAREER PLACEMENT

The college assists current and graduating students in their job searches by posting job openings, maintaining files of job announcements, sending out a résumé book and scheduling on-campus interview sessions. The college has a solid reputation for producing well-trained, educated graduates and works closely with alumni and other professionals to assist them in meeting their personnel needs. The college also sponsors events to aid students in the development of a career strategy which will assist them throughout their professional lives. These events bring students together with alumni, professionals and recruiters from various firms.

In addition, the University has a Career Planning and Placement Office which has an extensive library of related materials. Professional staff provide career counseling, placement counseling, referral services and information on student employment. Seminars are offered in résumé writing, the job search process, and interviewing skills.

## TCAUP MATERIALS + EQUIPMENT

The College provides drawing tables, lockers, stools, and other essential furniture for the operation of classes. It is assumed that students using this equipment will bear in mind that it must be available to others and consequently will leave it in good condition. The student is responsible for providing all other materials except those furnished through the payment of lab fees. Unless notified otherwise, students are advised to purchase required supplies after arrival at the University when course elections have been established and materials lists are made known for the term's work.

## TCAUP RETENTION OF STUDENT WORK

The faculty reserves the right to retain examples of student work, done in conjunction with class assignments, for purposes of illustration, instruction, and exhibition.

## TCAUP COLLEGE USE OF DIGITAL MEDIA

The college may record/capture video, audio, and/or images of students and student work during regular college activities (i.e. class sessions, lectures, exhibits, studio critiques, group meetings, etc.). These media may be made available in various forms to describe and/or promote college activities and programs in a variety of ways consistent with the mission of the college and University.

## TCAUP STUDENT APPEAL PROCEDURE

It is the purpose of the appeal procedure to provide undergraduate and graduate students and faculty with a mechanism for review of student and faculty allegations about matters pertaining to student conduct, performance and status and/or faculty misconduct. The appeal procedure shall be available to both student and faculty members of Taubman College for review of grievances of academic matters, including, but not limited to:

1. All aspects of the degree process involving grading, evaluation, or status
2. Unjustified denial of student access to data or misappropriation of student data
3. Professional misconduct toward students
4. Unfair, discriminatory, or intimidating treatment of students, including sexual intimidation and discrimination due to disability
5. Discipline or other action taken as a result of allegations or findings of student academic misconduct involving plagiarism, cheating, fabrication, falsification of records or official documents, intentional misuse of equipment or materials, and aiding and abetting the perpetration of such acts

## TCAUP PROCEDURE FOR APPEALS

## STEP 1

The first step is discussion of the grievance by the student and the faculty member. It is anticipated that most disputes can be resolved without recourse to other steps.

## STEP 2

If not satisfied with the outcome of this discussion, either party may request time to discuss the problem with the appropriate program chair who will informally attempt to mediate and resolve the dispute.

## STEP 3

If Step 2 fails to satisfy either party, he or she may request time to discuss the problem with the dean of the college, who will informally attempt to mediate and resolve the dispute.

## STEP 4

If Step 3 fails to satisfy either party, he or she may present a written grievance to the appropriate program chair requesting review by an appeal board. In the event the program chair is personally involved in the complaint, the written grievance shall be addressed to the dean of the college.

## STEP 5

Upon receipt of a written grievance, the program chair (or dean) will appoint an ad hoc appeal board comprised of two faculty and two students to review the case. The appeal board shall conduct a hearing to hear the complainant's case and the respondent's case including the calling of witnesses for either or both sides. Upon consideration of the facts and circumstances of the case, the appeal board shall prepare a written recommendation to the chairperson (or dean) who will promptly inform the complainant and the respondent in writing of the results of the appeal board investigation.

## STEP 6

If the decision is still not acceptable to either party, the matter shall be presented to the executive committee of the college who will make a final determination.

## TCAUP GUIDELINES FOR APPEALS

It is the duty and responsibility of all faculty, staff and students in Taubman College to maintain equity and consistency in the application of college policies and procedures. The appeal procedures outlined above are designed to insure that each individual is
provided with an opportunity for a thorough examination of any decision or action which that individual may perceive as arbitrary, capricious or unjust. The appeal procedures can achieve this objective only with the cooperation and good faith of all parties involved. Certain guidelines should be noted.

1. Every effort should be made to resolve disputes at the lowest possible step in the appeal procedure.
2. Written grievances should be filed promptly, as soon as possible following the action or decision from which the appeal derives. College officials will respond to appeals in a timely manner.
3. All written grievances should include all pertinent facts and information that substantiate the grievance. All decisions made in response to such grievances shall be made in writing and include the reasons and/or basis for each decision.
4. A graduate student teaching assistant involved in an allegation to be adjudicated shall enjoy the rights of faculty when the allegation concerns his/her performance in the exercise of his/her assigned duties. (Employment-related matters covered by the University contract with the Graduate Employees Organization are outside the jurisdiction of this college.)
5. When a student enrolled in another academic unit files a grievance against a member of Taubman College faculty, the Taubman College appeal procedures are followed. Conversely, when a student enrolled in Taubman College files a grievance against a faculty member in another unit, the procedures of that unit will be followed.

## RESIDENCY CLASSIFICATION GUIDELINES

The University of Michigan enrolls students from 50 states and more than 120 countries. Residency classification guidelines have been developed to ensure that decisions about whether a student pays instate or out-of-state tuition are fair and equitable and that all applicants for admission or enrolled students, even those who believe they are Michigan residents, understand they may be asked to complete an application for resident classification and provide additional information to document their residency status.

The Residency Classification Office in the Office of the Registrar on the Ann Arbor campus administers the University's residency guidelines. If your activities and circumstances as documented to the Residency Classification Office demonstrate establishment of a permanent domicile in Michigan, you will be classified as a resident once your eligibility has been confirmed. If your presence in the state is based on activities or circumstances that are determined to be temporary or indeterminate, you will be classified as a nonresident.

For more information and complete residency guidelines, visit the Office of the Registrar website at http://www.umich.edu/~regoff/resreg.html or contact the Residency Classification Office.

Residency Classification Office<br>Office of the Registrar<br>1210 LSA Building<br>500 South State Street<br>Ann Arbor, MI 48109-1382<br>Phone: (734) 763-5174

## ACADEMIC CALENDAR FALL 2007-WINTER 2009

For the most current academic calendar information, visit the U-M Office of the Registrar website at http://www.umich.edu/~regoff/calendar/

## FALL 2007

Registration (for students not pre-registered)............................................ Aug 31, Fri
Labor Day (Holiday).................................................................................. Sept 3, Mon
Classes begin ...................................................................................... Sept 4, Tues
Fall Study Break...................................................................... Oct 15-16, Mon-Tues
Thanksgiving recess 5:00 p.m. .................................................................Nov 21, Wed
Classes resume 8:00 a.m. ......................................................................Nov 26, Mon
Classes end ......................................................................................... Dec 11, Tues
Study Days ........................................................ Dec 12, Wed + Dec 15-16, Sat-Sun
Examinations ......................................Dec 13-14, Thurs-Fri + Dec 17-20, Mon-Thurs
Commencement .................................................................................... Dec 16, Sun

WINTER 2008
Registration (for students not pre-registered)............................................. an 2, Wed
Classes begin ..................................................................................... J an 3, Thurs
Martin Luther King, Jr. Day University Symposia. No Regular Classes. ..........J an 21, Mon
Vacation begins 12:00 noon............................................................................. 23 , Sat
Classes resume 8:00 a.m. ................................................................................ ${ }^{\text {ar }}$ 3, Mon
University Honors Convocation............................................................... Mar 16, Sun
Classes end .................................................................................................... 15 , Tues
Study Days .............................................................Apr 16, Wed + Apr 19-20, Sat- Sun
Examinations ....................................... Apr 17-18, Thurs-Fri + Apr 21-24, Mon-Thurs
Commencement Activities..............................................................Apr 25-27, Fri- Sun

SPRING SUMMER 2008
Registration (Full and Spring Half Terms)................................................. Apr 28, Mon
Classes begin ................................................................................................. ${ }^{\text {Apr 29, Tues }}$
Memorial Day (Holiday)........................................................................ May 26, Mon
Classes end (Spring Half Term) .................................................................. une 16, Mon
Study Days ................................................................................ une 17-18, Tues-Wed
Examinations J une 19-20, Thurs-Fri
Spring Half Term ends ..... June 20, Fri
Registration (Summer Half Term) ..... J une 24 , Tues
Classes begin (Summer Half Term) ..... J une 25 , Wed
Independence Day (Holiday) ..... July 4, Fri
Classes end 5:00 p.m. ..... Aug 12, Tues
Study Day ..... Aug 13, Wed
Examinations ..... Aug 14-15, Thurs-Fri
Full + Summer Half Terms end ..... Aug 15, Fri
FALL 2008
Registration (for students not pre-registered) ..... Aug 29, Fri
Labor Day (Holiday) ..... Sept 1, Mon
Classes begin ..... Sept 2, Tues
Fall Study Break ..... Oct 20-21, Mon-Tues
Thanksgiving recess 5:00 p.m ..... Nov 26, Wed
Classes resume 8:00 a.m. ..... Dec 1, Mon
Classes end ..... Dec 9, Tues
Study Days Dec 10, Wed + Dec 13-14, Sat- Sun
Examinations Dec 11-12, Thur-Fri, + Dec 15-18 Mon-Thur
CommencementDec 14, Sun
WINTER 2009
Registration (for students not pre-registered) ..... Jan 5, Mon
Classes begin ..... J an 7, Wed
Martin Luther King, J r. Day University Symposia. No Regular Classes ..... J an 19, Mon
Vacation begins 12:00 noon ..... Feb 21, Sat
Classes resume 8:00 a.m. ..... Mar 2, Mon
University Honors Convocation ..... Mar 15, Sun
Classes end ..... Apr 21, Tues
Study Days Apr 22, Wed + Apr 25-26, Sat-Sun
Examinations Apr 23-24, Thurs-Fri + Apr 27-30, Mon-Thurs
Commencement ActivitiesMay 1-3, Fri- Sun

MAPS U-M ANN ARBOR AREA



## MAPS U-M NORTH CAMPUS


$(P)=U \cdot M$ Employee Parking $\quad(V P=$ Visitor Parking
For a comprehensive set of U -M campus maps, visit the Campus Information Center website at http://www.umich.edu/~info/.

MAPS THE ART + ARCHITECTURE BUILDING, 2000 BONISTEEL BOULEVARD

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MAPS THE ART + ARCHITECTURE BUILDING, 2000 BONISTEEL BOULEVARD


## MAPS THE ART + ARCHITECTURE BUILDING, 2000 BONISTEEL BOULEVARD




## STUDENT WEB RESOURCES

http://www.umich.edu/student_res.html

## ACADEMIC CALENDAR

http://www.umich.edu/~regoff/calendar/

SCHEDULE OF CLASSES
http://www.umich.edu/~regoff/schedule/

TUITION AND FEES
http://www.umich.edu/~regoff/tuition/

FINANCIAL AID
http://www.finaid.umich.edu/

STUDENT FINANCIAL OPERATIONS
http://www.sfo.umich.edu/

## WOLVERINE ACCESS

Change your address; order transcripts; and access grades, financial aid, CRISP, and class schedules.
https://wolverineaccess.umich.edu/

## REGISTRAR

Diploma, disenrollment procedures, term grade reports, drop/add deadlines, final exam schedule, residency regulations, and more.
http://www.umich.edu/~regoff/

## STUDENT SERVICES

Career programs, course information, support services, and financial aid. http://www.umich.edu/student_serv.html

INTERNATIONAL CENTER
http://www.umich.edu/~icenter

## STUDENT EMPLOYMENT

http://www.finaid.umich.edu/Employ/

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS)
http://www.umich.edu/~caps/

EMERGENCY PREPAREDNESS
http://www.umich.edu/~urel/prepare/

HOUSING
http://www.housing.umich.edu/

LIBRARIES AND ACADEMIC RESOURCES
http://www.umich.edu/lib_resources.html

## COMPUTING ON CAMPUS

Where you can use a computer, how to get started using the University of Michigan
Computing Environment (UMCE), and what technical assistance is available.
http://www.umich.edu/computing.html
UNIVERSITY HEALTH SERVICE
Primary medical care services for currently enrolled U-M students, non-enrolled students, students from Flint and Dearborn campuses, alumni, faculty, staff, U-M retirees, spouses, domestic partners, and guests.
http://www.uhs.umich.edu/

## CAMPUS INFORMATION CENTERS

http://www.umich.edu/~info/
THE CAREER CENTER
http://www.cpp.umich.edu/
GRADUATE GUIDE TO COMMENCEMENT
http://www.umich.edu/~gradinfo/
ANN ARBOR AREA/LIFE ON CAMPUS
Maps and directions, campus safety, and housing.
http://www.umich.edu/campus_life.html

## MARKETPLACE

Buy-Sell-Trade, requires uniqname and umich password.
http://marketplace.umich.edu/

RIDEBOARD
http://www.umich.edu/~ridebd/

TCAUP FACULTY AND STAFF
http://www.tcaup.umich.edu/ facultystaff.html

Student Yearbook http://www.michiganyearbook.com/

INFORMAL LEARNING SPACE INFORMATION
Lists and maps showing campus study resources.
http://lattice.engin.umich.edu/ILSinfo/ index.php?title=Main_Page

## EXPLORE NORTH CAMPUS

Transportation and maps, schools and colleges, libraries, recreation, and more. http://www.umich.edu/~gonorth/

## INTRODUCTION

The Urban + Regional Planning Program offers two degrees: a professional Master of Urban Planning (M.U.P.) and a Ph.D. in Urban + Regional Planning. The urban planning profession is concerned with the human and physical environments of cities and regions. A primary goal of the profession is to improve the quality of life in places - whether neighborhoods, cities, metropolitan regions, rural settlements, or larger regions-anywhere in the world. In pursuing this goal, graduate students acquire knowledge in these areas:

1. An understanding of cities and regions, including the interrelationship between their social, economic, and political systems and their spatial patterns.
2. An awareness of the techniques for analyzing cities and regions and for developing plans and programs for their future.
3. The formulation of future development policies, especially as the process involves identifying problems, establishing objectives, generating and evaluating alternative plans, and implementing them.

## MASTER OF URBAN PLANNING DEGREE

## M.U.P. DESCRIPTION AND OBJECTIVES

The M.U.P. degree offers professional education in the planning field. Graduates may eventually apply their professional skills in various government agencies, private enterprises, or nonprofit organizations within a variety of subject areas. Graduate education at Michigan emphasizes the development of students' abilities to analyze, evaluate, integrate, and apply critical thinking in interdisciplinary planning processes. The course of study normally requires two years (four terms/full-time) for completion.

The M.U.P. degree, formally accredited through the American Planning Association and the Association of Collegiate Schools of Planning, takes a broad view of the scope of urban and regional planning. The core courses, about one-third of the credits, provide background for all areas of planning. Students choose to concentrate their studies in such areas as land use and environmental planning, housing, community and economic development, planning in developing countries, physical planning and urban design, and transportation planning. Because urban and regional planning is an interdisciplinary field, students are encouraged to choose related courses in other departments.

## M.U.P. ADMISSION REQUIREMENTS

To be eligible for admission for the M.U.P. degree, a student must have earned a bachelor's degree from an accredited college or university and is expected to have maintained a " B " average ( 3.0 on a 4.0 scale) or better in his or her undergraduate studies.

## M.U.P. GRADUATE RECORD EXAMINATION

GRE scores (General Test) are required for all applicants who are U.S. citizens or permanent residents or who have studied at an institution where the language of instruction is English. GRE scores are recommended for all other international students as well. Schedule a test at: http://www.gre.org.

## M.U.P. TOEFL/IBT EXAMINATION (International Students Only)

 The TOEFL or MELAB test of English fluency is required for all international students except those who have received a degree from an institution where the language of instruction is English. Minimum expected scores are shown below.|  | Rackham | M.U.P. |
| :--- | :--- | :--- |
|  | (minimum expected scores) | (minimum expected scores) |
| TOEFL (paper based) | 560 | 600 |
| TOEFL (computer-based) | 220 | 250 |
| MELAB | 80 or better | 85 |
| IELTS | n/a | 7 |

## M.U.P. ACADEMIC ENGLISH EVALUATION (A.E.E.) POLICY

New graduate students with an undergraduate or graduate degree from an Englishmedium institution (either in the U.S. or in another country) will be exempt from the AEE. New graduate students who do not have a degree from an English-medium institution may or may not be required by the Rackham Graduate School to take the AEE. The decision will be made based on the student's score on TOEFL, MELAB, or IELTS. Testing is done after arrival on campus before classes begin.

## M.U.P. APPLICATION PROCEDURES

Students are encouraged to apply for fall term admission; M.U.P. students are also admitted in the winter term. The M.U.P. is oriented toward meeting the needs of full-time students, but part-time students are also encouraged to apply. The program seeks to accommodate the scheduling needs of these students.

Overall administration of the Graduate Program in Urban + Regional Planning is by the Horace H. Rackham School of Graduate Studies. All applicants must meet the general requirements of the Horace H. Rackham School of Graduate Studies.
Please refer to the online publications for the most up-to-date information on admission and programs of study at http://www.rackham.umich.edu.

## Horace H. Rackham School of Graduate Studies

Office of Admissions
The University of Michigan
106 Rackham Building
915 E. Washington Street
Ann Arbor, MI 48109-1070
Phone: (734) 764-8129
Fax: (734) 647-7740
Email: rackadmis@umich.edu
Web: http://www.rackham.umich.edu

Students seeking admission for the M.U.P. should apply online at:
http://apply.embark.com/Grad/UMich/Rackham/.

Application packets can also be downloaded at:
http://www.rackham.umich.edu/Admis/rackhamalt.html.

Send the department portion of the application to:

## Urban Planning Admissions

A. Alfred Taubman College of Architecture + Urban Planning

The University of Michigan
2000 Bonisteel Boulevard
Ann Arbor, MI 48109-2069

In addition to the application, each applicant is required to furnish a written statement of purpose that explains your interest in Urban and Regional Planning. This should include what you plan to do during the course of studies, and how you hope to use your graduate education in planning. If possible, the field of intended specialization or concentration should be indicated. Two letters of recommendation are required. Personal interviews are not necessary, but prospective students may visit the College and arrange for appointments with the program chair, faculty, and students.
U. S. citizens should send original transcript(s) to the department only. International applicants should send a second set of original transcripts with their Rackham
application to the Graduate School. Transcripts and letters of recommendation can be sent separately from the application or with the application (sealed in an envelope and signed on the flap).

## M.U.P. APPLICATION DEADLINE

For financial aid consideration, applications should be submitted by J anuary 5. Most applications are reviewed in February and early March. For fall term, completed applications will be accepted through J uly 1 for international students and August 1 for domestic students - or until the class is filled. For winter term, the application deadline is October 15 for international students and November 15 for domestic students. Send test scores to the following codes:

|  | Institution | Department |
| :--- | :--- | :--- |
| TOEFL | 1839 | 97 |
| GRE | 1839 | 4402 |

## M.U.P. APPLICANT EVALUATION

The Urban + Regional Planning Program faculty carefully review each application on the basis of the candidate's grade point average and pattern of undergraduate academic performance, written statement of purpose and intended area of specialization, GRE and TOEFL scores, record of professional experience, career objectives, evidence of scholarly abilities, and potential for professional development. For those also applying to law schools, the LSAT can be used in place of the GRE. For those also applying to business schools, the GMAT can be used in place of the GRE.

## C.U.G.S. THE CONCURRENT UNDERGRADUATE/GRADUATE STUDY PROGRAM

Under certain circumstances, University of Michigan undergraduates may begin concurrent graduate studies in urban and regional planning. The Concurrent Undergraduate/G raduate Study (C.U.G.S.) option offers advanced University of Michigan undergraduates the opportunity to combine the senior year with the first year of the master's program.

A student graduates with the master's degree in one additional year after the combined year. Up to 15 credits of graduate level courses may be counted toward both the
bachelor's and the master's degrees. Applications for CUGS are evaluated by looking at a student's breadth of program, commitment to the field, degree of motivation, academic ability, and GPA among other factors ordinarily used by graduate admissions committees. Applicants must have an undergraduate grade point average of at least 3.7 and must have met all requirements for the undergraduate degree except in the major and in independent study. The student must have completed at least six courses in the major and one independent study experience.

Students interested in CUGS should consult both their undergraduate advisors and the Urban + Regional Planning Program in their junior year. More detailed information on the application procedure can be obtained from the Rackham web site: http://www. rackham.umich.edu/Admis/pdfforms/cugsform.pdf or the LSA website: http://www.Isa. umich.edu/lsa/cg/bulletin/chap5/.

## M.U.P. DEGREE REQUIREMENTS

In order to obtain the Master of Urban Planning degree, a student must fulfill the following requirements:

1. The student must complete a minimum of 48 approved credit hours, of which:
a) a minimum of 30 hours must be in graduate-level urban planning courses; and
b) no more than 8 hours may be counted from among individual study-type courses (i.e., UP 680, 681, 682, 683, 685, 690, 692, 694, 733, or 734).
2. The student must complete all "core" courses, unless waived by the faculty member who teaches a specific core course.
3. Each student must complete a course in economics and a course in statistics if these were not taken as an undergraduate.
4. Each student must complete a minimum of 4 hours of courses outside the program.
5. Each student completes a concentration that normally includes at least three courses.

Each student must earn an overall grade point average of " B " ( 5.0 on the 9.0 Rackham scale) or better while enrolled in the program.

Incoming students are assigned a faculty advisor with whom programs of study, course alternatives, concentration choices, and career objectives are explored. The counseling
procedure within the program varies according to the individual student's needs and his or her evolution through the four terms of study.

All students develop a written study plan using the "Degree Requirements Checklist." This study plan should be reconsidered and revised by the student with the approval of the advisor each term. The checklist will be maintained in the student's file and serve as the official record of a student's progress toward degree requirements. Keeping the form up to date helps to ensure that degree requirements are met in a timely fashion. Students complete a concentration declaration form during their second full semester in the program; the concentration advisor should approve a student's concentration plan on the Degree Requirements Checklist before the end of the third semester.

## M.U.P. CORE COURSES

Generally, students take the majority of their courses during the first year from among the offerings of the Urban + Regional Planning Program. A series of "core" courses serve to give the student a broad-based knowledge of planning. These classes deal with urban planning analysis, history and theory, professional practice, and the social, economic, political, legal, and physical aspects of urban planning. If a student already possesses an acceptable level of competence in an area covered by a core course, an elective may be substituted. The determination as to whether or not a student possesses an acceptable level of competence will be made by the respective instructor in a core course in consultation with the student, his or her advisor, and the chair. All changes must be noted on the "Degree Requirements Checklist." The "core" courses required of Master of Urban Planning students are as follows:Course Number/TitleCredit Hours
UP 503 Introduction to Statistics* (for those who have not taken statistics) ..... 3
UP 504 Quantitative Planning Methods ..... 3
UP 505 Fundamentals of Planning Practice. ..... 3
UP 510 Public Economics for Urban Planning** (for those who have not taken economics) ..... 3
UP 513 Legal Aspects of the Planning Process ..... 3
UP 540 Planning Theory ..... 3
UP 610 Fiscal Planning and Management

# UP 634 Integrative Field Experience............................................................................. 6 <br> or UP 631 Land Use and Physical Planning Studio <br> or UP 733/4 Planning Thesis/Professional Project 

* Or a statistics course taken prior to program entry.
** Or a microeconomics course taken prior to program entry.


## M.U.P. INCOMPLETES

Grades of "Incomplete" in the Urban and Regional Planning Program are guided by Rackham policies, available at: http://www.rackham.umich.edu/StudentInfo/ Publications/GSH/html/registration.html.

In addition to Rackham policies, the Urban and Regional Planning Program specifies that a written agreement be formed between the student and the faculty member before a grade of "Incomplete" is assigned. The agreement will specify the work to be completed, and the date by which it will be completed. If the student completes the work on or before the specified date, the faculty member will assign a letter grade for the course. This assurance expires after the deadline specified in the agreement. Students with an "Incomplete" grade should take care to fulfill the terms of the agreement in order to be assured that a grade will be assigned for the course. If the terms of the agreement are not met, the student loses this assurance, and may have to retake the course. Grades of "Incomplete" are assigned at the instructor's discretion and will not normally be granted for examinations not taken.

## M.U.P. CONCENTRATIONS

The Urban and Regional Planning Program encourages master's students to select a concentration in order to gain depth in a specific area of the very broad field of urban and regional planning.

The following are guides for five possible concentrations. In general, a concentration recommends one or two "foundation" courses that provide the conceptual basis for analysis, decision-making, and planning in that area; techniques or methods course(s); and electives organized into "streams" of topics within the concentration. The structure of each concentration is slightly different, however, in order to fit the character of that
subject area. Faculty are ready to advise you in selecting courses. A concentration is required for the degree.

Courses offered in other departments may require prerequisites and may restrict enrollment.

## M.U.P. CONCENTRATION IN LAND USE + ENVIRONMENTAL PLANNING

This concentration prepares planners to work toward the long-term environmental and social sustainability of land use. In contrast to the Physical Planning and Urban Design Concentration, this concentration focuses on informing private and public decisionmaking processes related to land development.

Students are taught to recognize the value-based and analytical conflicts that are common to land development and environmental planning debates and to creatively employ planning and policy making approaches designed to resolve those disputes. The challenge is to guide land development in ways that preserve and restore the ecological integrity of both urban and rural systems while improving the quality of life for residents, facilitating a vital economy, promoting the efficient use of land and community facilities, and respecting fiscal and legal requirements.

Land use and environmental planners address a wide array of overlapping issues such as metropolitan sprawl and intergovernmental growth management; the relationships between land use and transportation systems; the relationships between economic development and environmental protection; open space and farmland preservation; brownfield redevelopment; transboundry environmental issues; and environmental justice. Land use and environmental planners find employment in local, regional, state, and federal government agencies, as private sector planning consultants, and in environmental nonprofit organizations.

The core courses for this concentration include a negotiation and dispute resolution course, required as a skills course; UP 502 (environmental planning), required both as a foundational and skills course focusing on environmental aspects of land use planning; and one of several land use planning courses. The student should then select from
among URP and non- URP courses to complete a program of study that best fits his or her interests.
CORE COURSES
UP 502 Environmental Planning: Issues and Concepts
UP 614 Negotiation and Dispute Resolution (or NRE 532/533 below)
PLUS ONE OF THE TWO FOLLOWING COURSES UP 579 Land Use Planning and Design (NRE 579) UP 520 Urban Land Use Planning
RECOMMENDED URP COURSESUP 523
$\qquad$Regional Planning
UP 532 Sustainable Development: Resolving Economic \& Environmental ConflictsUP 560Behavior and Environment (NRE 560)
UP 572 Transportation and Land Use Planning (Geog 472)
UP 673 Historic Preservation and Urban Conservation (Arch 673)
SELECTED COURSES FROM OTHER PROGRAMS (PROVIDED AS EXAMPLES)
NRE 514 Environmental Impact Assessment
NRE 532/533 Environmental Dispute Resolution
NRE 561 Psychology of Environmental Stewardship
NRE 571 Environmental Economics
NRE 593/594 Environmental J ustice
NRE 662 Resource Policy and Administration
NRE 686 Politics of Environmental RegulationPUB POL 686State and Local PolicyLAW 679Environmental Law / Environmental Law \& Real Property
FACULTY ASSOCIATED WITH LAND USE AND ENVIRONMENTAL PLANNINGRichard Norton (concentration coordinator), Scott Campbell

## M.U.P. PLANNING IN DEVELOPING COUNTRIES

This concentration prepares planners to work in the diverse and rapidly changing contexts of Africa, Asia, the Middle East, Latin America, and the Caribbean.

Cities in these parts of the world face a distinct set of issues. Many face challenges presented by rapid population growth, resource scarcity, migration from rural areas, and severe poverty and socioeconomic inequality. Yet they also exhibit significant opportunities, including phenomena of inventiveness borne out of necessities of survival (e.g. self-help housing, group micro-credit programs, cooperative forms of institutions), as well as a highly effective use of resources (e.g. recycling as part of long-held cultural traditions, leveraging minimal financial resources for maximum gain, pooling of familial resources).

Development planners focus on understanding these issues and opportunities and formulating appropriate interventions, and on achieving social justice and redistribution of development benefits. They work in project management, administration, and finance, as well as in urban policy.

The focus of the curriculum in the planning in developing countries concentration is on providing students with a sophisticated understanding of the issues that confront cities in developing countries, and imbuing them with a sensibility and a sensitivity in their approach to planning. The history of planning in developing countries is replete with cases of failed efforts to transfer models from the developed world without a proper understanding of the distinctive dynamics of urbanization in these contexts. Planners must exhibit a sensibility in formulating interventions that reflect an understanding of place-specific socioeconomic, political, and cultural circumstances. They should be able to critically assess the appropriateness and applicability of planning theories and practices developed in the United States and Europe, and generate new approaches. They must also understand how the flows of capital, labor, technology, culture, and information, in an increasingly integrating world, impact the local space of cities and regions. Planners must exhibit sensitivity to the very different perspectives of clients they will encounter in their international work, and must be able to work effectively in multicultural settings.

The concentration is designed to be flexible enough to allow students to pursue their own interests within the field of planning in developing countries while also gaining certain essential skills. Students are encouraged to tap into the resources both in the College and across the University. Students may choose to focus on specific themes and substantive areas such as community development, transportation, environmental planning, land use and physical planning, or economic development. They may also choose between two tracks reflecting their substantive interests in micro or macro level action and practice:

## Track 1: Project and Program Planning for Development

This track prepares students to work with grass-roots community groups, non profits and social welfare agencies such as Oxfam; the Self-Employed Women's Association (SEWA); and the Grameen Bank. The objective is to obtain skills for effective practice from a social justice and redistribution orientation; to empower marginalized populations; and, to facilitate collaborative practice at the local level. Coursework for this track may include: development program and project administration; housing, infrastructure and community development; economic development; environment and development; and theories of economic, social and political development.

## Track 2: International Systems of Administration, Management and Finance

This track prepares students to work on issues of macro concern such as structures of governance and politics, legal systems; and matters of finance and administration. The objective is to practice in international agencies such as the World Bank and the United States Agency for International Development (USAID), private consulting firms such as the Planning and Development Collaborative International (PADCO), the Asia Pacific Cities Forum, and UN Agencies such as UNDP, UNCHS, and UNIFEM. Training for this track may include coursework in: development program and project administration; the international economy and financial policy; and theories of economic, social and political development.

Students may also choose to pursue regional interests by taking courses listed by the National Resource Centers and Area Studies Programs in the International Institute which include regional seminars and courses in geographic areas of interest such as Latin America, Africa, China, J apan, South and Southeast Asia.

In addition to the core courses in the Urban and Regional Planning Program, students in this concentration normally will take at least two of the concentration foundations courses, two courses in their interest areas, and at least one course in techniques and skills.
CONCENTRATION FOUNDATION COURSES (TWO COURSES) UP 573 Urban and Regional Theory
UP 658
Urban and Regional Planning in Developing CountriesTECHNIQUES AND METHODS (ONE COURSE)UP 580 ......................................................Learning by Comparison: First/Third World Introduction to GIS
UP 507 Geographic Information Systems
UP 539 Methods of Economic Development
SPP 636 Program Evaluation
SPP 573 Benefit Cost Analysis
The following are some of the courses that may fit into students' interest areas:
REGIONAL FOCUS
ANT 619 Proseiminar on Latin American and Caribbean Studies
CSB Business Strategies and Practices in Southern Africa
PLS 453 Government and Politics of the Middle East
PLS 454 Governments and Politics of Southeast Asia
PLS 448 Governments and Politics of Latin AmericaPLS 657Governments and Politics of IndiaPLS 459
African Politics
EC 455 The Economics of the People's Republic of China
AAS 403 Education and Development in AfricaConstitutionalism in South Africa
AAS 408 African Economics, Social and PoliticsAfrican Women
AAS 453 ..... Southern Africa
ENVIRONMENT AND DEVELOPMENT
NRE 453 Tropical Conservation \& Resource Management (F)
SNRE 477 Women, Gender \& Environment
NRE 492 Environmental J ustice: Domestic \& International (F)
PBL H 502

$\qquad$
Environmental Health in Developing Areas
NRE 520 Ecotourism for Ecodevelopment in National Parksand Protected Areas: Third World and NativeAmerican Perspectives (Winter term: odd years)
NRE 545 Population-Environment Dynamics (F)
NRE 556 Environmental History and the Tropical World (W)
PBL H 661 Environment Disasters and PopulationNRE 664 .......................................... Environment, Economy and Transnationalism (F)PH 651International Environmental Management System Standards
INTERNATIONAL ECONOMY AND FINANCIAL POLICY CSB 510 World Economy
PLS 463 International Organizations and Integration
PLS 569 Politics of International Economic RelationsIB 503The World Economy
SPP 540......................................................................International Economic PolicySPP 615....International Finance
EC 641 International Trade Theory
LW 801 WTO and International Human Rights
SPP 676 .........................................I International Politics of Poverty and Development International Macroeconomics and Financial Policies
SPP 742 International Trade and Investments: Policies and StrategiesSPP 744Topics In International Economic Policy
THEORY OF ECONOMIC, SOCIAL AND POLITICAL DEVELOPMENT
ANT 439Economic Anthropology and Development
EC 461 and 462 The Economics of Development I and II
EC 665Underdeveloping Countries
PLS 450

$\qquad$
Political Modernization in the Developing World
PLS 465
$\qquad$Political Developments and Dependence
SOC 542Sociology of Economic Development
DEVELOPMENT PROJ ECT AND PROGRAM ADMINISTRATION

| BA 519 | Nonprofit Organization |
| :---: | :---: |
| UP 406 \& 507 | ...Geographic Information Systems |
| UP 539 | . Methods for Economic Development Planning |
| SW 661 (779) | ................Budgeting and Fiscal Management |
| SW 663 (779) | ...Grantgetting, Contracting and Fund Raising |
| SW 685 | .................. Methods of Program Evaluation |
| SPP 586 | ................................Organizational Design |
| SPP 587 | .......................Public Management |
| SPP 573 | ................. Benefit Cost Analysis |
| SPP 636 | Program Evaluation |

HOUSING, INFRASTRUCTURE AND COMMUNITY DEVELOPMENT
PLAN 527 .....................Infrastructure Planning in Developed and Developing Countries
SW/UP 651(768) ...........................Planning for Organizational and Community Change
SW/UP 654 ........................................Concepts and Techniques of Citizen Participation
SW 657 .............................................................Multicultural, Multilingual Organizing
SW 658 ...........................................................Women and Community Organization

## SUMMER INTERNSHIP

Students are encouraged to seek summer internships abroad at the end of their first year. Financial assistance for travel and research support is available on a competitive basis at the International Institute, Rackham Graduate School and at various Area Centers. Students are encouraged to expand on work initiated in a summer internship abroad through the thesis or professional project option for meeting the capstone requirement.

## FACULTY ASSOCIATED WITH THE CONCENTRATION:

Gavin Shatkin (concentration coordinator), Scott Campbell

## M.U.P. CONCENTRATION IN PHYSICAL PLANNING + URBAN DESIGN

The purpose of the physical planning and urban design concentration is to encourage the conception and practice of meaningful physical planning and urban design. This pedagogical approach is driven by the goal of addressing critical urban challenges such as uncomfortable
and unsafe built environments, community powerlessness, economic deprivation, and fragmented interventions.

Such a pedagogical approach also includes critical analysis, such as an in-depth understanding of physical planning and urban design problems and promises through case studies of urban design practice and projects, and interdisciplinary learning, such as examining cities from the perspectives of architects, landscape architects, urban planners, policy makers, social workers, and business interests. The formulation of such a pedagogical approach is catalytic, that is, consisting of physical planning urban design strategies that include a focus on products such as public spaces, building complexes and neighborhoods, but also the generation of long-term community, economic and international development processes.

The primary impact of this type of learning for students is an understanding of the physical planner and urban designer as a catalyst. Through an in-depth analysis of urban issues, an interdisciplinary approach to urban problem-solving, and skills that focus not only on issues of urban aesthetics and form but also on purposeful intervention generated by long-term processes, students will gain a profound and empowering understanding of meaningful urban design. With the study of power structures of cities and the nurturing of critical thinking skills, students will gain both humility (by realizing just how little power urban designers actually have) and confidence (by learning to be politically savvy in order to accomplish their goals). A secondary impact on learning for students will be a unique opportunity for them to shape the future direction of urban design through readings, research, discussions, case study analyses, and project designs that will focus on specific urban challenges, examine deficiencies in current urban design approaches and projects in addressing those challenges, and formulate alternative, more meaningful, urban design strategies. In summary, a meaningful pedagogical approach to physical planning and urban design - as adopted in the concentration - has the following characteristics:
a) selective: focus on key physical planning urban design challenges,
b) depth: develop expertise in the design/urban development nexus,
c) cutting edge: experiment with new perspectives and a critical approach, and
d) breadth: integrate with other fields, including political economy, social work, business, and environmental studies.

For more focused streams of in-depth expertise, the following are recommended: Community-Based Physical Planning and Urban Design (advanced courses and cognates in neighborhood planning and in the School of Social Work), Landscape and Ecological Physical Planning and Urban Design (advanced courses and cognates in environmental planning and in the School of Natural Resources and Environment), Development of Physical Plans and Urban Design Projects (advanced courses and cognates in architect/planner as developer, real estate essentials and feasibility analysis), Physical Plan Implementation and Urban Design Production (advanced courses and cognates in architect/planner as developer and in the College of Engineering), Computer-Based Physical Planning and Urban Design (advanced courses and cognates in computer-assisted design, geographic information systems, and computer graphics courses in the School of Art and Design), International Physical Planning and Urban Design (advanced courses and cognates in international development, planning in developing countries, and comparative urbanism), and Physical Planning and Urban Design as Public Policy (advanced courses and cognates in the School of Public Policy).

## FOUNDATION COURSES

Students in the concentration normally take the following courses that provide a basic foundation:
UP 443
History of Urban Form (Arch443)
UP 518 $\qquad$ Physical Planning Workshop
UP 519 Principles and Practice of Urban Design: Theories of Urban Design

| RELAT | ELECTIVES |
| :---: | :---: |
| UP 406 | ........ Introduction to Geographic Information Systems (Geog 406) |
| UP 517 | .... Real Estate Essentials (BA 517) |
| UP 613 | ..Architect/Planner as Developer (Arch 517) |
| UP 532 | ..... Sustainable Development: Resolving Economic and Environmental Conflicts |
| UP 536 | .........Physical Aspects of Housing: Ends and Means |
| UP 655 | ..................... Neighborhood Planning (SW 655) |
| UP 573 | .......................... Urban and Regional Theory (NRE 573) |
| UP 580 | .... Learning by Comparison: First World/Third World Cities |

COGNATES
CEE 532..... Construction Management and Project Engineering (College of Engineering) NRE 587 $\qquad$ Landscape Architecture Design Theory, Elements and Principles (School of Natural Resources and Environment)

Students who concentrate in physical planning and urban design normally take UP 631 Land Use and Physical Planning Studio for the capstone requirement. The course brings architects and planners together to work on a large-scale urban issue.

## FURTHER OPPORTUNITIES IN PHYSICAL PLANNING AND URBAN DESIGN

## URBAN DESIGN CHARRETTE

The J anuary urban design charrette in Detroit is open to Urban and Regional Planning students with a strong interest in this concentration, and studio in the winter semester may be required.

## ADDITIONAL URBAN DESIGN COURSES FOR URBAN PLANNING STUDENTS

As the degree in urban design is further developed, additional courses will be offered that can add to the depth of urban design studies for students in Urban and Regional Planning.

DUAL DEGREE IN M.ARCH./M.U.P. URBAN AND REGIONAL PLANNING PROGRAM Students who want much greater depth in design can apply for admission to the Architecture Program and the dual degree program between Architecture and Urban and Regional Planning. See the College Bulletin or our web site for details.

STUDENT-INITIATED DUAL DEGREE WITH LANDSCAPE ARCHITECTURE, M.L.A./M.U.P. Students who are interested in site planning and design at a range of scales that consider the built and the natural environments may apply for admission to the School of Natural Resources and Environment for admission to the Landscape Architecture Program and can receive both an M.U.P. and an M.L.A. in a coordinated way. See the College Bulletin and our web site.

Students interested in continuing their study of urban design after the M.U.P. may apply for admission to the M.U.D. degree in Taubman College.

## FACULTY ASSOCIATED WITH THE CONCENTRATION IN URBAN DESIGN

Larissa Larsen (concentration coordinator), Robert Fishman, Douglas Kelbaugh

## M.U.P. CONCENTRATION IN TRANSPORTATION PLANNING

The transportation planning concentration builds an interdisciplinary range of skills and perspectives in transportation planning, including understandings of transportation planning's societal roles, applied technical and evaluation skills, historical uses and misuses of transportation planning techniques, and the rich interdependencies between transportation planning and other areas of urban and regional planning.

Major themes in transportation studies include the interaction of transportation and land use planning, transportation needs of the poor, alternative approaches to public transit policy, the role of technology in improvement of transportation systems, transportation's role in environmental quality planning, and the intergovernmental and interjurisdictional dimensions of transportation problems.

The transportation planning concentration prepares Master of Urban Planning students for professional work in transportation related organizations at local, regional and national levels, and in private planning/engineering firms that are engaged in transportation planning. Transportation planners develop transportation and traffic plans, forecast travel conditions and prepare transportation demand management programs for their jurisdictions. At the broader level, transportation planners provide input into transportation policy questions, such as the relative benefit of alternative approaches to transit investment, pricing of public and private transportation, or innovative approaches to addressing needs in "welfare-to-work" transportation. New transportation technologies and institutions create opportunities that eventually change land use patterns. Conversely, new land use patterns change the burden on the transportation system and affect available transportation strategies. Transportation planners anticipate and plan for these interactions.

Normally students in the transportation planning concentration take each of courses in Group I, at least one from group IIA, one from IIB and one from group III.

## GROUP I: FOUNDATION COURSES

UP 573
Urban and Regional Theory
UP 510 .............................................................Public Economics for Urban Planning
UP 671
Public Policy and Transportation
UP 572
Transportation and Land Use Planning

## GROUP II: TECHNIQUE COURSES

A. Geographic Information Systems

UP 406 $\qquad$ Introduction to Geographic Information Systems UP 507 $\qquad$ Geographic Information Systems UP 697 GIS Programming (experimental course)
Other coursework in GIS/Spatial Analysis, see: http://gis.umich.edu/curricula.html.
B. Economic Analysis

UP 539 ................................................. Methods for Economic Development Planning SSP 558 ............................................ Microeconomics B: Economic Decision-Making NRE 570 ...................................... Microeconomics with Natural Resource Applications
NRE 571 Environmental Economics (Prerequisites: Econ 401 or NRE 570)

GROUP III: OTHER POLICY COURSES RELATED TO TRANSPORTATION
Political Environment of Transportation Planning
SPP 580
Values, Ethics and Public Policy (subject to enrollment availability)
SPP 585 ........ Political Environment of Policy Analysis (subject to enrollment availability)
PolSci 623
Politics of the Metropolis
UP589 ................................................................................. Equality in Public Policy

Environment/Energy in Transportation
NRE 574
Energy Demand

Social Equity and Transportation Policy NRE 492 $\qquad$ Environmental J ustice: Domestic \& International SPP 736 .................................. (and cross listings in Social Work and Political Science) Poverty, Inequality and Public Policy

Also relevant to a transportation planning concentration is the certificate program in spatial analysis. For details, please see: http://gis.umich.edu/certificate.html.

FACULTY ASSOCIATED WITH THE CONCENTRATION IN TRANSPORTATION PLANNING J oe Grengs, J onathan Levine

URBAN AND REGIONAL PLANNING AFFILIATE FACULTY
Lidia Kostyniuk, University of Michigan Transportation Research Institute

OTHER UNIVERSITY OF MICHIGAN RESOURCES RELEVANT TO TRANSPORTATION PLANNING

Institute of Labor and Industrial Relations Trucking Industry Program
http://www.ilir.umich.edu/LIR/umtip/default.htm?People/belzer.htm

## University of Michigan Transportation Research Institute Social and Behavioral Analysis Division

http://www.umtri.umich.edu/umtri/divisions/social.html

## M.U.P. CONCENTRATION IN HOUSING, COMMUNITY + ECONOMIC DEVELOPMENT

The Housing, Community and Economic Development concentration focuses on planning housing, neighborhoods, and economic wellbeing of a community. The goal of housing, community, and economic development is to increase social and economic capital and improve the quality of life generally but particularly in low-income, minority and other disadvantaged communities.

Planners with this background work with local residents, neighborhood and community organizations, community development corporations (CDCs), and nonprofit housing
developers, as well as municipal, state and federal agencies and the private sector in efforts directed toward securing decent, affordable housing, improving job opportunities, increasing safety, and restoring or maintaining community stability. They work for state departments of commerce or economic development, city departments and mayors' offices, and federal agencies to plan and implement development projects, strengthen tax base, improve employment opportunities, and enhance housing policy.

Students selecting this concentration acquire basic background in issues of housing and development so that they understand the political/economic/social systems that lead to low incomes, inadequate housing, unemployment, and poor neighborhoods. Through other coursework they learn techniques of community participation, which facilitate an open planning process with people and organizations of multiple backgrounds and interests, and also acquire skills in analysis of local economies, real estate finance and development, neighborhood planning, site planning, and nonprofit management. Students may choose to specialize in one of the three areas within this broad concentration, such as housing, community development, or economic development.

Students in this concentration should complete the economics requirement early in their programs, if they have not taken microeconomics elsewhere. Students in this concentration normally take UP634 Integrative Field Experience, a course where students work in teams on community-based planning projects, to meet the capstone requirement.

## CONCENTRATION FOUNDATION COURSES

The following courses provide theoretical perspectives and frameworks for assessing housing, community and economic development. A student should take UP573 Urban and Regional Theory and at least one of the following, depending on the student's particular interest within the concentration:
UP 537
Housing Systems
UP 538 ............................................................................... UP 652 ................................... Frameworks for Community Development and Housing UP 655 Neighborhood Planning

## METHODS AND TECHNIQUES COURSES

Students should take at least one of the following courses to gain exposure to methods in this broad area of planning. Students should choose methods courses that relate to the sub-area that most interests them - housing, for instance, or economic development.
UP 539
Methods for Economic Development Planning
SPP 573 Benefit-Cost Analysis
UP 517/BA 517 Real Estate Essentials
UP 565/FIN 565 Real Estate Development UP 566 .......................................................... Structuring Real Estate Financial Deals UP 654 ..................................... Concepts and Techniques of Community Participation BA 519 ...........................................................Managing the Nonprofit Organization SPP 636 ......................................... Planning for Organizational and Community Change
SW 651 $\qquad$
SW 652 $\qquad$ Organizing for Social and Political Action
SW 657 $\qquad$ Multicultural, Multilingual Organizing
SW 658 Women and Community Organizing
SW 660 $\qquad$ Managing Projects and Organizational Change

## OTHER COURSES RELATED TO THE CONCENTRATION

Students may pursue their special interests within the concentration through courses in Urban and Regional Planning and elsewhere in the University. Note that these vary from semester to semester and may not be offered every year. Also note that prerequisites may exist for many courses. New courses are introduced every term.
UP 613 $\qquad$ Architect/Planner as Developer SPP 736 Poverty and Inequality
LHC 482 Real Estate Law Legal Assistance for Urban Communities Clinic, in the Law School SW 550 Theory and Practice of Community Organization SW650 Community Development
HBHE 640 Community Organization for Health Education
SW 641 Social Work and the Workplace
UP 568 Real Estate and Urban Development An occasional course in Social Work in faith-based economic development.
UP 527 Infrastructure Planning in the U. S. and Developing Countries
SPP 561 Economic Development Policy
BE 570 Tax Policy and Business
SPP 730 Women and Employment Policy
SPP 530 Economics of Regulation
Econ 632 Public Policy toward Business
Econ 641 International Trade Theory
SW 640 Income Support Policies and Services
CS 581/ES581 Urban Entrepreneurship
BA 519 Managing the Nonprofit Organization
BA 520 The Nonprofit Organization
CS 517 Preparing the Business Plan for Start-ups
CS 515 Getting and Evaluating Ideas for Start-upsEcon 665Economic Development
SPP 694 State, Local, and Community Development: A Practitioner's GuideSPP 562/BA743 .......................... The Corporate Site Selection Process in Public PolicyEcon 574 ........................................................................... Forecasting and Modeling
PS 623 Proseminar in Urban Politics
UP 532

$\qquad$ Sustainable Development
UP 492Environmental J ustice
BA 745 Systems Thinking for Sustainable Development and Enterprise
CS 564Strategies for Environmental Management
CS 565/CSIB 565 Strategies for Sustainable Development
NRE 501:014Seminar on the Economics of Pollution Control
NRE 512Ethics of Corporate Management
NRE 557Industrial Ecology
NRE 571/Econ 471 Environmental Economics
NRE 570Microeconomics With Natural Resource Applications
NRE 664Environment and Economy

## OTHER OPPORTUNITIES RELATED TO HOUSING, COMMUNITY AND ECONOMIC

 DEVELOPMENT
## Dual degree in Social Work and Urban and Regional Planning

The student-initiated dual degree, MUP/MSW, enables students to study community planning in greater depth and to obtain two master's degrees in about three years of study.

## Dual degree in Business Administration and Urban and Regional Planning

 The MBA/MUP degree provides much more extensive background for students who would like to work in the area of urban revitalization through business development or in the area of real estate development.
## Dual degree in Public Policy and Urban and Regional Planning

The student-initiated dual MUP/MPP degree provides the student with additional background for going into housing and economic development policy making at the state or the federal government levels.

## Dual degree in Law and Urban and Regional Planning

The J D/MUP degree prepares students for community development advocacy, affordable housing development, and other areas related to the concentration.

## The Non-Profit and Public Management Program

Students may also want to take courses associated with this program which prepares them to go into work in community-based nonprofits as well as other nonprofits.

## The Graduate Certificate in Real Estate Development

This new program that admits students who want to gain the background for implementing development ideas to create better neighborhoods, stronger cities, and better housing.

The Michigan Neighborhood AmeriCorps Program and the Department of Housing and Urban Development Community Development Work-Study Program
These programs offer internships in community-based organizations in Detroit.
FACULTY ASSOCIATED WITH THE HOUSING, COMMUNITY AND ECONOMIC DEVELOPMENT CONCENTRATIONMargaret Dewar and Scott Campbell (concentration coordinators), Barry Checkoway,J oseph Grengs, Elsie Harper-Anderson, Gavin Shatkin, David Thacher, Peter Allen(adjunct)
M.U.P. SAMPLE SCHEDULEThe following schedule is typical for a full-time student enrolled for the Master of UrbanPlanning degree.
M.U.P. SCHEDULE: YEAR 1
Fall Term Credit Hours
UP 503* Introduction to Statistics ..... 3
UP 510** Public Economics for Urban Planning ..... 3
UP 513 Legal Aspects of the Planning Process ..... 3
UP 540 Planning Theory or elective ..... 3
Elective or concentration course ..... 3
Winter Term. Credit Hours
UP 504 Quantitative Planning Methods ..... 3
UP 505 Fundamentals of Planning Practice. ..... 3
UP 540 Planning Theory or elective ..... 3
Elective or concentration course ..... 3
Spring Half-Term
Many students take one or two electives
M.U.P. SCHEDULE: YEAR 2
Fall TermCredit Hours
UP 631 Land Use and Physical Planning Studio ..... 6
or UP 733 Planning Thesis/Professional Project ..... 3
Electives or concentration courses ..... 6-9
Winter Term. Credit Hours
UP 610 Fiscal Planning and Management ..... 2-3
UP 631 Land Use and Physical Planning Studio ..... 6
or UP 634 Integrative Field Experience ..... 6
or UP 734 Planning Thesis/Professional Project ..... 3 or 6
Electives or concentration courses ..... 6

* For students who have not taken statistics.** For students who have not taken economics.Students play an integral role in the management of M.U.P. degree activities, andtheir participation is solicited in program governance. All students are encouraged toparticipate in the Urban Planning Student Association (UPSA) which meets regularlyduring the year. This organization allows students to discuss problems and issues,formulate policies, and provide direct input to the faculty. In addition to its formalorganizational functions, UPSA provides an opportunity for informal associations amongstudents, faculty, staff, and alumni.


## M.U.P. EDUCATIONAL RESOURCES

The geographic location of the University provides a wide variety of academic and practical opportunities for advanced inquiry by the planning student. First, the vast research and teaching facilities of the greater University are available to students enrolled for the M.U.P. degree. Libraries, laboratories, research institutions, lecture series, and computer centers serve as educational resources. Second, the City of Ann Arbor, with a population of over 120,000 people, is a lively and urbane living environment. Its cultural and social offerings are varied, and its citizens are politically informed and involved in the continued improvement of their community. Third, the College is proximate to Detroit and its suburban and rural surroundings. These contrasting environments provide a comparative base for investigation by the student and increase his or her understanding of the breadth of urban and regional planning concerns.

## M.U.P. INTERNSHIPS + CAREER SERVICES

Although an urban planning-related internship is not required, the program encourages students to find work related to the profession and provides assistance to students in finding internships. The program funds numerous internships through grants and alumni gifts. The Michigan Neighborhood AmeriCorps Program provides positions for several urban planning students each year. The U. S. Department of Housing and Urban Development Community Development Work Study Program often supports internships
for up to three low-income and minority students. The College's manager of community partnership programs identifies many internships for students.

The program provides assistance to students in finding professional planning positions after graduation. A part-time staff person maintains job and internship listings, arranges resume reviews, facilitates networking with alumni, provides information on good job searching techniques, maintains job web site connections, and connects students to the services of the UM Career Planning and Placement office.

## M.U.P. COMPUTER HARDWARE + SOFTWARE RECOMMENDATIONS

A personal computer is an essential tool for learning and professional work in the programs offered at Taubman College. Our students master computing technologies and use them throughout the curriculum.

The College provides desktop computing clusters in various locations throughout the building and also hosts a campus computing site.

In order to assure effective access to computing resources, many students have personal computers. Current hardware and software recommendations for those students who decide to purchase a computer are available on the TCAUP Help Desk website at http://www.tcaup.umich.edu/helpdesk/help.html.

## M.U.P. ACCREDITATION

The M.U.P. degree is fully accredited by the Planning Accreditation Board. A copy of the most recent accreditation report is available in the Urban + Regional Planning Program office.

## COMBINED DEGREES IN URBAN + REGIONAL PLANNING

Because urban and regional planning is an interdisciplinary field that relates to many other professions and disciplines, the Urban + Regional Planning Program offers students opportunities to pursue combined degrees. Dual degree programs enable students to earn two degrees in considerably less time than if each degree were earned separately.

Three formal, dual degree programs enable students to study for a dual Master of Business Administration/Master of Urban Planning degree, a dual Doctor of J urisprudence/Master of Urban Planning, or a dual Master of Architecture/Master of Urban Planning degree. Students can pursue student-initiated dual degrees with a wide range of other programs.

Certificate programs allow students to gain depth in specific topics that relate to many disciplines and professions. The Concurrent Undergraduate/Graduate Study Program allows advanced undergraduates to begin the master's degree before they have completed the undergraduate degree.

For either formally approved dual degrees or student-initiated dual degrees, students apply for admission to each program. After admission to a formal dual degree, students meet the specified requirements of the dual degree. After admission to both programs for a student-initiated dual degree, the student meets the requirements of both degrees. The student may double-count one-sixth of the sum of the credits required for each of the two degrees. A student may apply for a student-initiated dual degree at any time during the course of study.

If the two units in a combined degree program charge different tuition fees, the student may be liable for the higher tuition in a semester when he or she registers for any credits in the unit with the higher tuition.
Formal dual degree programs include:

- Architecture and Urban + Regional Planning
- Business Administration and Urban + Regional Planning
- Law and Urban + Regional Planning

Student-initiated dual degrees allow students to combine a second field of study with the Master of Urban Planning. Urban + Regional Planning is frequently paired with the following fields in student-initiated dual degrees:

- Social Work
- Resource Policy and Behavior (School of Natural Resources and Environment)
- Landscape Architecture
- Public Policy
- Public Health (Health Behavior and Health Education)
- Urban Design

Students may also initiate other dual degrees to meet their interests in individual specializations.

Certificate programs allow students to gain depth in specific areas as they work towards the Master of Urban Planning or the Ph.D. in Urban and Regional Planning. The certificates that have most interested students in the Urban + Regional Planning Program are:

- Certificate in Complex Systems
- Certificate in Spatial Analysis

Other certificate programs of potential interest to students in Urban + Regional Planning include:

- Industrial Ecology
- Science, Technology, and Society
- Women's Studies


## M.U.P. FORMALLY STRUCTURED DUAL DEGREES

## M.U.P./M.ARCH. DUAL DEGREE IN URBAN + REGIONAL PLANNING/ARCHITECTURE

The M.U.P./M.Arch. dual degree is structured to develop highly qualified professionals capable of combining architecture and urban planning to work effectively in the professional fields of architecture, urban development, and community development planning. It equips students with a broad range of skills and particular expertise related to the design and planning of the built environment.

Graduates with a dual degree in Architecture and Urban + Regional Planning are able to work both in the private sector and with a wide range of public agencies and non-profit organizations. The program combines the two-year/60 credit hour M. Arch. degree with the two-year/48 credit hour M.U.P. degree, resulting in a three-year/84 credit hour program.

## M.U.P./M.ARCH. DEGREE REQUIREMENTS

Students must register in the A. Alfred Taubman College of Architecture + Urban Planning and the Horace H. Rackham School of Graduate Studies. Because of the way the Architecture Program calculates grade point averages, a student must register for double-counted courses in both units in the semesters when these courses are taken. A student may register for all courses in both units so that course elections are identical in both units. The dual M.Arch./M.U.P. degree requires the completion of a minimum of 84 credit hours. Specifically, a student must complete:

1. 36 credit hours of $500 / 600$ level architecture courses, including four courses, 24 hours, of architectural design (Arch 552, Arch 562, Arch 672, Arch 662).
2. Five courses ( 15 credit hours) of specific required architecture courses (Arch 516 Architectural Representation, Arch 572 Architectural Theory and Criticism, Arch 583 Professional Practice, Arch 589 Site Planning, and Arch 660 Thesis Development Seminar).
3. One course (3 credit hours) in each of three subject areas-Architectural History, Environmental Technology, and Structures.
4. 30 credit hours of graduate level urban planning courses, including all "core" course work unless waived by the instructor.

Any additional cognate/elective courses needed to fulfill the 84 credit hour requirement. In addition, students who lack college-level economics or statistics must complete acceptable courses in these two areas. These may be counted toward the 30 credit hours of graduate-level urban planning courses, provided they are taken for graduate credit in urban planning.

A cumulative GPA of "B" must be earned in each unit and 24 credit hours may be double-counted toward the two degrees. Each unit maintains a separate transcript, and either degree may be awarded independently, provided the requirements for the single degree have been met. Because enrollment in the dual program involves two separate units, it becomes the responsibility of the student to follow the academic policies and procedures of each.

## M.U.P./M.ARCH. SAMPLE SCHEDULE

 FIRST YEAR GRADUATE STUDYFall Term Credit Hours
Arch 552 Architectural Design V ..... 6
Arch 516 Architectural Representation ..... 3
UP 503 Introduction to Statistics ..... 3
UP 513 Legal Aspects of the Planning Process ..... 3
Total ..... 15
Winter Term. Credit Hours
Arch 562 Architectural Design VI ..... 6
UP 572 Architectural Theory and Criticism ..... 3
Architectural History, Environmental Technology, or Structures Requirement ..... 3
UP 505 Fundamentals of Planning Practice ..... 3
Total ..... 15
SECOND YEAR GRADUATE STUDY
Fall Term Credit Hours
Arch 672 Architectural Design VII ..... 6Arch 519 (UP 519) Principles and Practice of
Urban Design ..... 3
UP 540 Planning Theory ..... 3
Arch 660 Thesis Development Seminar ..... 3
Total ..... 15
Winter Term Credit Hours
Arch 662 Thesis Studio ..... 6
Arch 583 Professional Practice ..... 3
UP 504 Quantitative Planning Methods ..... 3
Architectural History, Environmental Technology, or Structures Requirement (2 courses at 3 credits each) ..... 6
Total ..... 18
THIRD YEAR GRADUATE STUDY
Fall Term Credit Hours
Arch 443 (UP 443) History of Urban Form ..... 3
Graduate level courses in architecture, urban planning or elective field ..... 12
Total ..... 15
Winter Term. Credit Hours
UP 631 (NRE 631) Land Use and Physical Planning Studio ..... 6
UP 610 Fiscal Planning and Management. ..... 2-3
Graduate level courses in architecture, urban planning, or elective field. ..... 9
Total ..... 17-18
M.U.P./M.B.A. DUAL DEGREE IN URBAN + REGIONAL
PLANNING/BUSINESS ADMINISTRATIONThe Urban + Regional Planning Program and the Business Schooloffer a dual degree program that enables qualified students to pursueconcurrent work in business administration and urban and regionalplanning, leading to the Master of Business Administration (M.B.A.) andMaster of Urban Planning (M.U.P.) degrees. Students can complete allrequirements for both degrees within six semesters of full-time study.

The dual degree program is for students who want to go into urban real estate development, management of urban operations, or urban economic revitalization in the United States and elsewhere in the world.

The dual degree program is designed to educate developers interested in making urban areas better places to live, managers fascinated with the prospect of making city agencies perform, and leaders engaged in bringing more economic activity to transform areas that need jobs and tax base the most. In the Business School students normally choose a concentration in real estate finance, corporate strategy, entrepreneurship, or organizational behavior and human resources. In the Urban + Regional Planning Program, students in the dual degree program often concentrate in housing and community development, transportation, economic development, or international development.

## M.U.P./M.B.A. DEGREE REQUIREMENTS

The dual degree is an 84-credit-hour program that can be completed in three years. This combines the two-year, 48-credit-hour Master of Urban Planning with the twoyear, 60 -credit-hour Master of Business Administration. Each student must take at least 45 credits of Business School courses and at least 30 credits of Urban and Regional Planning courses with an additional 9 credits registered in either program. Students must meet the requirements of both programs. Total credit hours needed 30 $+45+9=84$. Both schools must agree to admission of a student to the dual degree.

## M.U.P./M.B.A. SAMPLE SCHEDULE

This schedule is based on requirements in effect in May 2003. If a student decides to begin in the Urban + Regional Planning Program, years 1 and 2 would be reversed.

FIRST YEAR: BUSINESS SCHOOL CORE CURRICULUM
Fall Term

- Principles of Financial Accounting
- Applied Microeconomics

NOTE: Meets the M.U.P. requirement for economics.

- Corporate Strategy I
- Applied Business Statistics

NOTE: Meets the M.U.P. requirement for statistics

- Marketing
- Human Behavior \& Organization
- Financial Management

NOTE: Meets part of the M.U.P. requirement for UP 610 Fiscal Planning and Management; the remainder can be met through a directed study course arranged with the instructor or through specific other public management courses. A dual degree student meets with the instructor for UP610 to discuss his or her background and to plan the fulfillment of the requirement. The directed study credits are included in the total credits required for the degree.

## Winter Term

- Management Accounting (first 7 weeks)
- Operations Management (first 7 weeks)
- Elective in Business or U.R.P.
- Multidisciplinary Action Project (second 7 weeks)- preferably on a project related to interests that bridge Business and Urban + Regional Planning. Students work on this project full time and take no other courses.

SECOND YEAR: URBAN + REGIONAL PLANNING PROGRAM
Fall Term

- Planning Theory
- Legal Aspects of the Planning Process
- 2 electives in real estate finance, economic development, community development and housing, transportation, international development, and/or public management


## Winter Term

- Quantitative Planning Methods
- Fundamentals of Planning Practice

NOTE: This requirement may also be met by a combination of writing and presentation experiences at the Business School. The instructor for the required urban planning course will judge whether a student has enough experience to
fulfill this requirement. The student should meet with the instructor to determine what materials are needed to demonstrate mastery of the course content.

- 2 electives


## THIRD YEAR: BOTH SCHOOLS

Fall Term

- Business law or ethics
- 3-4 electives


## Winter Term

- Capstone requirement for U.R.P.
- 2 electives

Students are encouraged to take electives that address their specific interests in combining the two degrees. Here are some examples:

1. A student interested in urban real estate development may elect a set of urban real estate development or finance courses. These include:

- An introductory course in real estate
- A course on the planner as developer
- Urban and regional development
- Real estate finance
- Real estate law
- A course focused on a real estate project, such as the capstone course in urban planning, may meet the requirement in U.R.P. for an integrative, practice-oriented experience.

2. A student interested in management of urban operations may elect a series of courses in a topic of interest in urban management. These might include:

- The series of U.R.P. concentration courses in transportation (for interest in public transit agencies), the series of U.R.P. concentration courses in housing, community, and economic development (for interest in public housing), and so forth.
- Courses in public and nonprofit management in the Business School.

3. A student interested in urban revitalization through economic development may elect a series of courses that bring the public and private perspectives on economic development together. These could include:

- The series of courses in economic development in U.R.P. (see the concentration in housing, community, and economic development planning).
- Urban entrepreneurship in the Business School
- Business plans and entrepreneurship in the Business School.


## M.U.P./J.D. DUAL DEGREE IN URBAN + REGIONAL PLANNING/LAW

The Urban + Regional Planning Program and the Law School offer a dual degree program that enables qualified students to pursue concurrent work in law and urban and regional planning, leading to the Doctor of J urisprudence (J.D.) and Master of Urban Planning (M.U.P.) degrees. Students can complete all requirements for both degrees within eight semesters of full-time study.

The dual degree program is for students who want to focus on concerns that intersect both law and urban and regional planning. These areas of common interest include community development, real estate development, land use planning and regulation, environmental planning and regulation, and legislative work related to housing, land use, economic development, taxation, transportation, immigration, and other topics.

## M.U.P./J.D. DEGREE REQUIREMENTS

The dual degree is a 128 -credit-hour program ( 80 Law credits and 48 Urban + Regional Planning credits). Nine credits may be counted from Urban + Regional Planning toward satisfaction of the requirements for the J.D.; fifteen Law credits may be counted toward satisfaction of the requirements for the Master of Urban Planning. Thus, students enrolled in the program may reduce by 24 the number of credits they would need if they were pursuing the two programs separately, allowing the program to be completed in four years. This combines the two-year, 48-credit-hour Master of Urban Planning with the three-year Doctor of J urisprudence. Each student must meet the requirements of each program by taking course work as follows:

1. The required first-year law courses and additional upper-class courses, as required by the Law School's academic regulations. More specifically students entering the Law School in Summer 2001 or after must earn a minimum of 80
credits toward the J.D.
2. At least 30 credit hours in Urban + Regional Planning courses, including the core courses; with double-counted courses, the total credits must equal at least 48.

The first two years of study will be divided equally between the Law School and Urban + Regional Planning; students are normally expected to spend one year, full-time in each school. These two years are followed by two years of mixed enrollment. Tuition is assessed at either the Law School rate or the A. Alfred Taubman College of Architecture + Urban Planning rate, whichever is higher, when courses toward both degrees are taken in a single term.

Students are required to satisfy the degree requirements of each school and work closely with advisors in each school to determine precise graduation requirements for each degree. Students should not expect any law courses beyond first year courses to be offered in the summer term. Students will not receive credit toward the law degree for non-law course work taken prior to matriculation at the Law School. The Urban + Regional Planning Program will consider for dual degree enrollment a student who has completed a year or more of Law School courses at the UM.

In the Urban + Regional Planning Program each dual degree student receives a requirements checklist laying out the degree requirements. Because the program is small, students' advisors are knowledgeable about the dual degree curriculum and provide guidance. In the Law School, students should consult with the assistant dean regarding fulfillment of requirements for the J.D.

## M.U.P./J.D. SAMPLE COURSE SEQUENCE

Note: If a student decides to begin in the Urban + Regional Planning Program, years 1 and 2 would be reversed.
FIRST YEAR: LAW SCHOOLFall/WinterCredit Hours
Civil Procedure ..... 4
Contracts ..... 4
Criminal Law ..... 4
Introduction to Constitutional Law ..... 4
Legal Practice I and II 4 (2 for each term)
Property ..... 4
Torts ..... 4
First Year Elective in ways of approaching legal problems that go beyond the common law method ..... 2-3
SECOND YEAR: URBAN + REGIONAL PLANNING PROGRAM Fall Credit Hours
Planning Theory ..... 3
Introduction to Statistics ..... 2
(for students who have not taken statistics previously) Public Economics for Urban Planning ..... 3
(for students who have not previously taken economics)Electives, if statistics, economics, or law courses are not taken.(The requirement of Legal Aspects of the Planning Process, 3 credit hours, is waived forstudents in the dual M.U.P./J .D. degree)
Winter Credit Hours
Quantitative Planning Methods ..... 3
Fundamentals of Planning Practice ..... 3
2 electives
THIRD AND FOURTH YEARS: BOTH SCHOOLS
Capstone requirement for U.R.P. on a project related to the student's focus ..... 6
Two semesters of credit in the Urban Communities Law Clinic will satisfy the U.R.P. capstone requirement.
Fiscal Planning and Management (in U.R.P.) ..... 2-3
At least one Law seminar
Professional responsibility requirement in Law
Land Use Planning and Control and/or Local Government Law should be taken in the
Law School if a student has not taken Legal Aspects of the Planning Process in U.R.P.
Electives to meet the credit requirements in each program and to develop aconcentration in U.R.P.

## M.U.P. STUDENT-INITIATED DUAL DEGREES

## M.U.P./M.S.W. DUAL DEGREE IN URBAN + REGIONAL PLANNING/SOCIAL WORK

The focus of the M.U.P./M.S.W. dual degree is community planning. The dual degree prepares students to work for social change at the community level. The program incorporates issues related to class, race, ethnicity, gender, age, and cultural differences. It develops skills in organizing groups for social action, planning programs at the community level, developing community-based services, and involving people in the planning process.

Students have many opportunities to participate in community-based planning projects associated with Taubman College's Detroit Community Partnership Center and in research projects related to community development.

## M.U.P./M.S.W. DEGREE REQUIREMENTS

The M.U.P./M.S.W. is a 90 -credit-hour program designed for completion in 2-1/2 to 3 years. Students take 60 credit hours in Social Work, 48 credit hours in Urban + Regional Planning; 18 of which may double-count toward both degrees. Students meet the specific requirements of each degree.

In Social Work, students usually major in community organization and also concentrate in a substantive policy or service field. Human behavior and social environment courses emphasize community structure, organizational processes, and related areas. In Urban + Regional Planning, students usually choose to concentrate in housing, community, and economic development or international development. Students often take courses in non-profit and public management and take advantage of seminars and workshops offered through the University's Non- Profit and Public Management Center.

## M.U.P./M.S.W. COORDINATED REQUIREMENTS

Field experience is an important part of the program, and the Social Work field placement is usually arranged in a setting that gives the student exposure to community development from the perspective of both social work and urban and regional planning. Dual degree students can complete the Urban + Regional

Planning Program's capstone requirement through a professional project that builds on experience in a field placement or can participate in a community-based group planning project in partnership with a community-based organization in Detroit. Students may take either SW 661 or UP 610 to meet the budgeting and financial management requirement in Urban + Regional Planning.

## M.U.P./M.S. DUAL DEGREE IN URBAN + REGIONAL PLANNING/RESOURCE POLICY + BEHAVIOR

This student-initiated dual degree between the Urban + Regional Planning Program and the School of Natural Resources and Environment (S.N.R.E.) is for students especially interested in environmental planning in urban and urbanizing areas, regional planning, urban environmental justice, or community-based environmental planning.

The dual degree combines the study of natural resource policy and management with planning for the built environment in urban areas. Through coursework in the School of Natural Resources and Environment and the Urban + Regional Planning Program, students learn about urban and environmental challenges from a range of perspectives. Students have the opportunity to develop the tools, skills, and knowledge to integrate natural resource policy and management into the local and regional planning processes. Some of the topics students could study include management of metropolitan growth, brownfield redevelopment, industrial ecology, environmental justice, regional land use and resource management, community organizing, and advocacy with respect to urban environmental issues.

## M.U.P./M.S. DEGREE REQUIREMENTS

Students entering the School of Natural Resources and Environment as of fall 2006 or after are required to take 42 credit hours in S.N.R.E. Prior to fall 2006, S.N.R.E. students were required to take 36 credit hours. Please contact the School of Natural Resources and Environment regarding credit hour requirements.

As of Fall 2006 the M.U.P./M.S. is a 75 -credit-hour program designed for completion with 2-1/2 to 3 years. Students take 42 credits in S.N.R.E. and 48 credits in U.R.P. with 15 of theses credits counted in both programs. In Urban + Regional Planning, students
usually choose a concentration in land use and environmental planning, physical planning and urban design, or housing, community and economic development. In S.N.R.E., student s in Environmental Policy and Planning; Environmental J ustice, Landscape Architecture. A required core includes courses in natural and social sciences, analytics; and statistics. Students meet the specific requirements of each degree.

Students complete a 6-credit "capstone" requirement of a theses or a team project that integrates what they have learned and addresses an environmental planning issue, usually for a client or community partner.

## M.U.P./M.S. COORDINATED REQUIREMENTS

A statistics course in S.N.R.E. or UP503 meets the statistics requirement in both programs. UP504 meets the requirements of an analytic methods course in S.N.R.E. An S.N.R.E. economics course meets the U.R.P. economics requirement. One capstone project meets the requirements of both programs, subject to approval of appropriate faculty or committees.

## M.U.P./M.L.A. DUAL DEGREE IN URBAN + REGIONAL PLANNING/ LANDSCAPE ARCHITECTURE

Students especially interested in physical planning at any scale-from site design to metropolitan planning-may decide to get both a M aster of Urban Planning and a Master of Landscape Architecture. The dual degree equips students to plan and design the built environment in a comprehensive manner.

Students develop design skills at the same time that they understand the social, economic, and political context of the built environment. Having both degrees enables graduates to design at both the large and small scales and to understand the relationship between the two. Graduates can address questions such as: How do small-scale design decisions relate to the larger social context? How can the regional or local jurisdiction's political environment affect a design? Graduates address issues that draw on the knowledge in both degrees - livable communities, smart growth, conservation design, watershed-scale planning.

## M.U.P./M.L.A. DEGREE REQUIREMENTS

The M.L.A./M.U.P. degree is a 70 -credit-hour program that can be completed in 3-1/2 to 4 years. The M.U.P. requires 48 credits (with 30 of these in urban planning courses); the M.L.A. requires 36 credits. Fourteen of these can be double counted. M.L.A. students take approximately 29 credits of prerequisites early in their program; these do not count toward the 36 credit total for the M.L.A. degree; that is the degree and its prerequisites ordinarily comprise about 65 credits. A student in the dual degree must meet the requirements of both programs.

In Urban + Regional Planning, students often choose a concentration in physical planning and urban design, land use and environmental planning, or housing, community and economic development. In Landscape Architecture, students proceed through a structured sequence of studios and complementary support courses, while taking advantage of elective courses in the School of Natural Resources and Environment.

## M.U.P./M.L.A. COORDINATED REQUIREMENTS

Students may complete a 6-credit master's project in either program to meet the project requirement in both. The required UP 504 Quantitative Methods for M.U.P. can fulfill the analytics course requirement for the M.L.A. An advanced M.L.A. student may be excused from taking UP 505 Fundamentals of Planning Practice; the faculty member will review the student's background to make this decision. Under some circumstances, UP 505 may fulfill the M.L.A. requirement for Arch 583 Professional Practice; students should consult advisors.

## M.U.P./M.L.A. SAMPLE SCHEDULE

A student may begin the dual degree program with emphasis in either department. The first two years of the landscape architecture curriculum include many required courses and therefore allow little room for courses in urban and regional planning. The following is an example of a course of study where a student begins in Landscape Architecture and starts course work in Urban + Regional Planning in the third year. In this example, the student elects to do the master's project in the Urban + Regional Planning Program, and the student has undergraduate background in economics and statistics.

## YEAR 1, PRIMARILY IN LANDSCAPE ARCHITECTURE Fall Term

- NRE 587 Watershed Studio
- NRE 430 Soil Properties
- NRE 437 Woody Plants
- NRE 586 Visualizing the Environment

Winter Term

- NRE 590 Landscape Ecology Studio
- NRE 403 History of Environment and Design
- NRE 588 Site Engineering
- NRE 540 GIS and Natural Resource Applications

YEAR 2, PRIMARILY IN LANDSCAPE ARCHITECTURE Fall Term

- NRE 690 Landscape Planning/GIS Studio
- NRE 691 Ornamental/Planting Design
- NRE 591 Materials and Methods
- NRE/UP 579 Land Use Planning

Winter Term

- NRE 688 Site Planning Studio
- UP 504 Quantitative Planning Methods

NOTE: Prerequisite is an undergraduate course in statistics or UP 503 Introduction to Statistics, offered fall semester.

- UP 505 Fundamentals of Planning Practice
- Elective

YEAR 3, PRIMARILY IN URBAN + REGIONAL PLANNING, WITH STUDIOS IN LANDSCAPE ARCHITECTURE
Fall Term

- NRE Modular studios, each 7 weeks
- UP 540 Planning Theory
- UP 513 Legal Aspects of the Planning Process
- UP 631, UP 733 Masters Project


## Winter Term

- NRE Modular studios, each 7 weeks
- UP 610 Fiscal Planning and Management

NOTE:Prerequisite is an undergraduate course in economics or UP 510 Public Economics for Urban Planning, offered fall semester.

- Arch 583 Professional Practice
- UP 634, UP 631, UP 734 Masters Project


## YEAR 4

- Complete remaining courses to fulfill credit and distribution requirements and develop a concentration.


## M.U.P./M.P.P. DUAL DEGREE IN URBAN + REGIONAL PLANNING/PUBLIC POLICY

The Master of Public Policy and Master of Urban Planning is especially suited for students interested in urban policy and in state and local policy in subjects such as economic development, transportation, regional development, and housing. The dual degree also trains students interested in community-based approaches to social change; in implementation of plans and policy at the local level; and in leadership of nonprofit organizations working to improve communities.

Students most likely to enroll in this degree want to combine strong analytic approaches to designing policy solutions, public and nonprofit management skills, and hands-on interdisciplinary approaches to improving the quality of life in cities and neighborhoods with a strong foundation in the substance of urban and regional issues.

## M.U.P./M.P.P. DEGREE REQUIREMENTS

The M.U.P./M.P.P. degree is an 80 -credit-hour program that can be completed within 3 years. The M.P.P. and the M.U.P. each require 48 credits; 16 credits may be doublecounted, according to the Rackham guidelines, but students should check with the Ford School before assuming that a given course may be double-counted toward the M.P.P. Students meet the specific requirements of both degrees.

In Urban + Regional Planning, students usually choose a concentration in transportation or housing, community and economic development. In Public Policy, a student's concentration is the area of the dual degree, Urban + Regional Planning. Students take required courses in statistics and math, economics, the political environment for policy, cost-benefit analysis, public management, ethics, and a policy exercise. Students normally enroll nearly full time in one school one year and nearly full time in the second school the second year. They usually combine courses from both schools in the third year.

## M.U.P./M.P.P. COORDINATED REQUIREMENTS

The statistics, other methods courses, and economics in Public Policy meet the requirements for statistics and economics in Urban + Regional Planning and at least part of the requirement for quantitative methods for urban planning. Public Policy students are often waived out of the municipal budgeting course in Urban + Regional Planning if they have taken a series of courses in Public Policy that cover similar material.

A student who feels he or she has fulfilled a requirement in Urban + Regional Planning through other courses should consult with the faculty member for that course.

## M.U.P./M.P.H. DUAL DEGREE IN URBAN + REGIONAL PLANNING/ HEALTH BEHAVIOR/HEALTH EDUCATION IN PUBLIC HEALTH

The student-initiated dual degree in Urban + Regional Planning and in Health Behavior and Health Education in Public Health (M.U.P./M.P.H.) is for students who want to work to create healthier environments in urban areas anywhere in the world. Students may wish to go into work to promote health through the improvement of the places where people live in a wide range of ways.

For example, they may be interested in the provision of safer shelter, in communitybased initiatives for water supply and waste disposal systems, in reducing sprawl development and the traffic congestion that accompanies it, in planning for parks and recreation that offer more fitness opportunities, in implementing truck routing around low-income neighborhoods to reduce air pollution and increase pedestrian safety- to name just a few of the ways that public health and urban planning intersect. They may want to work for a nonprofit in a big city, for a planning department or a public health
department, for a regional rural services agency, for an NGO or a community-based initiative in a developing country.

## M.U.P./M.P.H. DEGREE REQUIREMENTS

The M.U.P./M.P.H. is a 90 -credit-hour program for students without relevant health education experience or advanced degrees. Students take 60 credits for the M.P.H. and 48 credits for the M.U.P. Eighteen of these credits may be counted in both programs. Students with substantial prior relevant postgraduate work or with substantial relevant experience may complete the dual degree with 80 credit hours, with 48 credits for the M.P.H., 48 credits for the M.U.P, and 16 credits counted in both programs. Students take at least 30 credits in the Urban + Regional Planning Program, at least 30 in Health Behavior and Health Education, and at least 10 credits in specific other courses in Public Health outside HBHE. Students normally complete the dual degree in three years of full-time study.

## M.U.P./M.P.H. COORDINATED REQUIREMENTS

Courses taken to meet the requirement in behavioral research and evaluation methods in Public Health may meet part or all of the requirement for UP 504 Quantitative Planning Methods. UP 504 meets the requirement of Biostatistics 503 for students doing the dual degree. Field experience is required for the M.P.H. and strongly encouraged for the M.U.P.

## M.U.P./M.U.D. DUAL DEGREE IN URBAN + REGIONAL PLANNING/URBAN DESIGN

Students who are especially interested in urban design and in physical aspects of the city and of urban development may decide to enroll in both the Master of Urban Planning and the Master of Urban Design. Students who want to enter a design-based planning practice may benefit from the additional design education that the M.U.D. provides.

Although the Master of Urban Design is primarily for students who already have a Master of Architecture, Master of Landscape Architecture, or Master of Urban Planning degree, students enrolled in the Urban + Regional Planning Program may apply to work toward the M.U.D. beginning in their second year of study. A student entering

Urban and Regional Planning with very strong design background or with a Bachelor of Architecture may apply to begin the dual degree in the first year of study toward M.U.P.

An Urban + Regional Planning student without a B.Arch. degree who intends to apply for study toward the M.U.D. should take UP 518 and UP 519 in his or her first year in the M.U.P. and should enroll in the Arch 402 studio in the summer before the beginning of the second year of study.

## M.U.P./M.U.D. DEGREE REQUIREMENTS

The M.U.P./M.U.D. is a 73 -credit-hour program that can be completed in 2-1/2 to 3 years. Students take 48 credits in Urban + Regional Planning and 39 credits in Urban Design with 14 of these credits counted in both programs. In Urban + Regional Planning students usually choose a concentration in physical planning and urban design or in land use and environmental planning. Students meet the specific requirements of both degrees. Because the M.U.D. is a second professional degree, dual degree candidates for M.U.D./M.U.P. must plan to receive the M.U.P. first or to receive the degrees concurrently.

## M.U.P./M.U.D. COORDINATED REQUIREMENTS

UP 631 Land Use and Physical Planning Studio meets the capstone requirement for the M.U.P. and can fulfill one studio course requirement for the M.U.D. if so determined by the M.U.D. program director and faculty.

## OTHER STUDENT-INITIATED DUAL DEGREES

Urban + Regional Planning students can initiate a combination of master's degrees to cover individual specializations. Where course material is similar in required courses, students are often waived out of the requirement in one unit with permission of the instructor. Recently, students have enrolled in dual degrees in a number of fields:
M.U.P./M.P.H. in areas such as Epidemiology or Health Management and Policy with interests in community-based approaches to public health in urban areas and the effects of a healthy environment in improving the quality of life in places - whether in American cities or rural areas or in developing countries.
M.U.P./M.F.A. with interests in the use of art in urban design and physical planning to improve the quality of urban life.
M.U.P./M.S. in Resource Ecology and Management with interests in the management, restoration, and re-creation of ecosystems in urban areas.
M.U.P./M.S. in Information with interests in community-based information systems and the use of information systems to improve urban planning, urban public management, and the quality of urban life.
M.U.P./PH.D. in a discipline in another program at the University with interests in a career as a researcher or a professor in topics that relate to urban planning. In recent years, students in this dual degree have come from Sociology, Anthropology, Classical Archaeology, and Architecture.

## M.U.P. CERTIFICATE PROGRAMS

Through the Rackham School of Graduate Studies, certificate programs are available for graduate students interested in gaining additional strength in a field that cuts across many disciplines.

Students in Urban + Regional Planning are most often interested in certificate programs in the areas of Complex Systems, Spatial Analysis and Real Estate Development. Students may count some of the credits for the M.U.P. degree toward a certificate, up to one-half the credits for the certificate. See the Rackham Handbook online at http:// www.rackham.umich.edu/.

## CERTIFICATE IN SPATIAL ANALYSIS

The graduate Certificate in Spatial Analysis is an interdisciplinary program where students acquire a set of core skills and knowledge in spatial analysis and its relevant sub-fields.

Coursework offered through the program leads to a graduate Certificate in Spatial Analysis with a focus on applied remote sensing, geographic information systems, or spatial statistics. Students select one of these three areas as a primary focus but select remaining course work to increase depth and breadth or to add a secondary
focus. The Certificate requires 15 credit hours of course work within the program. For further information contact Daniel G. Brown at danbrown@umich.edu, or visit online at http://gis.umich.edu/.

## CERTIFICATE in COMPLEX SYSTEMS

The graduate Certificate in Complex Systems introduces students to the ideas and methods used in the study of complex, nonlinear, and adaptive systems.

The specific aim of this curriculum is to allow students from different fields to integrate the rich paradigms and useful analytic and modeling techniques of complex systems into their own research, including agent based modeling. The curriculum is designed to be accessible to students in a wide range of disciplines including the social sciences. To enroll or for further information contact the Center for the Study of Complex Systems at cscs@umich.edu or visit online at http://www.cscs.umich.edu/.

## GRADUATE CERTIFICATE IN REAL ESTATE DEVELOPMENT

The quality of urban development is an issue of growing public concern. Debates over land use regulation, sustainable development, sprawl, and design of urban places occupy virtually every city council and every state legislature in this nation. The decline and abandonment of central cities occur simultaneously with extensive new building construction and the destruction of natural habitat at the fringe of metropolitan regions. Real estate development is the interdisciplinary profession that creates built environments, but few of those seeking to influence urban development understand real estate development well, and they are therefore less effective than they might otherwise be in improving the way development occurs.

The aim of the certificate is to give students from many graduate degree programs at the University guidance in how to bring about development that has a positive effect on living environments. The certificate draws on many courses that already exist and adds new ones to fill gaps in the collection of University-wide offerings. The certificate will provide students with the knowledge to become developers (although an individual can get a job as a developer with much less knowledge than a graduate of
the certificate program would have). The certificate will also equip planners, lawyers, business managers, architects, urban designers, and others to work more effectively with developers to make improvements in the urban environment. The certificate is a 17 -credit interdisciplinary program with requirements in an overview of real estate, real estate finance, real estate and land use law, real estate in the urban development context, design and implementation, and an integrative seminar.

## PH.D. DEGREE IN URBAN + REGIONAL PLANNING

## U.R.P. PH.D. DESCRIPTION AND OBJECTIVES

The Ph.D. in Urban + Regional Planning trains scholars for careers in higher education, research and high-level policy positions. (The Ph.D. is one of two degrees offered by the Urban + Regional Planning Program; the other is the Master of Urban Planning (M.U.P.), which is a two-year professional degree program.) It is a doctoral degree with a flexible, interdisciplinary focus. Graduates work in universities, government, non-profits and the private sector, both in the U.S. and around the world.

The doctoral curriculum integrates analytical methods, research design, a rigorous understanding of urbanization dynamics, and an examination of broader social processes and policies. Students address complex systems that typically encompass an array of spatial, environmental, social, political, technical, and economic factors. The emphasis is on theory, analysis and action. Each student is also expected to demonstrate an understanding of the literature, theory, and research in a specialization area within the larger discipline of urban and regional planning.

Doctoral students specialize in a wide range of possible topics. Current students are engaged in subjects as diverse as the political economy of public transit, inner-city revitalization, global city urbanization, information technology and cyberspace, the crisis of modernist urbanism, regional planning institutions, the effects of environmental contamination on patterns of urban and regional development, the culture of suburban commuting, the impact of tourism on historical cities, and the application of complex systems analysis to sustainable development.

The highly individualized course of study operates under the premise that concepts and methods from a wide range of professions and academic disciplines are applicable to urban and regional systems. Accordingly, students rely on faculty resources not only from the Taubman College of Architecture \& Urban Planning, but also from other schools, colleges, and institutes of the University of Michigan. Students commonly take courses in the social sciences (such as sociology, anthropology, history, and political science) and in the professional schools (such as architecture, business administration,
engineering, natural resources and the environment, public policy, public health, and social work). This emphasis on interdisciplinary collaboration, and on the links between theory and action, are defining characteristics of the doctoral planning degree at the University of Michigan.

## U.R.P. PH.D. HISTORY

The doctorate in planning began in 1968 as the Ph.D. Program in Urban + Regional Planning under the Office of the Vice President for Academic Affairs. From its inception, it was a University-wide Ph.D. program with faculty participation from many colleges throughout the University.

In the late 1970s, the degree moved into the Rackham Graduate School. The name changed to the Ph.D. in Urban, Technological, + Environmental Planning (U.T.E.P.) in 1982. The degree moved into the College of Architecture + Urban Planning in 1989 and administratively merged with the professional program in planning to form the Urban + Regional Planning Program. The degree is now known as the "Ph.D. in Urban + Regional Planning," a name change made in 2004. Over its 36 years of existence, the program has granted over 160 Ph.D. degrees. Graduates hold faculty positions in a range of departments in universities and work as consultants and staff of research organizations. Current affiliations of alumni are provided in the student handbook.

## U.R.P. PH.D. educational resources

The Ph.D. in Urban + Regional Planning provides students with a broad range of faculty and institutional resources to support doctoral-level research.

Affiliated faculty includes nationally and internationally recognized members of the University of Michigan's graduate faculty at Taubman College; the College of Literature, Science, and the Arts; and the Schools of Education, Natural Resources and Environment, Public Health, Public Policy, and Social Work.

The strong research focus of the College and the University has resulted in research facilities that are among the best in the country. The university currently has over 14,000 students enrolled in graduate and professional programs (among a total student body of 38,000 students, plus 3,700 regular faculty). The 24 libraries on
campus have 7.5 million volumes and offer online access to data and documents. Extensive computing facilities are available at both the college and university levels. Doctoral students in the College have their own computing lab in the building, as well as access to several specialized computer labs in the College (for geographic information systems, building + environmental technology, high-end digital output, and other capabilities). In addition, students can access an array of university-wide computing facilities both in the building (including an instructional computing facility) and numerous labs across campus. Doctoral students also have access to the research and testing facilities of Taubman College. Doctoral students participate regularly in sponsored research projects directed by Urban + Regional Planning faculty.

The Urban + Regional Research Collaborative (U.R.R.C.) is the umbrella organization for research of the Urban + Regional Planning faculty and students, as well as others in the Taubman College interested in urban and regional issues. The U.R.R.C. provides space for student research assistants on funded and unfunded research projects, together with computer facilities. The U.R.R.C. sponsors a monthly seminar series highlighting the research of Taubman College faculty, students, and visitors, and provides a vehicle for collaborative research and venue for developing external funding.

Other research units on campus also provide specialized laboratory facilities, exposure to a broad range of research, and possibilities for field experience. Among the resources most commonly identified with Urban + Regional Planning doctoral student interests are the Institute for Social Research, the Center for Research on Learning and Teaching, the Population Studies Center, the Center for Statistical Consultation and Research, UM Transportation Research Institute (U.M.T.R.I.), Institute for Labor and Industrial Relations (I.L.I.R.), the UM Medical Center, and the National Poverty Center.

## U.R.P. PH.D. ADMISSIONS

Admission to the Ph.D. program is normally limited to the fall term. (In exceptional situations, the doctoral admissions committee may also consider applications for admission to start the program in the winter term.) Normally, only four to six new students can be admitted each year. This number represents a small percentage of those applying for admission.

The Urban and Regional Planning program is part of the Horace H. Rackham School of Graduate Studies, which is the overall administrative unit for graduate programs. Rackham works in conjunction with 17 schools and colleges to recruit applicants, administer the admissions process, and serve students through the final stages of degree attainment.

## Office of Admissions

Horace H. Rackham School of Graduate Studies
The University of Michigan
915 E. Washington Street
Ann Arbor, MI 48109-1070
Phone: (734) 764-8129
Fax: (734) 647-7740
Email: rackadmis@umich.edu
Web: http://www.rackham.umich.edu/

## U.R.P. PH.D. ELIGIBILITY

Applicants will normally possess a master's degree in urban planning or a related field (such as public policy, environmental studies, geography, architecture, etc.). Applicants with other master's degrees will be considered, as will exceptionally well-prepared applicants with a bachelor's degree.

There is no foreign language requirement for Ph.D. students in urban planning. However, work in some areas of specialization and on certain research/dissertation topics may require knowledge of one or more foreign languages (obtained either before or during doctoral studies).

In addition to the above requirements, the following items are required for applicants to the Ph.D. program:

1. Records/ Transcripts You must provide 2 sets of official/final undergraduate and/or graduate academic records/transcripts, with your degree posted. Official documents must be provided from the institution awarding the degreee. One set must be submitted to the Ph.D. program and the second set must be sent to the

Rackham Graduate School Admissions. It is your responsibility to request the release of any such records from the institutions involved.
2. Statement of Purpose This is a vital component of your application. Explain how you arrived at the decision to pursue a Ph.D. in urban and regional planning, what you plan to do during the course of your studies, and how you hope to use your doctoral education in planning. In particular, discuss the intellectual and policy challenges that you hope to address in your doctoral studies, outline the methodological skills you plan to pursue, and briefly note any tentative dissertation research topics. (The typical length is 2-4 pages.)
3. Letters of Recommendation Three (3) are required. Where reasonable, two of these letters should be from the applicant's previous professors. Electronic submission of recommendations is preferred. You will be prompted to register recommenders using the online application, enabling recommenders to submit letters of recommendation electronically. Recommenders will complete the recommendation form online and submit the form and a letter electronically to the program of study. Do NOT send paper copies of recommendations if they are submitted electronically.
4. GRE Scores An official Graduate Record Examination(GRE) Score Report, sent from the Educational Testing Service, is required of all students. Institution code:1839, and Department code 4402. For further information visit the GRE website at http://www.ets.org/gre.
5. Writing Samples One or several examples of relevant work by the applicant. Submissions should support the statement of purpose and clearly demonstrate research and writing abilities. These may consist of academic papers (from previous coursework), published articles, and/or a portfolio that are representative of the applicant's work and potential for doctoral studies.
6. TOEFL Applicants whose native language is not English must demonstrate English proficiency. The TOEFL is required of all international students except those who have received a degree from an institution where the language of instruction is English.) Applicants who have earned a degree from an institution where the
language of instruction is English (e.g., U.S., United Kingdom, Australia) are exempt from submitting a TOEFL. Applicants are urged to take the TOEFL as early as possible and must request the scores be sent to the University of Michigan, Ann Arbor: Institution code:1839, and Department code:97. Note: Scores that are more than two years old will not be accepted as valid. For further information visit the TOEFL website at http://www.ets.org/toefl/.

| Test (format) | by Planning Department |
| :--- | :--- |
| TOEFL (paper-based) | 560 |
| TOEFL (computer-based) | 220 |
| TOEFL (internet-based) | 84 |

## U.R.P. PH.D. APPLICATION DEADLINES AND PROCEDURE

## DEADLINE

To receive full consideration for both admission and program financial aid, applications and supporting materials should be submitted by the J anuary 9, 2008 deadline. The deadline is the date by which all application materials must be received by both the graduate program and Rackham. Early submission may avoid unnecessary delays.

Applicants who have been recommended for admission are notified by the department and the Rackham Graduate School by mid-April. Only the written notice from the Dean of the Graduate School constitutes approval of admission. When your application and application fee have been received by the Rackham Graduate School and entered into our system you will receive an Acknowledgement Email. This email will direct you to the Web Application Status page for your application and gives you details on how to access this information. The Web Application Status page gives you the ability to verify you application data, view the application decision, and accept or decline (with a reason) an offer of admission.

## PROCEDURE

Students seeking admission for the Ph.D. in Urban + Regional Planning are required to complete the Rackham online admissions application at
https://apply.embark.com/Grad/UMich/Rackham/ProgramA/36/.

Submit the following materials to the URP Doctoral Program:

- Statement of Purpose
- Letters of Recommendation (3)
- One official set of transcripts
- Writing samples/portfolio/publications
- TOEFL (required)
- GRE (required)


## Mailing Address

Urban + Regional Planning Ph.D. Program
A. Alfred Taubman College of Architecture + Urban Planning

The University of Michigan
2000 Bonisteel Boulevard Rm 2224
Ann Arbor, MI 48109-2069
Email: urpdoc@umich.edu
Web: http://www.tcaup.umich.edu/urp/

Submit the following materials to the Horace H. Rackham School of Graduate Studies:

- Online admissions application
- Non-refundable application fee
- One official set of transcripts


## Office of Admissions

Horace H. Rackham School of Graduate Studies
The University of Michigan
915 E. Washington Street
Ann Arbor, MI 48109-1070
Phone: (734) 764-8129
Fax: (734) 647-7740
Email: rackadmis@umich.edu
Web: http://www.rackham.umich.edu/

## Send the departmental application packet to:

Ph.D. in Urban + Regional Planning
Urban + Regional Planning Program
A. Alfred Taubman College of Architecture + Urban Planning

The University of Michigan
2000 Bonisteel Boulevard
Ann Arbor, MI 48109-2069
Phone: (734) 763-3075
Fax: (734) 763-2322
Email: urp@umich.edu
Web: http://www.tcaup.umich.edu/urp/

## U.R.P. PH.D. INTEGRATED CURRICULUM

The program also offers the ability to do a combined M.U.P./Ph.D. course of study. The students who could benefit from such a program fall into two categories:

1. Students admitted to the Ph.D. program who do not have a master's degree or who do not have a master's in urban and regional planning and are interested in obtaining the professional degree;
2. Students currently in the master's program who are admitted to the Ph.D. during or after their first year in the M.U.P. program. To participate in the integrated M.U.P./Ph.D., a student must be admitted to both degree programs.

The master's degree is the professional degree in the field of urban and regional planning, and the Ph.D. is the research degree. In contrast to traditional disciplines, where the master's is granted on the way to a research-oriented Ph.D., the Master of Urban Planning (M.U.P.) implies a mastery of the professional skills needed for urban planning practice. For this reason, the advisor is responsible for ensuring that students participating in the integrated program take the appropriate set of courses to develop professional competency in their chosen areas of study. In order to enable such candidates to complete both degrees while adding the minimum amount of time to their program, degree requirements may be double-counted in certain areas (such as the statistics requirement). All coordination is optional; in any category, the candidate is free to fulfill the requirements of the M.U.P. and the Ph.D. curricula separately.

## U.R.P. PH.D. FINANCIAL SUPPORT

The Urban + Regional Planning Ph.D. program is committed to funding each admitted student for four years of the expected time to complete the degree, including a stipend, full tuition, and health care during the academic year (September-April); students typically work and/or are funded through campus or outside research projects during the four summer months.

Additional years of funding may be available through graduate student instructorships, research assistantships, and other sources. We do encourage students to apply for funding from independent sources. With a student admissions application no additional documents or materials are required to be considered for departmental funding.

## PH.D. FUNDING

Though funding packages vary from student to student, a typical departmental package for a student admitted to the Ph.D. program consists of:

## Years 1-2

Annual stipend, full tuition and health care coverage during the academic year(SeptApril). Graduate Student Instructorship (GSI) in which the student teaches one class per term OR GSRA (Graduate Student Research Assistant) in which the student assists a faculty member. Typically requires a 12-14 hour work week.

## Year 3-4

Annual stipend, candidacy tuition, and health care coverage

The program will cover 2 years of pre-candidacy tuition and 2 years of candidacy tuition. Achieving candidacy before the third year is expected.

## STUDENT EXPENSES

The Office of Financial Aid (http://www.finaid.umich.edu/index.asp) establishes standard student budgets each year as a basis for awarding financial aid funds. These budgets reflect typical "modest but adequate" expense patterns of University of Michigan students based on research conducted by the Office of Financial Aid. While
actual expenses will vary based on your lifestyle and level of enrollment, the estimated costs listed below should assist you in planning your own budget.

|  | Michigan Residents <br> (In-State) | Nonresidents <br> (Out of State) |
| :--- | ---: | ---: |
| Tuition and Fees | $\$ 15,135$ | $\$ 30,281$ |
| Room and Board | $\$ 10,884$ | $\$ 10,884$ |
| Books and Supplies | $\$ 1,160$ | $\$ 1160$ |
| Personal and Misc. | $\$ 3,936$ | $\$ 3936$ |
| Total | $\$ 31, \mathbf{1 1 5}$ | $\mathbf{\$ 4 6 , 2 6 1}$ |

For more information about tuition and fees, visit:
http://www.umich.edu/~regoff/tuition.

## RESEARCH FUNDING

A limited amount of funding may be available for research related expenses if those expenses are in connection with a student's dissertation work. Students should submit a request for a Rackham Student Research Grant (http://www.rackham. umich.edu/Fellowships/guideln/2409.html). These grants are designed to support Rackham graduate students who need assistance to carry out research that advances their progress toward their degree. To be eligible for additional departmental research support, students must submit a request, along with a complete description of the project, and letter from the advisor supporting the need for such funding.

## PRESENTATIONS AND CONFERENCE ATTENDANCE

The Urban + Regional Planning prorgram wishes to encourage the development and presentation of papers to conferences if those papers relate to a student's academic program. Students should submit a request for a Rackham Conference Travel Grant (http://www.rackham.umich.edu/Fellowships/guideln/2195.html). These grants are intended to assist doctoral students to participate and attend conferences and professional meetings. Students must apply prior to the conference dates. To be eligible for additional departmental support, students must submit a request, along with a detailed budget and letter of invitation to present, to the chair of the doctoral program. Students are eligible for support for one national or international conference per academic year.

## TEACHING AND RESEARCH ASSISTANTSHIPS

- Graduate Student Instructorship Positions (GSI) http://www.umgeo.org/
Doctoral students are eligible for Graduate Student Instructorships (GSI) within the College. The teaching assignments are within the Urban + Regional Planningl program and are negotiated by the program chair of Urban Regional Planning and the doctoral program coordinator and the individual faculty members who requires a position.

As a general Rule, these positions will be limited to four terms or two years. Any exceptions to this policy must be clearly in the best interests of the student and must be agreed upon by the Chair of the Urban + Regional Planning program and the faculty member involved. Graduate student instructorship positions are reviewed at the end of each semester. Reappointment of a GSI is contingent upon evidence of satisfactory performance and the teaching needs of the Urban + Regional Planning Program. This award allows for a tuition waiver, stipend and health benefits.

- Graduate Research Assistant Positions (GSRA) http://www.hr.umich.edu/acadhr/grads/gsra/what.html
The number of research assistant positions (GSRA) and hourly positions that are available varies, depending on the amount of sponsored research that is currently in progress. In general, project directors have complete responsibility for the management of their projects. Project directors will generally hire those students (either Masters or Doctoral) who they feel have an appropriate background for the project and will contribute the most towards its successful completion. The doctoral program helps to facilitate the communication between project directors who are looking for research assistants and doctoral students who are seeking employment. Typically requires a 12-14 work hour work week.


# OTHER FUNDING RESOURCES <br> Rackham School of Graduate Studies <br> http://www.rackham.umich.edu/Funding/fullListing.html 

## Fellowships Office

http://www.rackham.umich.edu/Fellowships

Fellowship Finder<br>http://www.rackham.umich.edu/Fellowships/ff/index.php

## Rackham Pre-doctoral Fellowship

http://www.rackham.umich.edu/Fellowships/guideln/2110.html

## Rackham Student Emergency Fund <br> http://www.rackham.umich.edu/Fellowships/rackhamf.html

## Barbour Scholarship

http://www.rackham.umich.edu/Fellowships/guideln/2120.html

## Rackham Graduate Student Research Grant

http://www.rackham.umich.edu/Fellowships/guideln/2409.html

## Susan Lipschutz Margaret Ayers Host Fellowship

http://www.rackham.umich.edu/Fellowships/guideln/2445.html

## Michigan Society of Fellows

http://www.rackham.umich.edu/Faculty/society.html

## Rackham One-Term Dissertation Fellowship

http://www.rackham.umich.edu/Fellowships/guideln/2050.html

## Rackham International Research Award

http://www.rackham.umich.edu/Fellowships/guideln/rira.html

## Lurcy Scholarship

http://www.rackham.umich.edu/Fellowships/guideln/2330.html

## Rackham Shapiro Award

http://www.rackham.umich.edu/Fellowships/guideln/2255.html

## U.R.P. PH.D. DEGREE REQUIREMENTS

Degree requirements are set both by the university's Rackham Graduate School and by the Urban and Regional Planning Program. Degree requirements are divided into two parts: pre-candidacy and candidacy/dissertation research. The former involves course work, qualifying examinations, and a dissertation prospectus. Candidacy is certification that all requirements have been met except the dissertation. The Doctor of Philosophy (Ph.D.) degree in Urban and Regional Planning is granted upon the successful completion and defense of the dissertation.

## U.R.P. PH.D. PRE-CANDIDACY REQUIREMENTS

Pre-candidacy requirements include five areas:

- Planning theory
- Analytic methods
- Research design
- Primary area of specialization
- Secondary area of specialization

Students meet these requirements through coursework and exams over a two year period. During this time, a student's cumulative grade point average may not fall below a $B$ without academic discipline or probation.

## REQUIRED COURSES

Three courses are required of all Ph.D. students, including two doctoral-level planning theory courses and a two-semester research seminar sequence. The two theory courses, Advanced Urban Theory (UP 650) and Epistemology and Reasoning for Planning Research (UP 660), are offered during the fall term in alternating years. These courses are designed to provide doctoral students a solid theoretical foundation for conducting rigorous scholarly inquiry within the planning field. Second-year students are required to take UP 835 (Ph.D. Research Seminar) over the fall and winter terms


#### Abstract

(for a total of four credit hours). This year-long seminar has three objectives. First, it exposes students to various approaches to research related to planning. Second, it enables students to formulate and test out researchable topics among faculty and student peers. Finally, it enables students to gain experience in developing an appropriate research design, in writing a detailed research proposal, and in formally presenting the proposal to an audience of faculty and students in a seminar during winter semester.


OVERVIEW OF CORE CURRICULUM + EXAMS THEORY
Courses. Credit Hours
UP 540 Planning Theory (required for students without a masters degree in urban planning or without a previous equivalent course). ..... 3
UP 650 Advanced Urban Theory (offered fall term in even number years). ..... 3
UP 660 Epistemology and Reasoning for Planning Research (offered fall term in odd number years) ..... 3
Total ..... 6-9
NOTE: A written theory examination is given to all eligible students once per year, normally in May (after two years of coursework).
RESEARCH DESIGN + METHODS
CoursesCredit Hours
UP 835 Research Design (a two-semester sequence, normally taken fall and winter of the second year). ..... 4
Analytical Methods (2 semesters graduate level statistics). ..... 6
2 areas of dissertation-related methods (e.g., GIS, qualitative methods) satisfied through 9 credit hours of coursework ..... 9
Total ..... 19
NOTE: No examination. Requirement is satisfied through grades of B- or better(median of $\mathrm{B}+$ ) in all courses.
SPECIALIZATION
Courses. Credit Hours
UP 680/681 Directed Study (literature review in area of specialization, generally completed during the second or third semester) ..... 3
3 or 4 courses in student-defined area of specialization ..... 9-12
2 or 3 courses in secondary area of specialization. ..... 6-9
Total ..... 18-24
NOTE: Comprehensive examination (written take-home and oral) on primary andsecondary areas of specialization. Exam tailored to, and scheduled by the student.
Total core curriculum credit hours ..... 43-52
PLANNING THEORY COURSES AND EXAMThe requirements for demonstrating qualifications in the area of planning theory are thefollowing:

## 1. Course Work

Satisfactory performance (B or higher) in UP 650 and UP 660. In addition, students entering doctoral study without a M.U.P. or equivalent must take UP 540 (Planning Theory) unless they have previously taken an equivalent course. (Students are also encouraged to enroll in UP573, Urban \& Regional Theory.)

## 2. Planning Theory Exam

After completion of both UP 650 and UP 660, the student completes a take-home planning theory exam. Students normally take the exam during May following the second year of coursework. (In exceptional situations a student may request to take the exam at another time of year.) The examination committee consists of three faculty members (generally the two instructors of UP 650 and UP 660, plus a third faculty member such as the student's advisor). While the exam may be tailored somewhat to the particular interests of a given student, it is standardized for the most part and is intended to evaluate the student's comprehension of the various literatures covered by the theory course and ability to synthesize those materials. The exam is graded on a "Pass," "Conditional Pass" or "Fail" basis. If the student does not achieve a passing evaluation, he/she may take the exam one additional time to achieve a "Pass" or "Conditional Pass" status. A "Conditional Pass" indicates that additional requirements must be met, but the exam need not be retaken. (Note: the theory exam has no oral exam component.) On format: for the planning theory exam and all other requirements, please submit your work
to each committee member in hard copy (paper) format unless the instructor requests an electronic file version.

## ANALYTIC METHODS

Students are expected to be skilled in at least two analytic research techniques (in addition to statistics) and reasonably knowledgeable about several others. They are also expected to display substantive knowledge of planning theory, and a primary and a secondary area of specialization. The means for demonstrating these qualifications are as follows.

## ANALYTIC METHODS

Students qualify in analytic techniques by completing the following:

1. Satisfactory performance ( $B$ or higher) in two cumulative graduate level statistics courses. Students entering with previous statistics experience may wish to enter directly into a second semester statistics course.

In the past, students have typically selected one of the following sequences:

- Statistics 402 (Introduction to Statistics \& Data Analysis), Statistics 403 (Statistics \& Data Analysis II)
- Sociology 510 (Statistics); Sociology 610 (Statistical Methods)
- Natural Resources 438 (Natural Resources Biometrics), Natural Resources 538 (Natural Resources Data Analysis)
- Biostatistics 503 (Introductory Biostatistics), Biostatistics 523 (Biostatistical Analysis for Health-Related Fields)

NOTE: Students wishing to study statistics during the Spring or Summer Terms may want to check out the Summer Program in Quantitative Methods of Social Research sponsored by the Inter-university Consortium for Political and Social Research (ICPSR) and/or the Summer Institute in Survey Research Techniques conducted by the research staff of the Survey Research Center, Institute for Social Research. Choice of courses to meet requirements should be discussed with your advisor.
2. Competence in at least two analytic/research methods. These are methods used in planning research and should prepare the student for his/her likely area of dissertation work. The requirement is met through completion of nine credits
of course work in two analytic/research methods (in addition to statistics), to be defined by the student in conjunction with his or her advisor. (The two methods may be interrelated.) Depending on the research method and the student's background, more courses may be needed. Courses in these two areas must be completed with median grade of $B+$ or better in order to fulfill this requirement; no course completed with a grade of lower than a B- may be used. Graduate level courses that are audited can count for this requirement, as long as the student completes all the work of the course and the instructor provides a letter indicating the grade the student would have received had he or she been enrolled. Normally, students are expected to take coursework to expand their expertise in research methods; however previous graduate level coursework in research methods (completed with a B+ or better) can be considered for this requirement. All plans for satisfying this requirement are the joint responsibility of the student and his or her advisor.

Numerous analytic/research methods are appropriate. The methods a student selects should relate to his/her dissertation area. Below are several analytic/ research methods in which students have been examined in recent years. Students need not be restricted to choices on the list. These methods include: anthropological methods; case study methods; complex systems analysis; cost benefit \& cost effectiveness analysis; decision theory \& general risk analysis; demographic analysis; discrete choice analysis; differential equations; diffusion models; economic \& other forecasting models; evaluation research; graph theory; historical analysis; institutional analysis; interview techniques; linear programming and general analysis using linear models; network \& flow methods; population growth models; probability, both theoretical \& heuristic; simulation/gaming \& game theory; spatial analysis/geographic information systems (GIS); survey research; time series; Markov processes.

## PRIMARY AND SECONDARY AREAS OF SPECIALIZATION

## PRIMARY AREA OF SPECIALIZATION (I.E., MAJ OR FIELD REQUIREMENT)

Students are expected to demonstrate an understanding of the literature, theory, and methods from a primary area of specialization. Each student defines this area of specialization in consultation with his/her faculty advisor(s). An area of specialization
might be, for example, transportation planning, community development planning, regional planning, environmental planning, and so on. If appropriate, a student may further focus their area of specialization by demarcating a subfield within a broader planning topic, such as economic development finance within local economic development.) Students take graduate-level course work in the appropriate discipline(s) and complete a comprehensive examination (described below). During the first semester in the program, each student should meet with his/her advisor(s) to:
a. Discuss the student's goals and interest in doctoral study and identify an area of specialization.
b. Develop a program of study indicating courses to be taken, or courses that have been taken, covering the appropriate literature (theory and method) for the area of specialization. Students will normally take coursework totaling approximately 12 to 15 credit hours for the area of specialization. (Note: One or two courses taken for the master's degree may apply for either the primary or secondary areas of specialization, but master's level work normally should not be relied upon too extensively for the purposes of doctoral-level study.)
c. As three of these credit hours, a student is expected to take a directed study course with his/her primary advisor and a second faculty reader during either the winter term of the first year or the fall term of the second year of study. The purpose of this directed study is to conduct a literature review that will demonstrate the student's ability to review and synthesize a body of academic work and that will advance the student's efforts toward identifying a topic for dissertation research. The directed study is evaluated on a pass/fail basis; initial drafts must be revised until they are of passing quality.

## SECONDARY AREA OF SPECIALIZATION (I.E., MINOR FIELD REQUIREMENT)

In addition to the primary area of specialization, each student must also identify a secondary area of specialization (i.e., a "minor field" or "outside field") in consultation with his/her faculty advisor(s). The secondary area of specialization is typically from a discipline outside urban and regional planning (examples include urban politics, urban history, urban sociology, demography, development economics, environment and behavior, etc.). Students normally take at least 6 to 9 credit hours in this secondary
area. Students demonstrate sufficient knowledge in this secondary area (and their ability to integrate the secondary area into their main area of specialization) through their comprehensive examination.

## COMPREHENSIVE EXAMINATION

The comprehensive exam tests a student's knowledge of both their primary and secondary areas of specialization. The exam consists of a take-home, written examination followed by an oral exam. The examination normally occurs during the third year in the Ph.D. program, after completion of all relevant coursework.

## 1. The Committee

The student convenes an examination committee of three faculty members, choosing faculty who have expertise in the areas of specialization. At least one member of the committee should be a member of the Urban and Regional Planning faculty. The chair or co-chair of the committee must be a regular member of the URP faculty and cannot be an affiliate faculty member. At least one committee member should represent the student's secondary area of specialization. (If the student has identified a secondary area of specialization that is traditionally housed in another department on campus, then the student is encouraged to select a faculty member from that outside department as their third committee member.) On occasion, examiners from outside the University have served on students' examining committees. While this practice is generally discouraged, written requests for an outside examiner by students are treated on an individual basis by the Coordinator of Doctoral Studies.

## 2. The Field Statement

The student meets with the committee to identify appropriate readings and other expectations prior to the construction of the exam. In consultation with the committee, the student prepares a detailed "field statement" that defines the primary and secondary fields, contains a detailed bibliography of readings, organizes the readings into subfields, and outlines a set of major questions for the fields. This field statement is analogous to a detailed syllabus that one would prepare for a year-long graduate-level course on the selected specializations. The student often writes possible exam questions that he/she feels are appropriate for the area the exam will cover. The questions are not the questions the committee
asks the student; their major function is to help the committee and the student to agree on the scope of the exam.

## 3. Scheduling the Exam

The exam is scheduled on the student's initiative and is normally taken no later than one year following completion of the coursework in the program of study. A student may delay the exam for exceptional circumstances with approval of his/her faculty advisor. Exams are not normally scheduled during the summer unless there are extenuating circumstances. Students should notify the Program Administrator of their intent to take the exam and provide him or her with dates, times, location of the exam, and names of committee members.

## 4. The Exam

The written part of the exam is in the form of a take-home essay exam. (The committee chair solicits exam questions from the committee, selects questions to be used, and composes the final examination.) The allotted time period to write the exam is determined by the chair, and typically is over 3-4 days. This is followed by an oral exam, generally scheduled to take place one to several weeks after the written exam. The exam is evaluated on a "Pass/Fail" or "Conditional Pass" basis. If the student does not achieve a passing evaluation, he/she may take the exam one additional time to achieve a "Pass" or "Conditional Pass" status. A "Conditional Pass" indicates that additional requirements must be met, but the exam need not be retaken. Upon completion of the oral portion of the exam, the committee chair will send an examination report to the Program Administrator.

## LANGUAGE REQUIREMENT

## FOREIGN LANGUAGE REQUIREMENT

There is no foreign language requirement for Ph.D. students in U.T.E.P. However, work in some areas of specialization and on certain research/dissertation topics may require a knowledge of one or more foreign languages.

## ENGLISH LANGUAGE PROFICIENCY REQUIREMENT

Prior to taking the qualifying examinations, students are also expected to demonstrate writing skills in the English language of the sort required to produce a doctoral dissertation. Such writing skills will be demonstrated in the process of completing routine written assignments in core courses. Students having difficulty doing so are encouraged to take course work at the English Language Institute and/or other units, as appropriate and subsequently are required to take an English Proficiency Examination prior to taking the qualifying examinations.

## TYPICAL SCHEDULE OF COURSES

Following is a typical sequence of courses for Ph.D. students in urban and regional planning.

## YEAR 1

## Fall Term

- UP 650 or 660 Theory
- UP 540 (for non MUP students) and/or Elective
- Statistics I
- Elective (methods/specialization)


## Winter Term

- Directed Study (Literature Review) or Elective
- Statistics II
- 2 Electives

YEAR 2

## Fall Term

- UP 835 Research Design
- UP 650 or 660 Theory
- Directed Study (Literature Review) or Elective
- Elective


## Winter Term

- UP 835 Research Design
- 3 Electives


## Spring/Summer Term

- Planning Theory Exam (typically offered in May)


## YEAR 3-4

- Comprehensive Exam (scheduled by student; typically taken at the end of the second year or during the third year of study)
- Dissertation Prospectus (reviewed and approved by URP Ph.D. Candidacy Hearings Committee)
- Advancement to Candidacy
- Dissertation Proposal (reviewed and approved by student's dissertation committee)
- [dissertation research and writing]
- Dissertation Defense
- Submission of dissertation final version


## TYPICAL COURSE SEQUENCE

## Year 1 Fall

Theory (UP 650 or 660)
UP 540 (for non MUP
students) and/or Elective
[Statistics I]
Elective (methods/
specialization)

Year 2 Fall
UP 835 Research Design
Theory (UP 650 or 660)
Directed Study (Literature
Review) or Elective Elective

Winter
Spring/Summer
Directed Study
(Literature Review)
or Elective
[Statistics II]
Elective
Elective

Winter
UP 835 Research Design
Spring/Summer
Planning Theory
Elective Exam (normally
Elective given in May)
Elective

Year 3 - Comprehensive Exam (scheduled by student; typically taken during the summer or fall after two years of doctoral studies)

- Advanced to Candidacy

Year 4 - Dissertation Proposal (reviewed and approved by student's dissertation committee and the URP Doctoral Committee)

- [dissertation research and writing]
- Informal "Full Draft Review" (at least 6-8 weeks before the formal defense)
- Dissertation Defense
- Submittal of final version of dissertation


## U.R.P. PH.D. APPLYING FOR CANDIDACY

The student is advanced to candidacy when all requirements except the dissertation proposal and dissertation have been satisfied. (Any incompletes critical to satisfying program requirements must be made up before applying for candidacy.)

The normal time to achieve candidacy is two years from date of first enrollment in the doctoral program. Students who take longer than four years need to document a clear rationale for their slow progress.

Once the student has successfully completed all coursework, the theory exam and the comprehensive exam, the student is to schedule a meeting with the Doctoral Coordinator. The student should bring a copy of the URP Ph.D. "Compliance Form" that indicates the satisfactory completion of all degree requirements except the dissertation proposal and dissertation. The Compliance Form is an integral part of the student's record, and records the completion of requirements and various approvals. The form is available online at: http://www.tcaup.umich.edu/urpphd/studentresources/index. html . The student is responsible for maintaining this form and for making sure a current duplicate form is on file with the URP doctoral program administrator.

The Compliance Form has five pages:

1. Theory Requirement: Courses and Exam
2. Research Design \& Methods Requirement: Courses
3. Primary and Secondary Fields: Courses and Comprehensive Exam
4. Evidence of the equivalent of eight months of full-time work experience (teaching, research, or practicum) in a planning-related situation must be submitted and approved by the student's advisor or the Coordinator of Doctoral Studies. Work experience before entering or while enrolled qualifies equally.
5. Dissertation Proposal Approval (Note: this requirement is completed AFTER advancing to candidacy).

In order to advance to candidacy, the student must also meet Rackham requirements (http://www.rackham.umich.edu/OARD/Candlnfo.html). These requirements include:

1. Students must be enrolled (for a minimum of one credit) during the term in which they take their preliminary examinations. For URP Ph.D. students this means the term in which the comprehensive exam is taken.
2. A minimum GPA of 5.0 (B)
3. Completed a minimum of 36 Rackham Fee Totals (RTFs). This requirement is reduced to 18 RFTs if the student has a "relevant master's". [see Rackham Fee Totals (RFTs)]
4. Coursework-in-Residence: Complete 18 hours of graduate coursework in residence on the Ann Arbor campus.
5. Complete at least 4 hours of cognate graduate coursework (coursework outside the Urban and Regional Planning Program) with a grade of " C -" or better.

Once the student has satisfied all these requirements, the Doctoral Coordinator will formally nominate the student for candidacy (by signing and submitting the "Recommendation for Candidacy" Form). When a student becomes a candidate, he or she is considered ready to do the dissertation and is eligible for UP 995 candidacy registration.

## RACKHAM FEE TOTALS

"Rackham Fee Totals" are essentially an adjusted number of credit hours taken per semester. The maximum one can earn per semester is nine.; Full-time enrollment (9 or more credits) earns a student 9 RFTs per semester. The Rackham Graduate School requires a student to accumulate at least 68 Rackham Fee Totals (RFTs) in order to graduate, 36 of which must be accumulated prior to admission to doctoral candidacy. Students who enter with a relevant master's degree will have the minimum Rackham
fee total requirement reduced by 18. (Most students entering the URP doctoral program do have a "relevant master's.")

RACKHAM FEE TOTALS REQUIRED BASED ON PRIOR GRADUATE WORK

| Without | With | With a Rackham |
| :--- | :--- | :--- |
| a "relevant | a "relevant | master's degree |
| master's" degree | master's" degree | (e.g., a MUP |
|  | (Not from Rackham) | from Michigan) |


| RFTs needed |  | 18 | 36 |
| :--- | :--- | :--- | :--- |
| to advance to |  |  |  |
| candidacy |  |  |  |

Total RFTs
needed
68
50
68
to graduate

Note: Though a master's degree from Rackham does not get counted as a "relevant master's," students may count all RFTs accrued during their Rackham master's program. (A student with a MUP from Michigan will therefore have already typically earned 36 RFTs.)

## CERTIFICATE OF CANDIDACY

When OARD receives your Recommendation for Candidacy Form, the staff will review your academic record to determine if you have completed all of the Rackham requirements for the doctorate except the dissertation, and that you have met the minimum Rackham Fee Totals for coursework done prior to Candidacy. Once that information has been verified and the Candidacy process has been completed, you may request a Certificate of Candidacy. From http://www.rackham.umich.edu/ StudentInfo/Publications/GSH/html/doctoral.html.

## U.R.P. PH.D. FROM CANDIDACY TO DISSERTATION

This final stage of the doctoral program involves several steps: formation of dissertation committee; approval of the dissertation proposal; dissertation research; an informal "Full Draft Review" meeting; a formal, public dissertation defense; and final approval and submittal of the dissertation.

## FORMATION OF DISSERTATION COMMITTEE

Immediately after completing the comprehensive exam and advancing to candidacy, the student should form a dissertation committee and schedule a dissertation proposal hearing. (The student may also initiate this process of committee formation even before advancing to candidacy.) The student must receive approval of the proposal within six months after advancing to candidacy. The Rackham Graduate School defines rules and regulations governing dissertation research and preparation. Dissertation committees must have at least four members, three of whom are regular members of the Graduate Faculty, and two of whom are from the doctoral candidate's home program. The chair or one of the co-chairs must be a member of the urban planning program faculty. The committee must also have a Cognate member who is familiar with the standards for doctoral research and holds at least a . 50 appointment in a Rackham doctoral program other than the Urban and Regional Planning Program. Finally, the committee may include a University faculty member who is not a regular member of the Graduate Faculty, a University staff member, or a qualified individual outside the University to provide expertise in the candidate's discipline.

Once the dissertation committee is finalized, the student should complete a dissertation committee nomination form (http://www.rackham.umich.edu/OARD/ pdf/disscommittee.pdf) and give to the Doctoral Coordinator for submission to the Rackham Graduate School. For detailed dissertation committee formation guidelines visit the Rackham graduate school website at http://www.rackham.umich.edu/ OARD/pdf/disscommitteeguidelines.pdf.

The Chair/Co-Chairs, as well as the student, should provide the Program Administrator and the Coordinator of Doctoral Studies with periodic progress reports. Both should be kept aware of what is occurring in the dissertation process and all scheduled events (including the proposal hearing and the defense).

APPROVAL OF THE DISSERTATION PROPOSAL: FORMAL HEARING
The student must formally obtain approval of the dissertation proposal within six months after advancing to candidacy. Any post-candidacy financial aid will be contingent on the timely approval of the dissertation proposal. The steps to approval include:

1. Schedule a one-hour "dissertation proposal hearing" (to be attended by both the dissertation committee and the URP Doctoral Committee). Schedule this meeting well in advance so that all members can attend. This meeting should take place no later than three to six months after achieving candidacy. Reserve a room for the hearing.
2. Work with the chair and dissertation committee on the proposal. This process consists of several iterations of draft review \& comment over a several month period. The proposal presents the research topic, the research question(s), a detailed research design, the methods to be employed, data sources and relevant theory and literature. It is a detailed research plan, very much like a proposal for a sponsored research project. The proposal needs to present a clear statement of the problem or issue that will be dealt with, what the candidate intends to do and how it will be done.
3. Provide a full-length hard copy of your draft proposal (suggested length: 25-35 pages) to each member of the dissertation committee AND the URP Doctoral Committee at least two weeks before the scheduled hearing. (The URP Doctoral Committee will assist the dissertation committee in determining appropriate revisions needed before final approval.)
4. Convene the proposal hearing (a short presentation followed by Question \& Answer). The student, the dissertation committee and the URP Doctoral Committee attend the proposal hearing. Obtain approval of the proposal from the dissertation committee (or conditional approval subject to additional revisions).
5. Post-hearing: If necessary, work with the dissertation chair to make any necessary additional revisions.
6. Once the proposal is approved, the student should complete the "Dissertation Proposal Approval" page in the URP Ph.D. Compliance Form (page 5): dissertation proposal title and abstract, plus dissertation chair signature. An approved proposal constitutes readiness to proceed with dissertation work.

SAMPLE SCHEDULE TO COMPLETE DISSERTATION PROPOSAL (YEARS 2-3)

Year 2
Sep.-Apr.

Develop initial Theory Comprehensive
research Exam Exam, advance
proposal in
UP835

Year 3
Sep. Sep.-Nov. Nov.-Mar.

## DISSERTATION RESEARCH

Though the structure and methodologies of the dissertation research vary widely by candidate, topic and dissertation committee, all dissertation projects are governed by Rackham Graduate School regulations regarding human subject matter, the use of copyrighted material, etc. Please see the "Graduate Student Handbook" for details: http://www.rackham.umich.edu/Studentlnfo/Publications/GSH/html/doctoral.html.

## INFORMAL FULL DRAFT REVIEW (FDR)

The student is required to schedule an informal "Full Draft Review" (FDR) meeting with the dissertation committee at least 6-8 weeks before the anticipated formal dissertation defense. The meeting is to enable the identification of any significant issues in the dissertation that demand attention, and to give the candidate the opportunity to address them in the document before the public defense. This procedure is designed to eliminate, as much as possible, surprises during the oral defense in the form of committee concerns of which the candidate had not been aware previously.

The candidate should provide a complete hard copy draft of the dissertation to the committee at least two weeks prior to the "Full Draft Review" meeting. This allows the committee sufficient time to read and comment in advance of the informal meeting. Remember that committee members' personal availability may vary, so please confirm needed lead-time with each committee member.

## FORMAL PUBLIC DISSERTATION DEFENSE

The dissertation defense consists of two parts: the first is a formal, public presentation of the dissertation research, followed by questions and answers from both the committee and the audience. (Defenses are advertised and open to the public, and other students and faculty are frequently in attendance.) The second part is a closed session for the candidate and the dissertation committee. During the defense, the candidate may be asked to reconsider certain aspects of their work and to make certain changes or corrections in the dissertation. At the end of the session, the chair will discuss the oral defense with other members of the committee and inform the student of their assessment. The duration of the defense varies, but the candidate should reserve the room for a 2-3 hour period.

Final scheduling of the defense will depend on the outcome of the informal "Full Draft Review" meeting with the candidate and committee. For each degree conferral date, the Rackham Graduate School has specific deadlines for both the dissertation defense and formally submitting the final version of the dissertation. (see http://www. rackham.umich.edu/OARD/doctoraldeadlines.htmI). Though the Urban and Regional Planning faculty recognizes that candidates often want to have a precise defense and graduation date set far in advance, the timing of the final dissertation stages is contingent on the outcome of the "Full Draft Review" meeting, the formal defense, and the amount of revisions required by the committee.

Be sure to also schedule a separate pre-defense meeting with a representative from Rackham's Academic Records and Dissertations Office at least two weeks before the defense.

The student should deliver a revised completed draft, with changed or added areas highlighted clearly, to the committee members at least two weeks (or more) before the defense. Be sure to include the dissertation abstract (an official part of the document). The candidate must also distribute Rackham dissertation evaluation forms to each committee member, which the candidate will receive at the Rackham re-defense meeting.

The student must be registered for an 8 -hour candidacy enrollment (995 Dissertation Research) for the term in which the student defends. For detailed instructions on the defense requirements, see the Rackham Student Handbook (http://www.rackham. umich.edu/StudentInfo/Publications/GSH/html/contents.html).

FINAL APPROVAL AND SUBMITTAL OF DISSERTATION
The final approval of the dissertation, as with the defense, is primarily governed by Rackham rules. At your Rackham "Pre-Defense Meeting" you will receive detailed instructions about the final requirements needed for graduation, including applying for graduation, needed dissertation copies, format, etc. See: http://www.rackham.umich. edu/StudentInfo/Publications/GSH/html/doctoral.html.

## URBAN + REGIONAL PLANNING COURSES

## U.R.P. UNDERGRADUATE COURSES

## UP 263 (RCNSCI 263, ENVIRON 263) Energy + Environment

Prerequisites: None
(4 credit hours)
This course introduces the concepts of energy and the environment, which then serve as a basis for discussion of pollution, scarcity of resources, technological impacts, and the future of humankind. Topics include a survey of non-renewable and renewable resources and current energy use patterns, nuclear power issues, and the prospectus for and problems with alternative energy scenarios.

## UP 402 Undergraduate Experimental Course

Prerequisites: None
(3 credit hours)
The topics for this course vary each semester. This course is intended to provide undergraduates with an introduction to urban studies and urban and regional planning through special topics.

## UP 423 (ARCH 423, ENVIRON 370: This course originates in Urban Planning)

Introduction to Urban and Environmental Planning
Prerequisites: None
(3 credit hours)
This is an Undergraduate Course. This overview course explores urban and environmental planning issues and problems and reviews the ways planners grapple with them. Speakers from within and outside of the University describe the content of the issues and state-of-the-art intervention programs and techniques. Topics covered include the origins and history of urban planning, the legal aspects of planning, planning for sustainable development, metropolitan growth and urban sprawl, urban design, housing and real estate development, transportation planning, environmental planning, planning for open space and historic preservation, brownfield redevelopment, waste management, and third world development.

## UP 426 (CAAS 426) Urban Redevelopment and Social J ustice: Can We Have Both? A Seminar For Future Professionals

Prerequisites: None, (3 credit hours)
Taught from the perspective of a registered architect, this course is organized around topical issues of design, professionalism, and equity in urban resources development. Intended primarily for students with non-architectural backgrounds, the course seeks to provide a spirited exploration of the explicit (and subtle) connections between people, land, and power in our cities and the specific effects of these linkages upon contemporary urban rebuilding. In the main, our explorations are aimed at providing a broadened philosophical understanding of the Who? and Why? of contemporary urban redevelopment policies particularly as such policies impact on the emerging central city.

## U.R.P. GRADUATE COURSES

## UP 406 (GEOG 406: This course originates in Urban Planning) Introduction to Geographic Information Systems

Prerequisites: None
(3 credit hours)
This course provides an introduction to Geographic Information Systems (GIS) technology and how it may be applied to solve urban planning problems. Emphasis is on basic principles and concepts of GIS, theory and tools of spatial analysis, and broad exposure to GIS applications such as land use, infrastructure, and environmental planning. Topics include the history of GIS, hardware and software requirements, spatial data types, data formats and sources, spatial analysis techniques, making maps and reports, and fundamentals of database design.

## UP 443 (Arch 443: This course originates in Architecture) History of Urban Form

 Prerequisites: None(3 credit hours)
This course offers a study of the historical development of the physical form of western cities from ancient times to the present. The course will deal primarily with European and North American cities under the following headings: Ancient and Classic, Medieval, Renaissance and Baroque, and Modern (nineteenth and twentieth centuries). Cities of Asia, Africa, and Latin America will be included where possible and applicable.

## UP 492 (ENVIRON 492, NRE 492) Environmental Justice Domestic and International

Prerequisites: None
(3 credit hours)
This is primarily a lecture course. Information in the course includes:

1. The definition of environmental racism, environmental equity, environmental justice, and environmental advocacy,
2. Key research issues in the field of environmental justice which include race vs. income, intent vs. non intent, pollution prevention vs. pollution control, cause and effect vs. association;
3. Understanding energy and its relation with environmental justice,
4. The social structure of accumulation vs. the social structure of sustainability,
5. Comparing issues of environmental justice within the U.S. and within developing countries; and
6. Comparing the Basel Treaty and the Organization of African Unity's ban on the transport of toxic waste internationally.

## UP 500 Professional Practice/Planning Research

Prerequisites: None
(1 credit hour)
This course is intended for first-year urban planning students and those in other professional schools. It is designed to introduce students to various aspects of planning practice, policy, and research as reflected in the work of professional planners and members of the urban and regional planning faculty."

## UP 502 Environmental Planning: Issues and Concepts

Prerequisites: None
(3 credit hours)
This is an introductory graduate-level course on the issues and concepts underlying environmental policy-making and planning, with a focus on the United States. Rather than concentrating on one particular type of planning method (e.g., cost-benefit analysis, impact assessment, site design), the principal goal of the course is to address value-based and analytical conflicts that are common to environmental policy-making and planning processes employed in the U.S. and abroad. The course is designed to: provide students the ability to recognize and tease apart the competing values and
analytical assumptions made by various stakeholders in environmental policy-making and planning debates; consider how those debates are shaped by and play themselves out within the political, legal, and administrative processes that characterize environmental policy-making and planning in the U.S.; and familiarize students with the various forms of contemporary environmental policy-making and planning practice that they will likely encounter in their professional work.

## UP 503 Introduction to Statistics

Prerequisites: None
(3 credit hours)
This course is intended primarily for students who have no background in statistics and should be taken before UP 504. It introduces statistical concepts such as probability, descriptive statistics, tests of differences in populations, correlation, and linear regression. The course will familiarize students with computerized spreadsheets and statistical packages. The course meets for eight weeks.

## UP 504 Quantitative Planning Methods

Prerequisites: URP 503, statistics course, or permission of instructor Term: Winter (3 credit hours)
This course introduces students to some of the quantitative methods and techniques used in planning practice and urban research. We will cover computer applications for data analysis, including some computer lab time scheduled periodically through the semester. Analytic approaches include research design, multivariate regression, population forecasting, survey research, case study research, evaluation, and graphic data presentation. The emphasis is on methods in the context of planning and urban policy research, and matching the method to the problem.

## UP 505 Fundamentals of Planning Practice,

Prerequisites: None
Term: Winter (3 credit hours)
Students are introduced to planning practice by generating a complete master plan during the course of the semester. The class teaches techniques associated with problem identification, assessment of issues, and formulation and articulation of final recommendations. There is an emphasis on strong written, graphic, and oral communication skills as a basis for critiquing class performance.

## UP 507 Geographic Information Systems

Prerequisites: UP 406 or comparable introductory GIS course, or permission of instructor
(3 credit hours)
This course enables students who have taken the introductory course (UP 406) to advance their skills in the use of Geographic Information Systems. Several advanced GIS techniques are presented to help students deepen their analytical capabilities using spatial data. Topics to be covered include network analysis (e.g., pipeline flows, waterways, travel routing, and costs, facility service areas, and traffic flow); spatial data analysis (e.g., raster modeling, interpolating point data, density analysis, and neighborhood statistics); and an introduction to visualizing spatial data through 3D modeling. The course also introduces students to several statistical and computational approaches to quantifying spatial patterns and identifying clusters and outliers in spatial data. The course also further deepens skills in applying GIS as a tool for studying urban problems. Students work on case study projects drawn from local communities.

## UP 510 Public Economics for Urban Planning

Prerequisites: None
Term: Fall (3 credit hours)
This is a course in the application of microeconomic modes of reasoning to problems that planners address. The course begins with an overview of the economist's analysis of the relationship between markets and efficiency, including concepts of supply and demand, elasticity, marginalism, opportunity costs, consumer surplus, market competition, and equilibrium. The course then delineates efficiency- and equity-based rationales for planning, and explores how economic modes of thinking can aid in the design of planning interventions to alter market outcomes. This section of the course also considers strengths and weaknesses of both planning and market solutions in various contexts. Finally, the course applies economic modes of thinking to specific planning problems, developing tools of benefit-cost, cost-effectiveness and fiscal impact analysis, together with an exploration into the economics of transportation, pollution, and land use regulation. MUP students lacking previous coursework in microeconomics should enroll in this course; all other MUP students are welcome as well.

## UP 513 Legal Aspects of the Planning Process

Prerequisites: None
Term: Fall (3 credit hours)
This course provides a survey of the legal context in which the planning process takes place. In a two-credit module required of students for the master's of urban planning degree, the constitutional and statutory sources, and limits of government power at the federal, state, and local levels are examined. Attention is given both to the traditional legal tools that planners have utilized, such as eminent domain, zoning, and subdivision controls, and to newer legal techniques, such as timed development and transfer of development rights. A one-credit module examines intergovernmental and regulatory issues that planners often confront. Examples are drawn from land use, environmental planning, and other areas. The course can be taken as a whole for 3 credits or students may enroll for the 2 credit hour required module. The student has an opportunity to become familiar with legal materials and with judicial and administrative procedures. A student who has taken the 2 credit hour module or its equivalent may register for the 1 credit hour module alone.

## UP 517 (BA 517: This course originates in Urban Planning) Real Estate Essentials

 Prerequisites: NoneTerm: Fall (3 credit hours)
This survey course seeks to put architectural, urban planning, business, law, and public policy students together to understand how residential, office, retail, and research/industrial space gets built and why. Key topics include law, appraisal, finance, brokerage, property management, asset management, and development. The course will teach everyone how to analyze every type of real estate, from your own home purchase to a healthy or not-so-healthy downtown to an investment opportunity. You will learn how to recognize a good deal from a bad deal; how to rent, buy, or build your own commercial space; and how the key members of a development team depend upon one another for any type of real estate construction.

## UP 518 Physical Planning Workshop

Prerequisites: None
(4 credit hours)
This course provides an overview of basic theory, principles, and skills involved in planning for the physical environment. The course is taught primarily in a studio format in which the students learn by undertaking real or applied problems. The objective of the course is to provide students with a basic understanding of physical and land use planning, and to provide them with the rudimentary skills including graphic communication skills necessary for producing a physical plan.

## UP 519 (ARCH 519) Theories of Urban Design

Prerequisites: Graduate standing or permission of instructor
(3 credit hours)
The seminar is designed as a critical and collective inquiry into theories of urban design in order to develop an in-depth, interdisciplinary approach toward a more meaningful urban design for the future. Through a series of readings, discussions, case studies, presentations, and research work, students focus on deficiencies and opportunities in current urban design approaches, and formulate their own perspectives and strategies of urban form intervention, based on a critical understanding of the fundamental nature of cities versus the nature of thinking in the field of urban design.

## UP 520 Urban Land Use Planning

Prerequisites: None
(3 credit hours)
Urban land use planning will provide a broad overview of major land use planning issues from the perspective of the professional planner. Students will learn the fundamentals about the planning and development process including how to: review site plans, develop master plans, revise development standards, write staff reports and inspect development sites. Important planning tools and techniques will be applied to sustainable land use practices such as natural features protection, infill development, brownfield mitigation, neo-traditional development and urban waterfront redevelopment. Speakers and field trips will provide a first hand glimpse of the major land use issues that planners deal with everyday. This course will be helpful to anyone interested in working as a public or private sector planner.

## UP 523 Regional Planning

Prerequisites: None
(3 credit hours)
This course will provide an introduction to the history, tools, and future of regional planning. We explore the disparities between regional idealism and the actual practice of regional planning and management. We examine the lack of regional planning in the United States both as an example of American exceptionalism and as a myth. Emphasis will be on advantages and obstacles to regional planning for environmental protection, economic development, social justice, and land regulation.

## UP 526 (ARCH 526) Sociocultural Issues in Planning and Architecture

Prerequisites: None
(3 credit hours)
Throughout US history, socio-cultural factors have influenced the formation of places, and consequently, social relations and conditions within them. Yet, the fields of planning and architecture have traditionally not emphasized issues such as race, ethnicity, gender, class relations, immigration status (among other) as central topics to be addressed. The purpose of this course is to examine socio-cultural issues and their significance to planning and architecture practice and education. The course has three main goals:

1. Students will gain an understanding of the historical role that social and cultural factors have played in shaping the current context within which planning and architecture work takes place;
2. Students will engage in critical examination of theories and practices that shape the fields of planning and architecture and their social implications; and
3. Students will reflect on the current and desired roles carried out by planners and architects in deliberately or inadvertently affecting social conditions.

## UP 527 Infrastructure Planning in the U.S. and Developing Countries

Prerequisites: Graduate standing
(3 credit hours)
The course will take a comparative perspective in addressing infrastructure delivery issues in the U.S. and developing countries: What are the current theoretical perspectives on the cause of inadequate infrastructure, and on potential solutions to this problem? What are the potential roles of the state, private sector, and
organizations of civil society in infrastructure delivery? What approaches are being attempted currently, and how successful have they been? Emphasis will be on water, sanitation, sewerage, and power. The course will draw heavily on case studies from Asia, Latin America, Africa, and the U.S. Class will be conducted in a seminar format, and students will also engage in in-class debates on controversial issues, including potential role of decentralization, privatization, and community-based approaches to infrastructure delivery. Students will also be required to write a term paper on a topic of their choosing.

## 532 Sustainable Development: Resolving Economic and Environmental Conflicts

Prerequisites: No formal prerequisites, though some prior coursework in economic development and/or environment planning/policy is useful.
(3 credit hours)
A growing body of evidence suggests that human populations world-wide are not living on the earth in ways that can be sustained indefinitely given current patterns of natural resource consumption, population growth, land development, and institutional arrangements. In response to this predicament, the concept of sustainable development has become prominent in popular and academic policy-making and planning debates over the past decade. Does the notion of sustainable development itself offer any useful guidance for making public policy and planning decisions, or is it merely an attractive oxymoron that different interests can agree on only at an abstract level? The goal of this class is to explore this question in depth. The course begins by considering the variety of ways in which our current lifestyles, locally and globally, are not sustainable, and then works through the concept of sustainable development from different vantage points: in terms of fundamental principles, scale (from global to local), and institutions, policies, and laws. Finally, the course addresses a variety of policymaking and planning prescriptions that have been offered and assesses whether and how those various prescriptions will likely work in practice. Working in groups, students test these theories of sustainability by applying them to selected client communities in Michigan.

## UP 534 (NRE 599) Conception, Practical Issues and Dilemmas in Environmental

 J usticePrerequisites: Undergraduate sociology, psychology and economics (3 credit hours)
This course will explore theoretical and analytical models and specific case studies to increase student understanding of environmental justice.

## UP 537 Housing Policy and Economics

Prerequisites: None
Term: Winter (3 credit hours)
The objective of this class is to provide students with an understanding of policy and planning in housing, and the role of regulation in housing development, delivery, and choice. The course will address the economic, political, legal, and social forces that shape the housing stock and its use by owner-occupiers and tenants. We will examine the policies and programs that are currently in place, and their effect on the quality and affordability of housing. The first part of the course will provide a broad conceptual understanding of the basic economics of housing supply and demand, including the economic and financial aspects of housing delivery, the legal and administrative framework in which housing is developed, and the way households make housing choices and adjust their housing consumption. The second part of the class will focus on housing policy and planning to examine how affordable housing is delivered by both government and non-profit actors in the national, local, and community levels. The final part of the class will examine a variety of issues such as the links between housing and neighborhood transition, housing and transporation, and housing and local public finance.

## UP 538 Economic Development Planning

Prerequisites: None
(3 credit hours)
This course offers an introduction to ways of thinking about the functioning of regional, urban, and local economies and the implications for planning economic development. The course examines regional and metropolitan industrial locations, processes of development and growth, international and inter-regional trade, labor markets, and migration. Close attention is given to how planning intervention can influence the location, speed, and character of growth.

## UP 539 Methods for Economic Development Planning

Prerequisites: None
(3 credit hours)
This course provides students with background in some of the methods used by economic development planners to understand a local economy and to identify directions for planning action. Students learn to use the methods, understand and critique reports that use the methods, and assess the problems of a local economy. Methods include location quotients, shift-share analysis, input-output, retail trade area analysis, industry sector analysis, and others.

## UP 540 Planning Theory

Prerequisites: None
(3 credit hours)
This is a course in the theoretical foundations of planning. This course will stress basic tools that will help you to invent new solutions to new problems in the real world. We will use case studies of urban regions across the US for class discussion to both bring theory to life and allow us to test established planning theory against real urban problems. We will cover the historical foundations of planning, the classical theoretical paradigms of planning, an examination of the major roles played by practicing planners, and finally the application of those theories and roles to the case study and to larger problems of environmental limits, economic globalization, and increasing social disparity.

## UP 560 (NRE 560: This course originates in NRE) Behavior and Environment: The Psychology of Human-Environment Interaction

Prerequisites: None
(3 credit hours)
This course deals with two central themes. First, environmental problems are people problems, requiring an understanding of how people think, what they care about, and the conditions under which they behave most reasonably and creatively. Second, human behavior makes the most sense when studied in the context of the environment, both present and evolutionary. The course builds a model of human nature based upon research in the field of environmental psychology. The course will explore such topics as environmental perception and knowledge; preferred environments and coping with the failure of preference; and mental attention fatigue and restoration. It then
applies this model to such issues as common property resource management and the psychology of sustainability. The course is cross-disciplinary both in emphasis and student population with the disciplines of natural resource policy, planning and management; environmental education and communication; conservation behavior and conservation psychology; landscape architecture and urban planning, and green and sustainable business typically represented.

## UP 564 Integrative Real Estate Seminar

Prerequisites: None
Term: Winter (2 credit hours)
A survey seminar regarding the various progressive approaches to real estate development, including downtown revitalization, conservation development, New Urbanism, etc. It will also review the history of conventional development, progressive project financing, and public policy such as smart growth and regionalism.

## UP 565 (FIN 565: This course originates in the Business School) Real Estate Development

Prerequisites: FIN 318 or UP 517
(3 credit hours)
This course provides a practical, realistic exposure to public or private development while understanding how marketing, design, financing, and environmental issues interrelate. This course is a complement to UP 613 (Architect/Planner as Developer) and to UP 517 (Real Estate Essentials). In this course, students work as a team typically composed of MBA-Marketing-Oriented, MBA-Finance-Oriented, Architecture or Urban Planner and a third-year law student to research and develop a feasible plan for a relevant immediate development opportunity.

## UP 566 Structuring Real Estate Financial Deals

Prerequisites: A microeconomics course; UP517/BA517 or UP613/ARCH517 or permission of instructor
(3 credit hours)
Using case studies, this course will give students the opportunity to work through the structuring of financing or alternatives for the structuring of financing for a range of complex real estate deals that involve public, nonprofit, and private sector developers. The perspective is that of the developer.

## UP 568 Real Estate and Urban Development

Prerequisites: None
(3 credit hours)
This course examines the role of real estate in the formation of cities and regions drawing on research and concepts from urban and regional planning, political science, economics, geography, business, history, and other pertinent fields. The course looks at issues such as the historical emergence of real estate development, real estate growth machines and regimes, real estate rent-seeking in the succession of land use, political economy theories of real estate abandonment and gentrification, the role of real estate in racial segregation, and the impact of globalization on real estate.

## UP 569 Organizations and Management in Urban Planning

Prerequisites: None
(3 credit hours)
Urban Planning happens in organizations. That is true whether the topic is international development, housing, land use, transportation, the environment, or economic development. Your ability to make a difference in any of these fields depends partly on your ability to influence the behavior of organizations. This course will help you develop the knowledge and skills you need to do that. It will cover a range of topics including strategic planning, mission statements, contracting for services, human resource management, operations management, and public relations. By making heavy use of case studies drawn from many different planning fields, the course will offer students with a variety of interests the opportunity to learn about organizations relevant to their concerns. Assignments will include field experiences analyzing real planning organizations and focused analysis of management issues based on case studies.

## UP 572 (GEOG 472: This course originates in Urban Planning) Transportation and Land Use Planning

Prerequisites: Permission of instructor
(3 credit hours)
This course explores the interrelated systems of urban transportation and urban land use to discover principles and ideas that can be useful in developing plans that affect the two. The course covers four broad areas:

1. Transportation Planning History: What assumptions and approaches have guided domestic transportation planning? How do transportation planning's roots and
traditions affect current practice? In what ways did transportation planning and technologies interact to produce evolving city forms?
2. Transportation and Land Use Theory: What frameworks have been developed to understand the interrelationships between transportation and land use, and how might these affect how we view potential transportation planning alternatives?
3. Transportation Planning Techniques: Formal approaches to modeling domestic land use and transportation systems in the past few decades. We explore these approaches as well as their limitations.
4. Urban Transportation Policy: Alternative definitions of the transportation problem can lead to different directions for policy. We explore various contemporary transportation planning concerns and approaches to dealing with them.

## UP 573 (NRE 573: This course originates in Urban Planning) Urban and Regional Theory

Prerequisites: None
(3 credit hours)
This course surveys theories on the existence, size, location, and functioning of cities and their metropolitan areas in rich and poor regions of the world. It examines the development of urban form from the earliest settlements to the contemporary city, and it considers the political, economic, social, and cultural reasons for the formation and change of urban society. This seminar is intended to provide participants with an introduction to key principles and concepts or theories used by social scientists to explain urban growth and change in the broad field of urban theory, and to help students to recognize the distinctions between theories and understand their strengths and weaknesses when drawing upon them in planning practice. The course focuses on the relationship between political and economic processes and their joint influence on urban spatial form. It considers conventional treatments by planners, geographers, economists, and sociologists as well as the perspective of political economy. These theories are indispensable for understanding the origins of cities, the persistence of urban and regional spatial patterns, and the distinctive nature of urban problems.

## UP 576 (NRE 576: This course originates in NRE) Ecological Design Approaches to Brownfield Redevelopment

Prerequisites: None
(3 credit hours)
This course will draw on practicing experts to introduce students in these disciplines to the wide-ranging issues that must be integrated for sustainable brownfield redevelopment: Iaw and public policy, public health, public perception, environmental justice, environmental health, risk assessment, remediation, land planning, real estate finance and construction. Readings, lectures, a field trip, a charette, and a workshop critique of student work by visiting experts will allow students to gain a breadth of knowledge of factors that interact to affect the success of brownfield redevelopment.

## UP 589 (PUBPOL 689: This course originates in Public Policy) Equality in Public Policy

Prerequisites: None
(3 credit hours)
Most of us expect the benefits and the burdens of public policies to be shared equitably. This course examines what that principle should mean, drawing on ideas from philosophy, law, and policy analysis. Topics will likely include racial profiling, affirmative action, environmental justice, transit equity, the CRA, and insurance discrimination.

## UP 590 Expanded Horizons

Prerequisites: Graduate standing
Term: Fall (1 credit hours)
In this course, a city or urban region is selected for an intensive on-site field study. Meetings with various city and regional planning and planning-related professionals are held. In addition, tours of major urban development sites and programs are conducted. The trip is held early in the fall term. Students are expected to prepare a short paper reflecting on their experience upon their return. The trip is usually conducted over a three-day period at the end of the week.

## UP 594 American Planning 1900-2000

Prerequisites: None
(3 credit hours)
This course examines the development of American city planning in the twentieth century including consideration of pre-1900 and non-U.S. influences. We will emphasize the physical design of cities over time, the role of policy, and ideas about urbanization. The course will include visual case studies of US cities to illustrate the patterns of urban planning. We will examine the impact of events, issues, strategies, and planning practice throughout the century. The class is intended for planning students and architects; it is also open to students in non-planning fields such as natural resources, engineering, and the social sciences.

## UP 595 Program Evaluation for Urban Planning

Prerequisites: None
(3 credit hours)
This course provides an overview of the theories, issues and practice of program evaluation as it relates to urban planning and policy making. Using a combinationof case studies and hands-on projects the student develops an understanding of the purpose of program evaluation, the evaluation process, the role of protgram evaluation in urban planning and policy making, and critical issues and limitations of evaluation. Students are introduced to techniques for selecting best evaluation approaches and appropriate methods; collecting, analyzing, and interpreting data; and developing recommendations.

## UP 598 (PUBPOL 692: This course originates in Public Policy) Thinking

 About CrimePrerequisites: Permission of instructor
(3 credit hours)
As Chief of the New York City Police Department, William Bratton was fond of saying that the crime rate has the same meaning for a police department as profits have for a business that the crime rate is the bottom line of policing. In this course we will question this common view of what goals should govern society's response to crime, exploring how concern with crime itself should and does compete with other aims like due process, retribution, and equity. This range of goals, not the single goal of crime reduction, both justifies public efforts to control crime and motivates important policy
actors. These goals offer a framework for assessing crime control strategies, and we will develop it fully by reviewing classic and contemporary readings in philosophy and criminal justice. We will then use this framework to analyze current proposals for crime control in a variety of institutional settings, from the traditional criminal justice system (including sentencing policy, policing, corrections, and gun control) to increasingly important areas outside of it (including private-sector responses to crime, such as private security and gated communities; and social welfare responses, such as youth development).

## UP 610 Fiscal Planning and Management

Prerequisites: None
Term: Winter (2-3 credit hours)
Fiscal Planning and Management is designed to provide urban planners and related professionals with the methods of public financial management and analysis used in urban planning and public policy contexts. The course includes topics such as fiscal planning and mangement systems, budgeting, revenues, intergovernmental relations, debt financing, fiscal analysis, public investment analysis, and fiscal impact analysis. The course requires lecture and seminar sessions, independent reading, a short paper, and problem sets. The focus is on the practical and professional rather than the theoretical aspects of fiscal planning. The first part of the course is a two-credit module required of students for the master's of urban planning degree. The last part of the course continues with quantitative applications of the principles learned in the first part of the course. Students may enroll either for the 2 -credit-hour portion or for the entire 3 -credit-hour course. Students are assumed to have a basic understanding of microeconomics.

## UP 613 (ARCH 517) Architect/Planner as Developer

Prerequisites: Graduate standing
(3 credit hours)
This lecture/seminar course focuses on the knowledge and skills associated with the planner/architect working as, or with, a real estate developer in the U.S. The emphasis is on the integration of planning, marketing, site analysis, development regulation, and financial analysis with site design. While the project involves a medium density residential development, methods applicable to office projects are covered as well. Previous computer or design experience is not required.

## UP 614 Negotiation and Dispute Resolution

Prerequisites: None
(1.5 credit hours)

This half-semester course presents the basics of negotiation and interest-based dispute resolution upon which principled negotiation and other alternative dispute resolution methods are founded. It is designed for students with no prior background or experience in the fields of negotiation or dispute resolution. Students will learn about the negotiation process, different types of negotiation, negotiation strategies and alternative dispute resolution methods. Students will also explore the processes of negotiation and dispute resolution methods applied to urban planning contexts. Lectures, case studies, simulations and other materials will be used throughout the course.

## UP 631 (NRE 631) Land Use and Physical Planning Studio

Prerequisites: UP 518 and 519 or permission of instructor
Term: Winter (6 credit hours)
This is a professional practice course emphasizing an interdisciplinary approach to the preservation, conservation, and design of urban areas. The course is designed to fulfill the requirements established by the urban design and physical planning concentration guidelines as well as to act as one of the key studio courses for students pursuing the combined degree programs leading to dual master's degrees in architecture and urban planning and in urban planning and landscape architecture. Students from architecture, landscape architecture, and urban planning work individually and collaboratively on design problems, such as urban infill housing, urban space, and the design and preservation/conservation of urban areas.

## UP 634 Integrative Field Experience

Prerequisites: UP 505 and permission of instructor
Term: Fall + Winter (6 credit hours)
A one- or two-term capstone experience involving second-year students working with community-based organizations or with agencies concerned with neighborhood issues in Detroit and occasionally in Flint. Following general introduction and orientation to the planning topic and the neighborhood, students work intensively in collaboration with neighborhood leaders and residents in improving their situation. Students produce a plan to deal with the community-identified need. Plans often address strengthening
housing, reinforcing neighborhoods, revitalizing commercial districts, relieving transportation difficulties, dealing with contaminated sites, reinforcing industrial areas. Students will make presentations at community or agency meetings throughout the semester. (3 or 6 credit hours)

## UP 650 Advanced Urban Theory

Prerequisites: UP 540 or permission of instructor
Term: Fall of even-numbered years (3 credit hours)
This is an intensive reading seminar on contemporary conceptual challenges in planning and urban development, with an emphasis on urban intellectual history and critical social theory. It is intended for both doctoral students and master's students interested in deepening their understanding of ideas in planning, urban theory, and urban history. Themes may include: the rise of twentieth century planning thought in its broader social context; urban political economy; modernism and the failure of social engineering; postmodernism and the privatization of public space; suburbanization, regionalism, and new urbanism; the impact of technological innovation on cities; networks and the information city; globalization and the persistence of the local culture; utopianism; and competing visions of the market and the state.

## UP 651 (SW 651: This course originates in Social Work) Planning for Organizational and Community Change

Prerequisites: None
(3 credit hours)
This course examines social planning at the community level. Social planning is a process to develop plans, policies, and programs related to human services. The course analyzes historical trends and changing contexts, major models and practitioner roles, alternative strategies and methods, and ethical dimensions of practice. It recognizes sociopolitical change and develops skills in several stages of planning. It emphasizes issues of the poor, minorities, and women.

## UP 652 (PUBPOL 652) Housing and Community Development: Concepts and History

Prerequisites: None
(3 credit hours)
This seminar develops a framework for crafting sensible housing and community development strategies. Several key goals of the field will be investigated including affordability, quality of life, community, and empowerment. Important eras in housing and community development history will be reviewed in order to understand how the field's goals have evolved over time. Studies will focus on the organizational, political, and economic challenges that face housing and community development and investigation of practical strategies for coping with them. Ideas developed during the seminar will be applied to several current debates about the nation's housing and community development agenda.

## UP 654 (SW 654: This course originates in Social Work) Concepts and Techniques of Community Participation

Prerequisites: SW 560 or permission of instructor
(3 credit hours)
This course examines concepts and techniques of citizen participation in public policy, planning, and administration. It analyzes the political economy of participation; selected strategies and skills; and new and emergent techniques to involve people in decisions from neighborhood to nation. Emphasis is placed on promoting participation of economically disadvantaged people, African-Americans, women, and other groups in multicultural communities. Course responsibilities include critical analysis of recent research and practice, experiential exercises, and in-depth student-selected study of participation in an actual organization or community in the field.

## UP 655 (SW 655: This course originates in Urban Planning) Neighborhood Planning

Prerequisites: None
(3 credit hours)
The course focuses on concepts and issues that characterize community planning for neighborhoods and explores interdisciplinary approaches to neighborhood analysis and intervention. The initiatives of community development corporations, city agencies, and the federal government are examined through lectures, readings, and guest
speakers. The central questions the course examines are: Why do neighborhoods experience prosperity or decline? Which approaches (e.g., economic development, urban design, social service delivery, housing rehabilitation, community organizing, and empowerment) are likely to be most effective in revitalizing neighborhoods? How do we assess existing approaches to neighborhood revitalization? Emphasis is placed on discovering appropriate information sources, learning to ask relevant planning questions and formulating program alternatives and recommendations.

## UP 656 Central-City Planning and Community Development

Prerequisites: None
(3 credit hours)
Central-City Planning and Community Development is designed to help students develop both theoretical and practical strength in understanding how to improve central cities. In addition to reviewing how central cities fit into the modern metropolitan context, we will focus on several approaches to improving central cities, such as comprehensive planning, growth management or containment, support for commercial areas, new urbanism as used in central cities, housing development, neighborhood rehabilitaion strategies, and enhanced transit. The course will also explore the special role of community development corporations and citizen participation in creating improved central cities.

## UP 658 Urban and Regional Planning in Developing Countries

Prerequisites: None
(3 credit hours)
This course is designed to emphasize the theories that underlie planning interventions in countries that are newly industrialized or industrializing. Countries such as India, J amaica, Malaysia, Guatemala, China, Thailand, Tanzania, Hong Kong, Venezuela, and Egypt, varying in size and historical antecedent, will be used for drawing illustrative case studies. The demographic, technological, and ideological changes that have resulted in unprecedented population growth and migration during the development decades will be reviewed. Responses to migration, housing scarcity, need for physical and social infrastructure, for jobs, and amenities will be studied.

## UP 660 Epistemology and Reasoning for Planning Research

Prerequisites: Doctoral student status or permission of instructor
Term: Fall of odd-numbered years (3 credit hours)
This course is one of the two required planning theory courses for Ph.D. students in Urban + Regional Planning (along with UP 650). The purpose of this course is to provide an advanced theoretical foundation for doctoral students as they make scholarly contributions to policy-oriented research on planning thought and practice. It reviews and critically evaluates various epistemological, methodological, and normative foundations of planning thought and practice, focusing in particular on planning and public policy making from a social science perspective. Students participate actively in the preparation of discussion materials for weekly discussion sessions and write a paper suitable for advancing the development of a dissertation topic and proposed research design.

## UP 671 Public Policy and Transportation

Prerequisites: Graduate standing
(3 credit hours)
This course examines surface transportation from a broad public policy perspective, providing an overview of transportation policy and planning. The federal government's role in transportation has changed significantly in the past decade, placing new mandates on the transportation planning profession that include enhanced attention to air quality and other non-mobility concerns such as promoting broader public participation, preserving the environment, and ensuring social equity. The course investigates this changing landscape for transportation planning and its implications for the relationships among federal, state, regional, and local authorities, mostly in the U.S. context but with some applications to developing countries. By introducing the principal laws and regulations that govern transportation planning decisions and by analyzing the most critical issues facing planners today, the course aims to help students develop creative and informed approaches to the techniques of transportation planning and the implementation of policies and regulations that serve broader values and goals. It encourages critical thinking about transportation decisions the politics behind them, their ethical implications, and their effectiveness at achieving their planning objectives. Other objectives are to become familiar with data sources and methods with an appreciation for the strengths and weaknesses of common analytical
techniques; to gain skills in reading transportation plans and policy documents; and to improve skills in writing and speaking about transportation issues.

## UP 680 Directed Study

Prerequisites: Permission of instructor
Term: Fall (1-4 credit hours)
A directed study is an original investigation into a planning problem. The subject for investigation will be selected by the student contingent on faculty advisor approval. NOTE: No more than 8 credit hours are counted toward the degree. Ph.D. precandidates may also take UP 680/681 (1-4 credit hours) as independent/directed study with a supervising URP faculty member in order to get in-depth background in subjects not covered in classes usually as they prepare for exams.

## UP 681 Directed Study

Prerequisites: Permission of instructor
Term: Winter (1-4 credit hours)
A directed study is an original investigation into a planning problem. The subject for investigation will be selected by the student contingent on faculty advisor approval. NOTE: No more than 8 credit hours are counted toward the degree. Ph.D. precandidates may also take UP 680/681 (1-4 credit hours) as independent/directed study with a supervising URP faculty member in order to get in-depth background in subjects not covered in classes usually as they prepare for exams.

## 682 Directed Study

Prerequisites: Permission of instructor
Term: Spring (1-4 credit hours)
A directed study is an original investigation into a planning problem. The subject for investigation will be selected by the student contingent on faculty advisor approval. NOTE: No more than 8 credit hours are counted toward the degree. Ph.D. precandidates may also take UP 680/681 (1-4 credit hours) as independent/directed study with a supervising URP faculty member in order to get in-depth background in subjects not covered in classes usually as they prepare for exams.

## UP 683 Directed Study

Prerequisites: Permission of instructor
Term: Summer (1-4 credit hours)
A directed study is an original investigation into a planning problem. The subject for investigation will be selected by the student contingent on faculty advisor approval. NOTE: No more than 8 credit hours are counted toward the degree. Ph.D. precandidates may also take UP 680/681 (1-4 credit hours) as independent/directed study with a supervising URP faculty member in order to get in-depth background in subjects not covered in classes usually as they prepare for exams.

## UP 685 Directed Study

Prerequisites: Permission of instructor
Term: Winter (1-4 credit hours)
A directed study is an original investigation into a planning problem. Subject for investigation will be selected by the student contingent on faculty advisor approval. No more than 8 credit hours counted toward degree. Satisfactory/Unsatisfactory grading.

## UP 690 Community Development Fieldwork

Prerequisites: Permission of instructor
Term: Fall (1-4 credit hours)
Community Development Fieldwork is work experience in planning situations. Under faculty supervision, students individually and in teams work for or give assistance to government agencies, commissions, and citizen groups. Sample projects include preparation of graphics for public hearings, data gathering for special reports (traffic impacts, potential markets for commercial development, etc.), survey research on specific issues, and advocating citizen interests. NOTE: No more than 8 credit hours are counted toward the degree.

## UP 692 Community Development Fieldwork

Prerequisites: Permission of instructor
Term: Winter (1-4 credit hours)
Community Development Fieldwork is work experience in planning situations. Under faculty supervision, students individually and in teams work for or give assistance to government agencies, commissions, and citizen groups. Sample projects include preparation of graphics for public hearings, data gathering for special reports (traffic
impacts, potential markets for commercial development, etc.), survey research on specific issues, and advocating citizen interests. NOTE: No more than 8 credit hours are counted toward the degree.

## UP 694 Community Development Fieldwork

Prerequisites: Permission of instructor
Term: Spring + Summer (1-4 credit hours)
Community Development Fieldwork is work experience in planning situations. Under faculty supervision, students individually and in teams work for or give assistance to government agencies, commissions, and citizen groups. Sample projects include preparation of graphics for public hearings, data gathering for special reports (traffic impacts, potential markets for commercial development, etc.), survey research on specific issues, and advocating citizen interests. NOTE: No more than 8 credit hours are counted toward the degree.

## UP 696 Special Focus Workshop

Prerequisites: Permission of instructor
Term: Fall, Spring/Summer (3 credit hours)
The topic of this course varies from semester to semester and generally concerns an emerging issue in urban and regional planning or an underdeveloped aspect of the curriculum. New courses are often offered under this title before they are adopted as regularly offered courses. One-time courses by visiting faculty are also offered under this title.

## UP 697 Special Focus Workshop

Prerequisites: Permission of instructor
Term: Winter (3 credit hours)
The topic of this course varies from semester to semester and generally concerns an emerging issue in urban and regional planning or an underdeveloped aspect of the curriculum. New courses are often offered under this title before they are adopted as regularly offered courses. One-time courses by visiting faculty are also offered under this title.

## UP 733 Planning Thesis/Professional Project

Prerequisites: Permission of instructor
Term: Fall (3 credit hours)
The thesis or professional project is limited to students pursuing a master's degree who are in their final year of study. It may be taken in lieu of UP 634 or UP631. It offers students an opportunity to engage in an in-depth theoretical or empirical study or a professional activity. Students normally work under the direction and guidance of a single faculty member and must submit and secure approval of a written proposal that describes in detail the proposed thesis and a timetable for completion.

## UP 734 Planning Thesis/Professional Project

Prerequisites: Permission of instructor
Term: Winter (3 credit hours)
The thesis or professional project is limited to students pursuing a master's degree who are in their final year of study. It may be taken in lieu of UP 634 or UP631. It offers students an opportunity to engage in an in-depth theoretical or empirical study or a professional activity. Students normally work under the direction and guidance of a single faculty member and must submit and secure approval of a written proposal that describes in detail the proposed thesis and a timetable for completion.

## UP 835 Ph.D. Research Seminar

Permission of instructor
Fall and Winter (1-4 credit hours)
This year-long seminar has three objectives. First, it exposes students to various approaches to research related to planning. Second, it enables students to formulate and test out researchable topics among faculty and student peers. Finally, it gives students experience in developing an appropriate research design, in executing the research, and in formally presenting it to an audience of faculty and students at the April symposium.

## UP 990 Ph.D. Dissertation Pre-candidate

Prerequisites: Election for dissertation work by doctoral student not yet admitted as a Candidate
Term: Fall, Winter, Spring, and Summer (Fall, Winter, Spring/Summer: 1-8 credit hours each; Spring, Summer: 1-4 credit hours each)

## UP 993 (ARCH 993) Teaching Methods for GSIs

Prerequisites: Architecture or Urban Planning GSI
Term: Fall and Winter (1 credit hour)
Methods and techniques of teaching are demonstrated to Graduate Student Instructors (GSIs) through seminars, workshops, and personal instruction by senior faculty. GSIs are taught the various modes of teaching used in the College and the types of instructional techniques they are expected to perform. Since most of the courses in the College are unique, senior faculty who use GSIs will independently instruct them on the special needs and methods used in their courses. Orientation seminars will also cover topics of ethics, deportment, College Rules, and other general areas of instruction that can affect GSI performance.

## UP 995 Ph.D. Dissertation Candidate

Prerequisites: Graduate School authorization for admission as a doctoral Candidate Term: Fall, Winter, Spring, and Summer (Fall, Winter, Spring/Summer: 8 credit hours each; Spring, Summer: 4 credit hours each) NOTE: The defense of the dissertation (the final oral examinations) must be held under a full-term Candidacy enrollment period (8 credit hours).

## URBAN + REGIONAL PLANNING FACULTY

Faculty members are accomplished and diverse, coming from a variety of educational backgrounds and possessing a wide range of professional experiences. They are award-winning planners, respected scholars, and leading researchers. Faculty are actively engaged in teaching, practice, and research in many fields. Cross-disciplinary efforts within the college and across the University are strongly encouraged and supported.

Douglas S. Kelbaugh FAIA is dean of the college. J onathan Levine chairs the Urban + Regional Planning Program. Scott D. Campbell coordinates the Ph.D. in Urban + Regional Planning program.

## Peter Allen

Lecturer in urban planning
Real estate essentials, public policy, finance, development, legal and brokerage aspects of real estate

## Phillip Bowman

Director of the National Center for Institutional Diversity
Professor in the Center for the Study in Higher and Postsecondary Education
Diversity issues in urban policy, planning, and higher education; quantitative methods in racial, ethnic, and African American studies

## Bunyan Bryant

Professor of urban planning and
natural resources
Environmental advocacy, policy, and justice

## Scott D. Campbell

Associate professor of urban planning Coordinator of doctoral studies in urban and regional planning Planning theory, environmental aspects of planning, quantitative methods, planning history

## Barry N. Checkoway

Professor of social work and urban planning
Social welfare planning, community organization, action and participation

## Lan Deng

Assistant professor of urban planning
Housing, real estate and urban economics

## Margaret E. Dewar

Professor of urban planning
Faculty director of the Edward
Ginsberg Center for Community
Service and Learning
State, local, and community economic development planning; planning for declining industries

## Eric Dueweke

Lecturer in urban planning

Robert B. Fishman
Professor of architecture and urban planning
Urban history, urban planning history, urban design, theory, regionalism

## J oe Grengs

Assistant professor of urban planning
Transportation planning and policy, urban politics, community development, planning methods, international development

## Elsie Harper-Anderson

Assistant professor of urban planning
Urban labor markets, urban + regional
economies, program evaluation

## J effrey Kahan

Lecturer in urban planning

## Douglas S. Kelbaugh, FAIA

Dean of the College of
Architecture + Urban Planning
Professor of architecture and
urban planning
Urban design, land use, New Urbanism

## Lidia Kostyniuk

Adjunct professor of urban planning
Travel behavior, transportation safety, mobility and accessibility

## Larissa Larsen

Assistant professor of urban planning and natural resources
Landscape planning, neighborhood design, social + natural capital

## Matthew Lassiter

Associate professor of history 20th century United States, urban/ suburban, political, social, Southern, popular culture

## Christopher B. Leinberger

Professor of practice in urban planning
Director of the graduate certificate in
real estate development
Downtown Redevelopment, Real
Estate Company Strategic Planning,
Metropolitan Development Trends,
Real Estate Development, Real
Estate Market and Financial Analysis

## J onathan Levine

Professor of urban planning
Chair, Urban and Regional Planning Program
Transportation and land use planning, transit planning and evaluation, markets and regulation in planning, public economics

## J une Manning Thomas

Centennial professor of urban + regional planning Mixed-income neighborhoods, neighborhood planning, and urban revitalization

## Richard Norton

Assistant professor of urban planning Environmental policy and planning, sustainable development, intergovernmental growth management, coastal area resource management, land use and planning law

## Gavin Shatkin

Assistant professor of urban planning Community and economic development planning, planning in developing countries, political economy of urban development

## David Thacher

Associate professor of urban planning and public policy
Public management, communitybased policing, housing policy

| AFFILIATE FACULTY | Frederick L. Goodman |
| :---: | :---: |
|  | Professor of Education, School of |
| Mark Chesler | Education |
| Professor of Sociology, |  |
| College of LS\&A | Ronald F. Inglehart |
|  | Professor of Political Science, College |
| Sheldon H. Danziger | of LS\&A; Research Scientist, Institute |
| Henry J. Meyer Collegiate Professor of Public Policy; Director, Research | for Social Research |
| and Training Program on Poverty | Laura Klem |
| and Public Policy; Senior Research | Senior Research Associate, Survey |
| Scientist, Population Studies Center | Research Center, Institute for Social |
|  | Research; Lecturer II in Psychology, |
| Raymond K. DeYoung | College of LS\&A |
| Associate Professor of Conservation |  |
| Behavior, SNRE | Michael R. Moore |
|  | Associate Professor of Environmental |
| Paul N. Edwards | Economics, SNRE |
| Associate Professor, School |  |
| of Information; Chair, Science, | J oan I. Nassauer |
| Technology and Society Program, | Professor of Landscape Architecture, |
| Residential College | SNRE |
| William H. Frey | Lawrence Root |
| Research Scientist, Associate Director | Director, Institute of Labor and |
| for Training, Population Studies Center; | Industrial Relations; Professor of Social |
| Adjunct Professor of Sociology, College | Work, School of Social Work |
| of LS\&A |  |

## Carl P. Simon

Director, Center for the Study of Complex Systems; Professor of Mathematics, College of LS\&A; Professor of Economics and Public Policy, Department of Economics

## Susan P. Wright

Lecturer III in History of Science, Residential College; College of LS\&A

## Frank D. Zinn

Director, Population Fellows Program, Center for Population Planning; Research Investigator, Health Behavior and Health Education Department, School of Public Health

## EMERITUS FACULTY

## Robert M. Beckley FAIA

Urban Design + Analysis, Housing,
Park Planning, Research + Methods

## Gerald E. Crane

Urban Design, Private Sector Roles in Urban Development

## Hemalata C. Dandekar

Development Planning for the Third World, Rural Development, Information Processing and Dissemination, Vernacular Architecture, Qualitative Methods

## Richard D. Duke

Gaming/Simulation, Policy Exercises

## Allan G. Feldt

Urban and Regional Theory,
Gaming/Simulation, Methodology,
Demographics, Development Planning

## J erold D. E. Lax

Legal Aspects of Urban Planning,
Land Use Control, Urban Planning
Administration, Conflict Resolution

## Robert W. Marans

Building/Program Evaluation, New
Community Development, Neighborhood
Quality, Retirement Housing, Recreation
Behavior and
Planning, Global Environmental Change

## J ohn D. Nystuen

Theoretical/Mathematical Geography, Transportation and Land Use Analysis, Nutrition and Health Planning, Global
Environmental Change, Geographic
Information Systems

## Mitchell J. Rycus

Energy and Technological Planning, Urban
Security, Quantitative
Research + Methods

## J ames C. Snyder

Architect as Developer, Fiscal Planning
and Analysis, Urban Security, Private
Development Process and Analysis,
Physical Planning, Research + Methods

## Alan W. Steiss

Strategic Planning, Management
Planning, Public Budgeting,
Fiscal Management

## Kate P. Warner

Housing Systems, Manufactured Housing,
Equity Planning,
Neighborhood Planning

## University of Michigan

For more information about planning at Michigan, visit our website at www.tcaup.umich.edu/urp/, send an email to urp@umich.edu, or call (734) 763-3075.


