



graduate handbook

university of massachusetts
amherst

UNIVERSITY OF MASSACHUSETTS, AMHERST
Department of Landscape Architecture and Regional Planning

This handbook is designed both to introduce prospective graduate students to the Master's degree programs in Landscape Architecture and Regional Planning and Ph.D. Program in Regional Planning and to provide current students with official information about the specific requirements, course offerings and other program and University regulations.

The first part of the handbook is intended primarily for prospective students, and contains a general overview of the Department and the University. The second part is oriented towards enrolled students who want to know "what am I supposed to do now?"

While every effort has been made to convey an informed idea of the programs available at the University of Massachusetts, **we urge you to visit us here in Amherst** as part of your application process. Attending graduate school is a major commitment, and the selection of the right program for you is an important decision. We are convinced that there is no substitute for individual conversation with faculty and graduate students, attending classes, seeing the Amherst area, the campus and the Department. Regardless of your final choice, a campus visit will be time and money well spent.

Should you decide to visit us, it is important that you write or telephone to arrange an appointment. Please write or call the appropriate Program Director:

Dr. Jack Ahern, FASLA, Department Head, (413) 545-6632
Professor Mark Lindhult, FASLA, MLA Program Director, (413) 545-6640
Dr. Mark Hamin – MRP Program Director, (413) 545-6608
Dr. Robert Ryan - MLA/MRP Dual Degree Program Director, (413) 545-6633
Dr. Ellen-J. Pader – JD/MRP Dual Degree Program Director, (413) 545-6620
Dr. Elisabeth Hamin - Ph.D. in Regional Planning Program Director, (413) 547-4790

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Sincerely,

Jack Ahern, Ph.D., FASLA
Professor and Head
Dept. of Landscape Architecture and Regional Planning

The URL for the Department web site is: <http://www.umass.edu/larp>

TABLE OF CONTENTS

THE DEPARTMENT

History of the Department	1
The University at a Glance.....	2
Departmental Philosophy.....	3
Organization Chart.	4

THE FACULTY	5
--------------------------	---

APPLICATION, TUITION AND FEES.....13

Financial Assistance	13
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DEPARTMENT PROCEDURES AND REGULATIONS

Appointment Procedure for TA's, RA's, and Internships.....	14
Admission Requirements	16
Degree Requirements	16
Procedures for Course Waivers, Advanced Standing and Credit Transfer	17
Faculty Advisors.....	17
Orientation Week.....	18
The First Day.....	18
Theses and Master's Projects.....	18
Miscellaneous.....	18

UNIVERSITY AND DEPARTMENT RESOURCES

Library Resources	20
Computer Facilities.....	21

THE LANDSCAPE ARCHITECTURE PROGRAM

Core Faculty	22
General Overview.....	22
Master's Program and Areas of Concentration.....	23
Degree Requirements	25
Core Curriculum for Landscape Architecture.....	26
Recommended Electives.....	29
Course Descriptions.....	35

THE REGIONAL PLANNING PROGRAM

General Overview.....	39
Core Courses	40
Recommended Sequence for Courses	41
Regional Planning Studios	42
Master's Program and Areas of Concentration.....	43
Course Descriptions.....	46

THE DUAL DEGREE OPTION IN LANDSCAPE ARCHITECTURE AND REGIONAL PLANNING

Admission	49
Curriculum	49
Credit Hour Requirements.....	49

Residency Requirements	50
THE COMBINED DEGREE IN LAW AND PLANNING (JD AND MRP)	
General Overview	51
Admission	51
Duration and Residency	52
Curriculum & Cross-Credits	52
THE PHD PROGRAM	53
Financial Support	53
Course Requirements	53
Foreign Language Requirement.....	54
Comprehensive Examination	54
Dissertation Supervisor and Committee.....	54
General Regulations of the Graduate School.....	55
YOUR MASTER'S THESIS OR MASTER'S PROJECT	56
Theses and Projects	56
Three-Course Option	57
Thesis and Project Deadlines	58
Meetings with Committee	58
Formal Defense/General Examination.....	58
Eligibility Form	59
Master's Thesis/Master's Project Abstract	59
Department Head Signature on Master's Project.....	59
Topic Selection of a Master's Thesis or Master's Project.....	59
Master's Thesis Guidelines.....	60
Master's Project Guidelines.....	61
Typical End Product of a Master's Thesis or Master's Project	62
Master's Thesis/Master's Project Schedule	63
Authorship Protocol for Funded Research	64

THE DEPARTMENT

A Very Brief History of the Department

The Department of Landscape Architecture and Regional Planning at the University of Massachusetts, Amherst was founded by Frank A. Waugh in 1903 as an undergraduate program in Landscape Gardening, the second such program in the United States. In the 99 years since then, the Department has grown substantially, changed its name, and developed a number of distinct instructional, research and outreach programs.

Bachelor's in Landscape Architecture (BSLA, BLA)

In 1930, the original Bachelor of Science in Landscape Gardening was changed to a Bachelor of Science in Landscape Architecture. At the same time, a Bachelor of Landscape Architecture (BLA) was awarded for a fifth year of study at the graduate level after the BS in Landscape Architecture. In 1959, the BS in Landscape Architecture was accredited by the American Society of Landscape Architects. Both options were suspended in 1966, and replaced by a Bachelor of Science in Environmental Design. Persons interested in landscape architecture were placed into the Design Option of this program after successful completion of a series of tests on graphic skills and creativity. In 1987, the Bachelor of Science in Landscape Architecture was resumed, and was accredited in 1990. It was most recently reaccredited in 2003.

Master's in Landscape Architecture (MLA)

The MLA was initiated in 1915 as a Master's in Landscape Gardening, changed three years later to a Master's in Landscape Architecture. It was first accredited by the American Society of Landscape Architects in 1971. The program was most recently reaccredited in 2001.

Associate's in Landscape Contracting (AS)

This program, part of the Stockbridge School of Agriculture, was initiated in 1923 as Horticulture, subsequently changed to Landscape Operations, and recently to Landscape Contracting.

Master's in Regional Planning (MRP)

This program was initiated in 1968, and in 1971, the name of the Department was changed to Landscape Architecture and Regional Planning to reflect a larger mission. However, it was not until 1976 that the MLA and MRP programs were administratively separated. The MRP was first accredited in 1987 and most recently reaccredited in 2002.

The Dual Degree Program (MLA/MRP)

Starting in the 1970's, an increasing number of graduate students selected courses that would allow them to receive both the MLA and the MRP with one additional year of study. This was formalized as a distinct program in the late 1980's, and almost ten percent of entering students now choose this option.

The Dual Planning and Law Program (JD/MRP)

In 1997, an agreement was signed with the Western New England College of Law that allows students to obtain both an MRP and a JD in four rather than the usual five years.

Doctorate in Regional Planning (Ph.D.)

This program was approved in 1988, and the first students were admitted in 1989.

Center for Rural Massachusetts

This Center was first established through an Act of the Massachusetts Legislature in 1984 as part of the then College of Food and Natural Resources, and assigned to the Department in 1990.

Center for Economic Development

This Center was transferred to the College of Food and Natural Resources from the School of Business in the late 1980's, and assigned to the Department in 1989.

In 1997, an agreement was signed with the Western New England College of Law that allows students to obtain both an MRP and a JD in four rather than the usual five years.

The University at a Glance (<http://www.umass.edu>)

1. The University of Massachusetts (Amherst) has an enrollment of approximately 25,000 students, 26% of whom are graduate students.
2. The University is comprised of 10 Colleges and Schools. The Department of Landscape Architecture and Regional Planning is in the College of Natural Resources and the Environment.
3. The Department of Landscape Architecture and Regional Planning is an academic administrative unit comprised of 2 year, 4 year, and graduate level programs. Total enrollment averages over 300 students. Currently, there are 15 full-time faculty, and 3 office staff in the department. Visiting and part-time adjunct faculty usually number between 6 and 8.
4. The size of a graduate class averages about 12 students.
5. The Department offers accredited Master's degrees in both Landscape Architecture (MLA) and Regional Planning (MRP) and a Ph.D. in Regional Planning. The time required for the MLA degree varies from two to three years depending on a student's background. The MRP program requires two years. Qualified students can earn both degrees with four years of study. The doctorate typically requires at least three years. There is also a dual-degree law and planning program that allows students to obtain both an MRP and a JD in four rather than the usual five years.
6. The town of Amherst is located in the Pioneer Valley, a part of the Connecticut River Valley. The town has a non-student population of 18,000. The University is located one mile from the town center. A free bus system serves the 1100-acre campus as well as the adjacent towns and the four colleges nearby: Hampshire, Mt. Holyoke, Smith and Amherst Colleges.
7. Almost all graduate students live off campus. However, because housing is somewhat scarce, we recommend that new students plan to arrange for housing in advance of arrival.

Departmental Philosophy

The common goal of all programs in this department is to encourage the appropriate use of land and natural resources, and to promote a harmonious distribution of human population on the land. We attempt to anticipate and adequately prepare for the impact of human life on the environment, and to resolve conflicts between the physical, economic and social needs of human beings and vital natural systems. We also have a special concern for aesthetics and for the psychological and emotional aspects of a designed environment.

Although the Landscape Architecture and Regional Planning graduate programs each have a special outlook, and a special body of techniques and approaches, the line between them is by no means sharply defined. Planning is the systematic analysis and resolution of the physical, economic, and social problems encountered by towns, cities and larger regions. Planning attempts to anticipate the consequences of various activities upon the land, the community and its people. Design, which is the province of all architecture, whether of land or buildings, is the conscious ordering of real life objects and events in three-dimensional space to further human purposes.

As a practical matter, all designers must plan and all planners must design. The programs and curricula of the Department of Landscape Architecture and Regional Planning attempt to promote the fullest possible interchange between these closely related, but often operationally distinct, points of view.

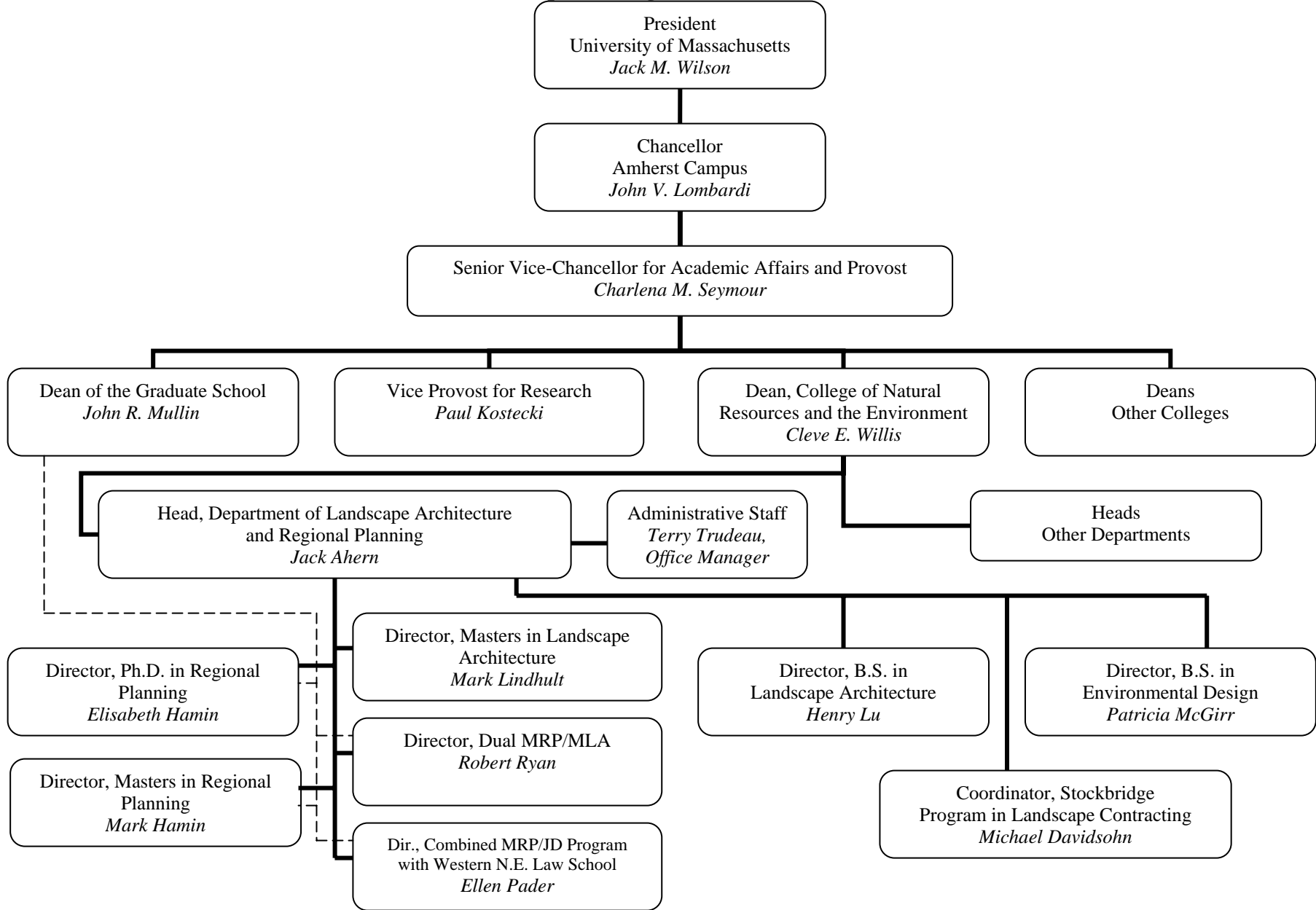
Accepting the fact that no single educational program or institution can fully encompass the complex cluster of disciplines involved in human-environment relationships, this department focuses on land and land-based resources as a central concept in planning and design. This concept is used as a unifying one for clearly there are few human concerns that do not, in one way or another, touch upon land.

While the physical environment unites concerns within the Department, examinations of the cultural, historical, political, and economic environments broaden and diversify interests in the Department. There is the recognition that different individuals and groups see various aspects of the environment differently. Students and faculty will perceive problems and solutions from divergent points of view. Thus, the Department's programs attempt to reflect the particular background, talents and research interests of its faculty, and to achieve the more difficult task of matching these with the talents, interests and aspirations of students. In addition, the program affords students the greatest possible opportunity to take advantage of other departments and institutes within the University and to cooperate closely with federal, state and local agencies, and the private sector, in solving problems of common concern.

As an academic department, our primary goal is to orient students to the professions of landscape architecture and planning and the special areas within that profession, which best suit individual student's abilities and interests. Secondly, students develop both breadth of viewpoint and technical competency in the widest possible range of activities, which are encompassed by the professions of Landscape Architecture and Regional Planning. Some general aspects of such an education are:

- an understanding of the basic natural resource constraints bearing on land-use activities
- an understanding of the cultural determinants of human behavior and the social, political, economic, and legal institutions influencing land-use decisions, and appropriate planning and design responses
- the capacity to communicate and work with specialists in other relevant fields
- a working knowledge of practices, processes, and techniques of analysis, synthesis and implementation used in the planning and design profession.

**University of Massachusetts
Department of Landscape Architecture and Regional Planning
Simplified Organizational Chart**



THE FACULTY

Each of the three graduate programs has a director and several core faculty members who have particular teaching responsibilities in Landscape Architecture, Regional Planning, and the Doctoral Program. These core faculty are listed within the descriptions of the three programs. In addition, all members of the Department faculty who have primary assignments in other programs are also involved in some way in the graduate programs. Thus students have the benefit of a relatively large number of academic staff, and are encouraged to discuss their interests and problems with any of them. Most of the Department faculty are also members of the graduate faculty and thus can participate on Master's thesis committees. This listing gives more detailed information on the core faculties of the Landscape Architecture, the Regional Planning, and the Ph.D. programs.

Faculty and their Specialties

Ahern, Jack F., FASLA: Professor of Landscape Architecture and Head of Department. B.S. in Environmental Design, University of Massachusetts, 1974; M.L.A., University of Pennsylvania, 1980, Ph.D., Wageningen University, 2002. Instructor of courses in plant materials, landscape ecology, landscape planning and design studios. Experience in private practice involving site and environmental planning and design. Research interests include: ecological basis for landscape planning design and management. Director of the Frank A. Waugh Arboretum, and the Center for Rural Massachusetts, UMass Amherst.

Bischoff, Annaliese, ASLA: Associate Professor of Landscape Architecture. B.A. in Art and German, Brown University; M.L.A., State University of New York in Syracuse. Teaches theory, writing, and design. Has written about cultural influences that shape landscapes. Interest in cultural landscape design. Winner of two ASLA merit awards in research and communication. Winner of several B.S.L.A. awards in design and communication. Recipient of Fulbright award as Senior Research Professor at the Technische Universität in Berlin. Past-president of the Council of Educators in Landscape Architecture. Former Director of the Junior Year Writing Program and former Associate Dean of the Honors Program at the University. Current faculty advisor at the Honors Program/Commonwealth College.

Cardasis, Dean, FASLA: Professor of Landscape Architecture. B.A. in American Literature from Ohio University; M.L.A., University of Massachusetts. Teaches design studios and graduate seminars exploring form and space in the light of recent cultural, political and economic developments. Director of the James Rose Center for Landscape Architectural Research and Design. Researches and publishes on modern and contemporary landscape design. Has received numerous professional awards at all levels both for new design and historic preservation initiatives, including the American Society of Landscape Architects' "Honor Award", the ASLA's "Classic Award" and the ASLA's "Centennial Medallion".

Carr, Ethan: Assistant Professor of Landscape Architecture. B.A. and M.A. in History of Art and Archaeology, Columbia University; M.L.A. Harvard University Graduate School of Design. Instructor in landscape history, landscape architectural theory, historic preservation and design studios. Has worked extensively with the National Park Service as a historical landscape architect. Author of Wilderness by Design – Landscape Architecture and the National Park Service, which received an ASLA award for research.

Davidsohn, Michael: Lecturer of Landscape Architecture. Director of the Stockbridge Landscape Contracting Program. A.S. in Landscape Operations, 1986 Stockbridge School of Agriculture; B.S. in Environmental Design, 1988 University of Massachusetts, LARP; M.S. in Landscape Architecture, 1992 University of Massachusetts, LARP. Courses taught in small-scale landscape design, surveying, construction materials, and small business management as it relates to landscape contractors. Owner of design/build firm specializing in private garden construction.

Deng, F. Frederic: Assistant Professor of Regional Planning. B.S. in Economic Geography, Beijing University; M.S. in Urban Planning, Beijing University; M.A. in Economics, University of Southern California; Ph.D. in Urban Planning & Urban Economics, University of Southern California. Instructor of quantitative methods and GIS. Current research interests include urban institutions, property rights, land use, urban economics, real estate market, and Chinese cities.

Hamin, Elisabeth M.: Assistant Professor of Regional Planning and Director of the Ph.D. in Regional Planning Program. B.A. in Business Administration, Cleveland State University; Masters of Management, Northwestern University; Ph.D. in City and Regional Planning, University of Pennsylvania. Instructor of growth management, and regional planning studio. Previous position as Assistant Professor at Iowa State University, Community and Regional Planning. Author of Mojave Lands: Interpretive Planning and the National Preserve, Johns Hopkins University Press, 2002.

Lindhult, Mark S., FASLA: Professor of Landscape Architecture and Director of the Master's of Landscape Architecture Program. B.S., Pennsylvania State University, 1977; M.L.A. and M.B.A., Illinois, 1980. Teaches courses in computer applications, site planning, and site engineering. Partner in The Berkshire Design Group, Inc., first computer editor for *Landscape Architecture* magazine, and author of numerous articles on computer applications. Currently working on a book about the integration of digital technology into the design process. Co-principal of The New England Greenway Vision Plan.

Lu, Henry T.: Associate Professor of Landscape Architecture and Director of the undergraduate program in Landscape Architecture. B.L.A., University of Georgia, 1989; M.L.A., Harvard, 1991. Teaches courses and studios in landscape architecture design, urban design, construction and graphic presentations. Experience in professional practice involving urban design, public open space design, institutional and corporate campus design and construction. Current research interests include landscape technology, interpretation and comparison of cultural and historical landscapes.

McGirr, Patricia L.: Associate Professor of Landscape Architecture and Director of the undergraduate program in Environmental Design. B.S. in Architecture, University of Michigan, 1984; M.L.A., University of Michigan, 1994. Teaches design studios, professional practice, and introduction to the visual environment. Professional experience in both architecture and landscape architecture. Research interests include social, historical, and cultural aspects of landscape, particularly as they relate to gender.

Mullin, John R., FAICP: Professor of Regional Planning, Director of the Center for Economic Development, and Dean of the Graduate School. B.A. in Government, Massachusetts, 1967; M.R.P., Community Planning and Area Development, Rhode Island, 1969; M.S.B.A., Boston University, 1972; Ph.D., Urban and Regional Planning, University of Waterloo, Ontario,

1975. Author of more than 100 articles on economic development, industrial planning and downtown revitalization. Fellow of the American Institute of Certified Planners.

Pader, Ellen-J.: Associate Professor of Regional Planning and Director of the JD/MRP Program. B.A. in Art History and English, Kenyon College, 1972; Ph.D. in Anthropology, Cambridge University, 1981. Major area of research is the cultural, social, and political facets of housing policy and design. Teaches courses on social issues in planning from inter-ethnic and cross-cultural perspectives, including: identifying discriminatory practices on the basis of ethnicity, race, gender and class; social change; housing policy and social policy. Has published on housing policy and design, social and spatial relations, and social theory. Fieldwork in Mexico, Cuba, the U.S. and Europe.

Ryan, Robert L.: Associate Professor of Landscape Architecture and Director of the Dual Degree MLA/MRP Program. B.S.L.A., California Polytechnic State University-San Luis Obispo, 1985; M.L.A. and M.U.P., University of Michigan, 1995; Ph.D. in Natural Resources and Environment, University of Michigan, 1997. Teaches courses in open space planning and research methods. Research interests include environmental psychology and landscape planning. Co-author of With People in Mind: Design and Management of Everyday Nature, published by Island Press, 1998.

Slegers, Frank: Lecturer of Landscape Architecture, M.L.A., University of Massachusetts, 1995 Dipl-Ing, Hannover, Germany, 1996. Teaches design studios in landscape architecture design. His lecture courses are in business management for landscape contractors and professional practice for landscape architects. He is a practicing landscape architect with an office in Hamburg, Germany. Contributing to the liveability of city life, his professional work includes numerous award winning competitions in urban design, parks, and plazas. Built works in landscape architecture include intimate gardens, roof top gardens, renewal of urban and regional parks. They are generated by the use of narrative images, transformed to make the landscape legible, and create a sense of place for people. A special point of interest and research is the building and organizing of site specific ephemeral art work in urban environments.

Volpe, Joseph S.R., Professor of Landscape Architecture. B.S., in Plant Science, University of California at Los Angeles, 1958; B.L.A., University of California at Berkeley, 1961; M.L.A., Harvard, 1964. Teaches courses and studios in landscape architecture design, including a foundation studio on landscape media and the definition of garden and landscape space, the studio in urban design, and seminars on current issues in planning and design. Has developed a system of teaching using a sequence of three-dimensional spatial models to understand the media of the landscape, landform, water, plants, and structures and to design human spatial experiences. Professional work includes both public and private practice in South America, New Zealand, France and North America on projects ranging from large-scale design to gardens. Professor Volpe explores the dynamics of landscape architecture as an art form and as a political and community process.

Adjunct Faculty and Lecturers

Brennan, Timothy, Adjunct Lecturer of Regional Planning. B.A. in Geography, State University of New York at Buffalo, 1970; M.R.P. University of Massachusetts, 1973; Intermediate and Advanced Diplomas in Urban Transportation Planning from the U.S. Department of Transportation, Washington, D.C. Since 1980, has served as the Executive Director of the

Pioneer Valley Planning Commission (PVPC), a public planning agency with 40 staff, an annual budget in excess of \$1.5 million and multifaceted planning programs, which cover land use, transportation, economic development, environmental protection and historic preservation, among others. Currently involved in start up efforts centering on the Institute for the Regional Planning Community, a new nationwide initiative by the National Association of Regional Councils.

Dodson, Harry L.: Adjunct Lecturer of Landscape Architecture and Regional Planning. B.A. in History and Literature, Harvard College, 1974; M.L.A., Harvard Graduate School of Design, 1980. Principal, Dodson Associates, Landscape Architects; founder, Franklin Land Trust.

Finn, John T.: Professor of Wildlife and Fisheries, Biology and Forestry, and Adjunct Professor of Regional Planning. B.S. in Biology, Georgetown University, 1970; Ph.D. in Ecology, University of Georgia, 1977. Primarily interested in producing dynamic models of ecological systems. Current interests include geographic information systems, digital remote sensing, population models (whale, bears) and construction of spatial computer models of landscape change.

Graham, Julie: Professor of Geography and Adjunct Professor of Regional Planning. B.A. in English Literature, Smith College, 1968; Ph.D., Clark University, 1984. Teaching interests are industrial development and change and social theory. Current research interests are alternative economic development and retheorizing the economy. Recently published *The End of Capitalism (As We Knew It)* (Blackwell, 1996) under the pen name of J.K. Gibson-Graham.

Hamin, Mark: Lecturer in Regional Planning and Director of the Master's of Regional Planning Program. B.A. History and B.A. Philosophy, Brown University; Ph.D. History and Sociology of Science, University of Pennsylvania. Instructor for Reg Pl 651: Planning History and Theory and Reg Pl 553: Sustainable Communities. Previous positions as Temporary Assistant Professor in Community and Regional Planning at Iowa State University and Adjunct Instructor at the University of Pennsylvania. Special research interests include: urban infrastructural and technological history; social-cultural perspectives on environmental risk, security, and 'quality of life' in cities; and changing food ecologies/economies.

Karson, Robin: Adjunct Lecturer of Landscape Architecture. M.A. in the History of Art and Museum Practice (University of Michigan, 1978). Executive Director, Library of American Landscape History (Amherst, Massachusetts), author (Fletcher Steele, Muses of Gwinn, Genius for Place, Pioneers of American Landscape Design/co-editor), numerous articles, research on subjects in American landscape history.

Kidwell, Jeanne M. Adjunct Professor of Landscape Architecture. B.S., History, Northeastern University, 1980; M.L.A., University of Massachusetts, 1985. Assistant Director, Office of Community Development, City of Chicopee; board member of various housing and environmental associations. Interests include urban rivers and greenways, constructed wetlands, economic development, neighborhood reinvestment, and large scale redevelopment projects.

Loomis, David K.: Associate Professor of Wildlife and Fisheries and Adjunct Associate Professor of Regional Planning. Ph.D. in Recreation Resource Development, Texas A&M University, 1988. Particular focus on the human dimensions of natural resource management as it

relates to outdoor recreation. Primary focus is on members of society who interact with wildlife, fisheries and forestry resources purposes. Recent projects include "Demographics and Angler Diversity: An Integrative Approach to Family Decisions" and "Allocation of Scarce Recreation Resources: Enhancing Support and Understanding for Management Decisions".

Mitchell, Robert P., Adjunct Lecturer of Regional Planning. B.A., History, Providence College, 1971; M.R.P., University of Massachusetts, 1973. Planning Director, Town of Amherst; Member AICP; President of the Massachusetts Chapter of the American Planning Association; Past President of the Massachusetts Association of Planning Directors. Interests include Growth Management, innovative zoning and development tools and techniques and their influence on community character, city planning history and town/gown relations.

Moriarty-Lempke, Maureen: Adjunct Lecturer of Regional Planning. B.A. English, University of Vermont; M.R.P. and Ph.D., Regional Planning, University of Massachusetts. Dissertation Topic: Planning in Divided Societies: An Analysis of the Relation Between Planning Reform and the Escalation of Violence in Northern Ireland During 1964-1968. Current position: Curriculum Development Assistant, Lincoln Institute of Land Policy.

Platt, Rutherford H.: Professor of Geography and Adjunct Professor of Regional Planning. B.A., Yale, 1962; J.D., University of Chicago, 1967; Ph.D., Chicago, 1971; Member, Illinois Bar. Research interests: urban development, environmental policy, floodplain wetland and coastal management. Lead editor of "The Ecological City" (University of Massachusetts Press, 1994) and author, "Land Use and Society: Geography, Law and Public Policy" (Island Press, 1996).

Rosenberg, Stanley: Massachusetts State Senator, Hampshire and Franklin District. Has served as Assistant Majority Leader, Chairman Senate Committee on Ways and Means. Prior experiences as State Representative and Administrative Assistant for Senator John Olver. Ongoing relationship with the regional and city administrations of Pskov, Russia working on economic development and legislative activities as part of a University of Massachusetts exchange program.

Shuldiner, Paul W.: Professor of Civil and Environmental Engineering and Adjunct Professor of Regional Planning. B.S. and M.S. in Civil Engineering, University of Illinois, Urbana, 1951, 1953; Ph.D. in Transportation Engineering, University of California, Berkeley, 1960. Teaches transportation policy and economics. Research in applications of video and machine vision technologies to transportation planning and traffic management. Directs Science, Technology and Society program of the Institute of Advanced Studies in the Humanities.

Taupier, Richard: Adjunct Assistant Professor B.A. Philosophy, University of Mass. M.S. Resource Economics, University of Mass. Ph.D. Regional Planning, University of Mass. Associate Director of the Environmental Institute, University of Mass. and Director of the Office of Geographic Information and Analysis. Principal interests include the application of geographic information systems to a wide range of environmental and natural resource planning needs, the economics of sustainable development, and regional developing within newly emerging democracies.

Washburn, Roger, ASLA: Adjunct Lecturer of Landscape Architecture and Principal of Roger Washburn Landscape Architecture. B.A. in Environmental Design, University of Washington, 1974. M.L.A. University of Massachusetts, 1980. Instructor at Radcliffe Seminars Graduate Program in Landscape Design, Radcliffe College, Cambridge, MA. Award-winning practice in private gardens, nonprofit and corporate landscapes.

Emeriti Faculty

- Bacon, Jr., Theodore S.: Professor Emeritus of Regional and Town Planning. B.A., History, Amherst; M.C.P., MIT. Extensive national and international experience in all aspects of town planning, management and administration. Formerly the Chairman of the Amherst Town Planning Board and the Lower Pioneer Valley Regional Planning Commission.
- Davis, Hugh C.: Professor Emeritus of Regional Planning. B.S., Rollins, 1950; M.S., Ph.D., Michigan, 1955, 1960. Has extensive experience with environmental planning and policy at both federal and state levels of government. Director of the Environmental Institute at the University of Massachusetts. Special interests: outdoor recreation, open space and environmental public policy and rural development.
- Dines, Nicholas T., FASLA: Professor of Landscape Architecture. B.S. in Landscape Architecture, Michigan State, 1966; M.L.A., Harvard, 1968. Research interests lie in design theory, adaptive responses to climate and computer applications to design and construction. Has offered national seminars for the American Society of Landscape Architects on "Energy Conserving Site Design", is a co-editor of a book published by McGraw-Hill entitled, Time Saver Standards for Landscape Architecture: Design and Construction Data, and is the author of a recently completed book entitled Landscape Perspective Drawing, also published by McGraw-Hill.
- Fábos, Julius Gy., FASLA: Professor Emeritus of Landscape Planning and recipient of an Honorary Degree from the University of Horticulture, Budapest, Hungary. B.S. in Plant Sciences, Rutgers, 1961; M.L.A., Harvard, 1964; Ph.D. in Resource Planning and Conservation, Michigan, 1973; Fellow, ASLA, 1985; ASLA Medalist, 1997. Principle developer of the METLAND System for landscape assessment and planning; has been awarded numerous research grants. Author and editor of more than 200 articles and research bulletins, as well as five books, the latest of which are: Land Use Planning, published by Chapman and Hall, 1985 and co-editor of the book entitled, Greenways: The Beginning of an International Movement, published by Elsevier, 1996.
- Gross, Meir: Professor Emeritus of Landscape Architecture. B.S. in Mechanical Engineering, 1964; M.R.P., 1972; M.A. in City Planning, 1976; Ph.D. in City and Regional Planning, 1979, University of Pennsylvania. Interests include the application of quantitative methods, computer techniques, information technology and Geographical Information Systems (GIS) to planning and policy analysis. Additional interests include urban form and infrastructure, spatial analysis, economic development and international planning.
- King, Gordon S.: Professor Emeritus of Arboriculture and Park Administration. B.S., Michigan State 1941; M.S., Massachusetts, 1956. Past President, International Society of Arboriculture. Major interests are in the use and care of shade and ornamental trees.
- MacDougall, E. Bruce: Professor Emeritus of Landscape Architecture and Regional Planning and Adjunct Professor in the Department of Geography. B.S., 1961 and M.S., 1962 in Forestry and Ph.D., 1967 in Geography, University of Toronto. Author of several articles on geographical analysis and two books, Computer Programming for Spatial Problems, (Edward Arnold, 1976) and Microcomputers in Landscape Architecture, (Elsevier Science Publishing Company, 1983). Current research interests include exploratory data analysis and user interfaces.

Martin, John H.: Emeritus Professor of Landscape Architecture, Bachelor of Architecture, 1950, Master's of Architecture, 1956, Brighton College of Art; Diploma in Landscape Design, University College, London, 1960; M.L.A., Harvard, 1967; Member, Royal Institute of British Architects, Member, American Society of Landscape Architects, Affiliate of the American Institute of Architects. Professional Registrations, Architecture (United Kingdom); Landscape Architecture (Massachusetts). An accomplished architect and landscape architect, artist and landscape historian.

Mosher, Harold E.: Professor Emeritus of Landscape Architecture. B.S., 1942; B.L.A., 1947; M.L.A., Massachusetts, 1957. Teaches courses in plant identification, ecology and physiography and the use of plants in the environmental design. Professional experience includes serving as a consultant to park systems and nursery managers. Interests include the consequences of human activity on fragile landscapes. Has undertaken fieldwork throughout North America and Europe, studying the problems of landscape degradation at alpine levels.

Procopio, Paul N.: Professor Emeritus of Landscape Architecture. B.S., 1941; M.S. in Horticulture, Massachusetts, 1954. Taught courses in landform, graphics and design studio. Professional work includes projects at the regional, town and city scales, with emphasis on land-use and community planning. Has served on program evaluation teams, the Landscape Architectural Accreditation Board and the Council on Education of the American Society of Landscape Architects. Was elected as a Fellow in the Society, 1983.

Scheffey, Andrew, J.W.: Professor Emeritus of Regional Planning. B.S., Haverford College, 1951; M.S., 1952; Ph.D., Michigan, 1958. Actively involved in agricultural development. Extensively experienced in resource policy planning and conservation in Massachusetts, as well as in Korea and Mexico. Special interests: resource policy, international development and environmental education.

APPLICATION, TUITION AND FEES

Tuition and fees are subject to change without prior notice. You may view all current fees at the University's Bursar's Office web page:

<http://www.umass.edu/bursar/fee.html>

Financial Assistance

While in graduate school, many students are in need of financial assistance. The Department offers a number of fellowships, assistantships, and work-study programs. Although preference is given to students already enrolled, entering students in need of financial aid are encouraged to discuss this possibility with the Department Head or their Program Director. The Department's ability to assist students financially varies from year to year.

Any student receiving an assistantship receives a tuition waiver plus the waiver of some fees for that semester. Funding promised to incoming students is guaranteed for the first year only. Incoming foreign students are encouraged to apply for a tuition waiver through the International Programs Office (<http://www.umass.edu/ipo/>). Current foreign graduate students with one of these waivers need to reapply during the spring semester of their first year for a waiver for the following year. They are not automatically renewed.

In addition, the university maintains an office dedicated to helping graduate students with grants and fellowships. The Graduate Students Grants Office can be reached by phone at 545-5279 or by e-mail at gsgs@ora.umass.edu.

DEPARTMENT PROCEDURES AND REGULATIONS

Appointment Procedure for TA's, RA's, and Internships

In accordance with GEO Union terms, the Department is required to have a written appointment procedure for each job classification. Concerning:

A) Requests for Funding

TA Positions: Candidates should notify their Graduate Program Director (GPD) of their interest/need for funding.

RA Positions: Candidates should notify their Graduate Program Director (GPD) of their interest/need for funding. Candidates should also directly contact faculty who are providing funding for RA positions.

Internship Positions: Candidates should notify their Graduate Program Director (GPD) of their interest/need for funding. When referred by the GPD, candidates may also directly contact the outside source that is providing the funding.

B) Deciding who will receive funding

TA Positions: Decided by the Department Head after consultation with the graduate and undergraduate program directors, and the faculty of the courses to which the TA positions are assigned.

RA Positions: Decided by the Faculty member who is providing the funding for the position in consultation with the GPD and Department Head.

Internship Positions: The GPD will first determine if the internship is associated/related with the candidate's program of study. After receiving the GPD's favorable recommendation, the decision and details regarding funding of internships belongs exclusively to the external organization, office or individual that is providing the funding.

C) Notifying people that they will receive funding

TA Positions: The Department Head is responsible for notifying TA's that they will receive funding. Students may be offered multi-semester TA positions. In such cases, faculty may expect students to remain available for the position.

RA Positions: The faculty providing the funding is responsible for notifying the candidate regarding funding decisions. Faculty may offer multi-semester opportunities for funding, and in such cases, may expect students to remain available for the position.

Internship Positions: The external funding source for the Internship is responsible for notification of internship funding, provided that the internship position has been approved by the GPD.

D) Posting of Job possibilities

TA Positions: The Department Head will notify graduate students of TA positions by means of the Department email notification system.

RA Positions: Individual faculty may post announcements for RA's on the Departmental email system, bulletin boards, or by other means including personal invitations.

Internship Positions: The Department Head and GPD's will maintain a bulletin board, and a notebook of Internship opportunities.

E) Assignment of TA's to courses

TA Positions: Assigned by the Department Head after consultation with the Graduate and undergraduate program directors, and the faculty of the courses to which the TA positions will be assigned. Students will be provided with a written offer for the position that becomes a binding contract after being signed by the student and the Department Head.

F) Notice of assignment

TA Positions: The Department Head will notify candidates of TA assignments.

RA Positions: The faculty providing the funding will notify candidates of RA assignments.

Internship Positions: The external funding source will notify candidates of Internship assignments. A written notice of the terms and conditions of the internship will be signed by the student, the GPD and the sponsor.

Admission Requirements

The basic admission requirements and procedures of the University Graduate School and the Department are as follows:

1. A Bachelor's degree or the equivalent from any college or university of recognized standing.
2. A minimum undergraduate cumulative grade point average of 3.0.
3. In addition to the information required on the application form:
 - a. Two copies of official transcripts of all previous college work (undergraduate and graduate)
 - b. Official scores of the Graduate Record Examination (GRE).
 - c. Two letters of recommendation.
 - d. A personal statement that outlines your goals for graduate study (1-3 pages).
 - e. A portfolio of creative work

These materials should be submitted to the Graduate School. Incomplete applications or those not received by the specified deadline will be considered only if the program's quota of entering students has not been filled.

Portfolio - All students applying to the MLA or Dual Degree Programs must submit a portfolio to enable us to assess your creative achievements or potential. Since many of our applicants do not have a design background, the portfolio may contain graphic and/or written work which an applicant feels expresses her/his creativity. Past portfolios have included reproductions of sketches and paintings; photographs of landscapes or places visited; creative writing examples; photographs of sculpture, pottery, quilts, furniture, stone walls and jewelry created by the individual. You should not create things just for the portfolio; it should contain examples of how your creativity is currently manifested in your life.

All portfolio evaluations are considered in the context of a student's particular experience and background. Since portfolio contents vary greatly, the only formal requirement for your submission is that it be bound and no larger than 11"x17" (8-1/2" x 11" is preferred). If you want your portfolio back, provide a self-addressed, stamped return envelope or arrange a pick-up time with the graduate administrative assistant (413-545-2266). The department will not assume costs and/or responsibility for returning portfolios without proper prior arrangements.

Degree Requirements

The MLA or MRP degree is conferred upon those graduate students who satisfy the following basic requirements:

1. The satisfactory completion of 48 credits of course work, of which at least 28 credits must consist of masters-level courses given within this Department. (Three year MLA students must first complete a preliminary year. Credits earned during this preliminary year are not counted towards the 48-credit requirement).
2. Completion of the specific requirements in the Graduate Handbook and regulations of the Graduate School in effect at the time of entry into the program.

3. The preparation of a Master's thesis or Master's project. All academic work including the Master's thesis or Master's project must be done in residence.
4. The maintenance of a "B" average: Students may not earn more than two "C" grades during their entire tenure.
5. Successful defense of Master's thesis or Master's project.

Procedures for Course Waivers, Advanced Standing, and Credit Transfer

Course Waivers - Students are allowed to waive required courses if they can demonstrate equivalency in terms of previous course work or experience. This process requires the completion of a course waiver form, available from the graduate program secretary. This form must be approved first by the faculty member whose course is to be waived, then by the program director. In general, if 80% or more of the course material has been covered a waiver is granted. If 50-80% of the course material has been taken then instructor may negotiate an appropriate instructional arrangement (e.g. audit, independent study). If less than 50% of the material has been covered then the waiver is not granted.

It should be noted that a course waiver does not reduce the total number of credits required for a degree but rather affords the student more flexibility in pursuing areas of interest.

Students Entering with Related Graduate Degree - There are two ways for students who enter with a related graduate degree to modify the normal degree requirements:

1. Up to 18 credits in the form of course waivers may be granted with the approval of the Program director and the filing of an official transcript. Note again that this option does not reduce the total number of credits required for graduation.
2. Up to 12 credits that have been earned in addition to the requirements of a previous graduate degree may be transferred also with the approval of the program director. In this case the transferred credits can be included as part of the total credits required for graduation.

Transfer of Non-Degree Credit - A maximum of 6 non-degree credits at the University of Massachusetts may be transferred, but students entering with a previous graduate degree may transfer these credits in addition to credits obtained via the process described in the previous section. Non-degree students, who are taking the first year preparatory courses, will receive credit for all these preparatory courses without the need to transfer them. Non-degree students are required to complete an official application to the program. Admission to the program for such students is on a competitive and space-permitting basis.

Current students are encouraged to take advantage of internships available through the department. These Independent Study courses may be arranged through the program director. Graduate credit is available for these courses.

Faculty Advisors

Entering students will be advised by the graduate director during their first year. After the first year a student is encouraged to work with one or more faculty advisors in selecting elective courses and a Master's thesis/Master's project.

Orientation Week

The week before classes begin, the department holds a four-day orientation, which provides students an introduction to the profession, computers, the ecology of the Pioneer Valley and basic design. The idea is to allow entering students to get to know one another before classes begin and to develop an understanding of the region they will inhabit for the next 2-3 years. There is an additional fee for this one-week course that is not covered by tuition waiver.

The First Day

The first day on campus begins with a meeting of all entering graduate students and the Department faculty. After this general orientation session the students meet with their program director and faculty to discuss program related issues. Later they meet individually with the program director, fill out course cards and discuss any questions they have. In the afternoon new students register for the fall semester. Later that afternoon there is an informal Department reception for all entering students and faculty. Classes begin the next day.

Theses and Master's Projects

During the spring semester prior to the final academic year, each student should decide on a topic for a Master's thesis or Master's project. The topic selection is the student's responsibility and must be approved initially by the program director and faculty. When the initial idea is approved, a thesis/Master's project committee is named by the program director in consultation with core faculty and students. This committee must include at least two graduate faculty members and the chairperson must be a core faculty member of the program.

For details on the Master's thesis/Master's project, see the section entitled **Your Master's Thesis or Master's Project**.

Miscellaneous

This section contains those rules and procedures which have evolved over time and which do not fit neatly in any of the other sections of the handbook. This does not imply that they are any less important. Please read them carefully, as they will certainly apply to you at some point during your tenure in the Department.

Credit Load per Semester - Forty-eight credits taken over a four-semester span implies an average of 12 credits per semester, an average assumed to be the normal load for graduate students. The Department's Graduate Handbook supports this assumption, and further specifies a maximum of 14 credits per semester (excluding the preliminary year in the MLA program). In addition, students with any form of TA or RA position may not exceed 12 credit hours per semester. (The only exception to this may occur during the fall semester of the second year for MLA students during which they may take 13 credits.)

Independent Study - The Department will allow a total maximum of 6 credits, which can be earned through Independent Study during a student's entire stay, except for students in the dual degree program who are allowed a total of 9 credits. More specifically, the policy on Independent Study allows for no more than 3 credits per semester. Students who plan to take an Independent Study must complete a form that, among other things, specifies the final product of the project. The final product may take a number of different forms: a paper, a formal presentation, drawings or a model are among the possible alternatives. A copy of the form,

signed by the student's advisor and faculty involved with the project, should be submitted to the Graduate Program Secretary, and will be kept in the student's personal file. In all cases, all independent study work should be done during the semester credit is received. Finally, Independent Study cannot be used to collect data for a Master's thesis/Master's project. Copies of the Independent Study form are available from the Graduate Secretary.

Professional Organizations - The Department strongly urges you to join either the American Planning Association (APA), the American Society of Landscape Architects (ASLA), the National Recreation and Park Association (NRPA) or any other relevant professional organization as soon as possible. It is not too early in your career to participate in the activities of these professional associations and there is much to be gained from your membership. You are afforded the additional benefit of reduced rates for membership.

Faculty Meetings - All faculty meetings are open to any student who wishes to attend. The only exception to this policy is when personnel matters are being discussed. Any student with a concern or issue relevant to specific programs within the Department should first speak to the appropriate Program Director in order to have the issue placed on the agenda of the faculty meeting. If the issue or concern relates to the Department in general, you should speak with the Department Head. In either case, it is important that you be aware of these options available to you. A schedule of faculty meetings for each semester is available in the main office, 109 Hills North.

Department Lecture Series - The Lecture Series adds an important dimension to your education providing contrasting opinions, information on new developments, and contact with practitioners. The Department urges you to attend.

If you have any requests or recommendations regarding topics or lecturers, please let the Department Head know in a memo. Our resources are limited, but we will try to make arrangements. Please do not schedule anyone for a lecture or make any arrangements without consulting with the Department Head.

This lecture series can be as interesting and invigorating as we make it. We ask for your help and participation in making it a success.

Extension for Completion of Degree Requirements - No extensions for completion of degree requirements will be granted unless there is a compelling reason to do so (e.g. sickness).

"Long Distance" Completion of Degree - In the past, many students have finished their degrees from afar, relying on faculty and staff to make phone calls, arrange meetings, and complete forms. Again, a compelling reason must be demonstrated to be extended this favor.

UNIVERSITY AND DEPARTMENT RESOURCES

Library Resources

As a graduate student in the Department of Landscape Architecture and Regional Planning you will have access to the resources of an unusually fine university library system. Present University of Massachusetts library holdings include more than 5.8 million books, periodical volumes, and government documents. In addition, there are about 2.5 million of these items in micro-format, and 15,500 serials, including some 8,700 journals, currently received.

Support for your graduate studies and research is provided through collections in the 28-story W.E.B. DuBois University Library Tower, one science branch library and several reading rooms. The DuBois Library houses materials in the social sciences and the humanities. Most of the science collection is found in the Integrated Science Library on the second floor of the Graduate Research Center.

The Tower contains the University Library System card catalog, the Reference Librarians, most reference materials, a book collection of about 80,000 volumes, all current periodicals in the social sciences and humanities and back filings of these periodicals, a basic law library, and the most frequently used government documents. The Tower the University Archives, Special Collection, and Rare Books.

Serial holdings and their locations are listed in the "Pioneer Valley Union List of Journal and Serial Holdings", a publication which also lists serial holdings of other major collections in the Pioneer Valley and the University of Massachusetts in Boston and Worcester.

The University Library system is a depository for United States Government publications. It also receives several categories of publications from the United Nations and other international agencies. In addition, the system houses publications of the Commonwealth of Massachusetts and its cities and towns.

Your University "U card" serves as a library card throughout the entire University Library system. It also admits you to the many library resources of the four other colleges in this 5-College Area: Amherst, Hampshire, Smith, and Mt. Holyoke Colleges. Library services of these five institutions are coordinated through the Hampshire Interlibrary Consortium and requested items are delivered daily. Copies of the Five-College Library Handbook are available at the Reference and Information Desks for student use.

Of particular interest and value to graduate students in this Department is the publication, "A Selective Guide to Reference Sources in Landscape Architecture and Regional Planning". This is available for reference or copying at the Reference and Information Desks in the Tower.

Also of special value to Landscape Architecture & Regional Planning students is the Department's collection of Master's theses/Master's projects, research projects, studio projects, and faculty publications located in the Department's main office in Hills North. These may be taken out on loan. Additional copies are located in the Dubois library.

Carrels for studying in the University Library Tower are available for a limited number of graduate students in the Department. An application for one of these should be made to the Office Manager.

Any questions you may have about library holdings or procedures, including the fee-based computerized library searches for selected bibliographies, can be answered by the Reference Librarians in the Dubois Library (545-0150).

Computer Facilities

The Department of Landscape Architecture and Regional Planning houses two computer labs. A primary lab located in Room 205A, is called the "CAD Lab", which consists of fifteen Dell computers containing specialized programs for CAD, 3D visualization, GIS, statistical, word processing and spreadsheet capabilities. A graduate CAD / GIS lab is located in Room 404 with ten new PC's that have the same capabilities as those on the second floor.

All of these labs are networked into a printing system that consists of a laser jet printer, a desktop plotter and a large full-scale plotter. There is also a scanner available in the CAD Lab. All machines have Ethernet access. They are readily accessible to students in the Department every weekday. A key sign-out procedure has been implemented for evenings and weekends.

In addition to these labs, there are computers located throughout the building for student use. All of these computers are Ethernet connected and networked into the printing system.

A third lab is for advanced GIS. The exact configuration of this facility varies from semester to semester, but generally includes a workstation/server, several PC's, a digitizer, and a plotter. The facility is managed by the Office of Geographic Information and Analysis, and access is limited to those who are working with OGIA or with faculty who work with OGIA.

There are a number of smaller computer facilities accessible to students with specialized needs such as scanning, advanced visualization, and advanced web page design. Access to these is generally restricted to students enrolled in specific courses.

There are a number of public computer labs (both PC and Mac) on the UMass campus, and we share a GIS Lab with Geosciences and Forestry and Wildlife Management for introductory instruction.

Students are expected to have a UMass computer account. This provides email and Internet access from any machine that has a direct (Ethernet) connection or through a dial-in connection. This account also entitles students to Internet software at no cost to them. Students living at some distance from the campus may wish to consider a commercial Internet Service Provider to save on long distance charges, but the low cost of the UMass fee is currently far less than those typically charged by a commercial ISP.

Many if not most graduate students own their own computers for preparation of assignments, and in some cases submit their assignments to the instructor via email. We have no particular recommendation on what machine is preferable. The Campus Bookstore sells computers at a considerable discount, although not always less than prices available elsewhere. Prices for software, however, are almost always far less than those in the commercial sector because of educational discounts and campus site licenses.

The URL for the Department web site is: <http://www.umass.edu/larp>.

THE MASTER'S PROGRAM IN LANDSCAPE ARCHITECTURE (MLA Degree)

Core Faculty

Mark Lindhult, Director
Jack Ahern
Annaliese Bischoff
Dean Cardasis
Ethan Carr

Mike Davidsohn
Henry Lu
Patricia McGirr
Robert Ryan
Joseph S.R. Volpe

General Overview

As suburban growth and sprawl threatens to destroy the environment and quality of life; as social and economic equity becomes ever more elusive in our cities, towns and countryside; as the information age transforms both the environment and the methods by which we work within it; and as intensified pressures of contemporary living result in ever-more dehumanized, depersonalized life-styles; the need for useful and inspiring physical landscape spaces grows and the inter-relationship between local, regional and global interventions in the environment becomes more apparent. Whether in broad geographic regions, cities, or gardens, no profession stands as ready to deal so comprehensively with the problems of planning and designing the twenty-first century world as does landscape architecture.

The mission of the Masters in Landscape Architecture program is to educate students from broadly diverse backgrounds in the fundamentals of landscape architecture---its history, theory and practice; and to build upon this foundation the capacity for informed independent thinking through research and applications in planning and design.

Objectives:

- A. To offer an accredited program that prepares students for diverse professional career tracks in landscape architecture.
- B. To prepare students to conduct original research and applications in design and planning.
- C. To promote active interchanges between the MLA and Regional Planning
- D. To engage students in critical thinking and expression on theoretical, ethical and professional issues.
- E. To integrate the regional landscape into the curriculum through studios, field trips and lab exercises.

Graduates of the program work in numerous capacities as environmental stewards and as guardians of our cultural landscape heritage; as *avant-garde* designers whose forms and spaces express the fundamental issues of our times; as private and public planners whose design perspective uniquely qualifies them to evaluate, interpret and create the policies which in turn shape our environmental framework; as private practitioners who imaginatively interpret and resolve environmental problems and as educators who continue to explore and teach an array of important subjects in colleges and universities throughout the world.

Master's Program

The Landscape Architecture Master's Program is designed to serve three groups of people. The first group of students are those who have discovered an interest in landscape architecture after earning a college degree. These people must take a year of preparatory courses. Then they take an additional 48 credits toward their Master's degree, which is typically granted within a three-year period. This professional degree is accredited by the Landscape Architecture Accrediting Board (LAAB).

The second group of students are those who have earned a degree in a related field such as environmental design or architecture. These students can enter into the second year, but they often need to take several of the core requirements of the first year preparatory curriculum. These students usually take such required courses in lieu of the elective courses of the second and third year curricula.

The third group of students are those with a degree in landscape architecture, many from an accredited school in the U.S.A. These students enter the Master's program to expand their knowledge in a special area of interest, and often work with a particular faculty member on a funded research project.

Overall, students from a great diversity of cultural and educational backgrounds enrich the program with broad-ranging perspectives, which are brought to bear on common planning and design problems. In a studio-centered curriculum, students experience expert guidance while engaging in real landscape problems ranging across all scales and types, including greenways, gardens, housing and open spaces, suburbs, cities, workplaces and recreation. Through a series of lecture and discussion classes, labs and workshops; as well as through research projects students gain the scholarly context necessary for the applied problem solving of the studios.

Generally, the curriculum endeavors to first provide beginning students with a broad framework of the history, theory and practice of landscape architecture; then to promote either the continued study of the interrelationship between all aspects of environment design, or to support a more specialized inquiry into specific areas of concentration.

Areas of Concentration:

Ecological Landscape Planning and Design

Ecological Landscape Planning and Design engages ecological pattern and its associated processes across a range of spatial scales. This area involves both planning and design. Planning is understood as proactive action(s) to achieve specific goals and objectives. Design is defined as the act of creating physical form and expression in landscapes. Planning and design here are conceived as complementary and synergistic disciplines, organized along a continuum according to ecological principles.

Many current environmental issues and concerns are being addressed in this area, including: water resource planning, integrating biodiversity and land use planning, mitigating hazards, and alternative waste removal and processing. With its integrated research, outreach and service activities the Department is an international leader in this area, and actively moving into new areas and initiatives.

The working definition of ecological landscape planning and design is inclusive of biotic, abiotic (physical) and cultural resources, values and issues. The emphasis in this area is on the biotic

and abiotic components. The cultural component is not excluded from the landscape ecological paradigm advanced here; on the contrary it is seen as profoundly significant and is identified as its own area of concentration because of this. Strong and active linkages between these areas are in place and will continue to be in the future.

In the future this area will continue to be a core area for our department. It will continue to have a significant outreach presence through community service projects, the Center for Rural Massachusetts, and externally funded research. In addition, it will become more involved with site and project-scale design and implementation of ecologically-based technological practices by establishing active collaborations with the Environmental Sciences Program and the Stockbridge School to develop new strategies for ecological mitigation, bioengineering and bioremediation.

Design and Management of Cultural Landscapes

Since the landscape is continuous in time as well as space, the history of built landscapes and the ideas embodied therein cannot be severed from new design interventions. In this area of concentration we focus upon the relationship between cultural history, social behavior, landscape aesthetics and design. Our concern is both with new designs and with recent and distant historic landscapes, including those made specifically by individual landscape architects, designers and environmental artists; as well as those formed more generally by the everyday beliefs and practices of groups of people. Such critical and scholarly study of the built landscape is integral to any meaningful understanding of ecosystem, city or garden. Moreover, it is essential knowledge in the design and management of all landscapes.

The design of significant new landscapes and active participation in the management (preservation) of historic landscapes are considered equally important to scholarly study in this concentration since such applications both embody our thinking and serve as touchstone in an iterative process of design inquiry. Departmental faculty and students have been active leaders in all areas: as important scholars, critics and design theorists; as designers and planners of meaningful, award-winning contemporary landscapes; and as creative managers of our historic landscape resources. We have forged strong links to active professional firms and to cultural landscape institutions such as the James Rose Center, the Library for American Landscape History, the National Park Service's Cultural Landscape Initiative and the Cultural Landscape Institute, to name a few. By bridging traditional scholarly research in this area with creative built work and professional outreach, we not only ground our ideas in practice, but also contribute materially to the culture through innovative designs and cultural landscape management practices in the real world.

Urban Planning, Policy and Design

Historically, cities are geographic areas that have evolved into centers of civic, political and cultural life. Over the centuries they have become more densely settled and increasingly heterogeneous both in terms of the ethnicity and economic stability of residents. This variety of life circumstances of urban dwellers requires that limited resources be allocated for many more varied purposes than ever before. At the turn of the 21st century we witness increased urbanization worldwide, much of it minimally guided or controlled. Similarly, we find many existing urban areas in a serious state of deterioration, physically, economically and socially. This concentration focuses upon the role of landscape architects and urban planners in working with urban residents, administrators and elected officials to help define the problems and then

create the most appropriate policies and designs to ensure a socially just, economically and environmentally healthy, and aesthetically pleasing environment. The Urban Planning, Policy and Design concentration brings together scholarly research, teaching and outreach concerned with the viability of towns, cities, metropolitan and suburban areas. Working with an eye toward solutions that are responsive to residents, this area of emphasis is concerned with ensuring the quality of the cultural and natural environments, economic opportunity, environmental protection and widespread democratic participation. Some specific areas of teaching, research, creative design work and outreach that support this concern include analyses of the structure and function of urban settlements; the design and physical planning of urban sites and neighborhoods; the history of urban forms, built environment and planning; the theory of urban planning, policy and design and analysis; conservation of natural resources and social and cultural heritages; planning and designing for social and cultural change; roles of government, citizens and multiple stakeholders; social justice and economic welfare; and citizen participation.

The Applications of Information Technology to Planning and Design

Technology is pervading society at a dramatically accelerating rate – which includes education in the planning and design professions. Our department has been a national leader in this area since its potential was first recognized, but we have chosen to never focus purely on the technological aspects of computers. The faculty have endeavored to look at process and the ways that technology can be best applied as a tool in planning and design. As such, a concentration in the applications of information technology to planning and design helps prepare students to become managers and leaders: people who can see the larger picture and the role of technology within it, as opposed to CAD and GIS technicians.

This area of concentration is further broken down into three foci: applications, process, and implications. The first looks at the range of applications used by planners and designers. Much of our past success has been shaped by the practice of testing new technologies in real situations through research, instruction and outreach. The second, process, recognizes that technology is only a tool. We look at the ways computers can be best integrated into the design and planning process. Through our teaching, research, and service, we have developed methods that are appropriate for the problems at hand and provide students with applied knowledge that is passed on to the profession and general public through publications, presentations, CDs, and the World Wide Web. The last area, implications, recognizes that technology will have profound effects upon society. Of particular interest to this department are the ways that technology will manifest itself in changing land use patterns, especially with respect to the contemporary problem of suburban sprawl.

Degree Requirements

The curriculum leading to the MLA degree consists of three areas: core courses, electives, and either a Master's thesis/Master's project or approved three-course option in the last semester. Students with a bachelor's degree in Landscape Architecture or an approved Environmental Design degree must earn 48 credits within a two-year curriculum. For those possessing substantial professional experience, a special program can be structured around specific research interests. It is also possible for qualified students to earn a joint degree in Landscape Architecture and Regional Planning. Students who do not have a design background are required to take additional courses beyond the 48 credits within a three-year curriculum. The core curriculum of the MLA program is as follows:

MLA Core Curriculum – 3-Year Program – First Professional Degree

First Year			
Fall Semester	Credits	Spring Semester	Credits
LA 501 Studio I - Introduction	3	LA 504 Studio III – Land Form	3
LA 503 Studio II - Models	3	LA 506 Studio IV – Sustainable Design	3
LA 592A Plants in the Landscape	3	LA 544 History & Theory II	3
LA 696P Plant Lab	1	LA 614 Site Materials	3
LA 547 Landscape Pattern and Process	3		.
Total Credits	13	Total Credits	12

Second Year			
Fall Semester	Credits	Spring Semester	Credits
LA 601 Studio V – Site Planning	3	LA 604 Studio VII – Urban Design	3
LA 603 Studio VI – Garden Design	3	LA 606 Studio VIII – Cultural Landscapes	3
LA 613 Site Engineering	3	LA 691F Research Issues for LA	3
<u>Elective</u>	3	<u>Elective</u>	3
Total Credits	12	Total Credits	12

Third Year			
Fall Semester	Credits	Spring Semester	Credits
LA 607 Studio IX – Landscape Planning	3	LA 698A Masters Project or Thesis	6 / 8
LA 609 Studio X – Historic Preservation	3	Elective	3
LA 651 Professional Practice	3	Elective	3
<u>Elective</u>	3		.
Total Credits	12	Total Credits	12/14

Notes:

For students entering the three-year curriculum, all required first year courses do not count toward the 48 required credits for a Master’s degree. Students must, however, maintain a “B” average in these classes.

Waivers: If a previous course covered the majority of a subject area you may be able to waive the class. You do not get course credit and must take another class in its place. In cases when the previous course covered 50-70 percent of the subject area of a core course, the student may take a 1-2 credit independent course with the instructor to satisfy the missing requirements. The appropriate path is negotiated among the student, instructor and program director. The goal is to ensure that each student satisfies all core requirements of the three-year curriculum in the shortest time period. Students must request all waivers from the program director within the first two weeks after enrollment. Waiver forms are available from the graduate secretary of the department.

2-Year MLA Program for students with a degree in Architecture

First Year			
Fall Semester	Credits	Spring Semester	Credits
LA 601 Studio V – Site Planning	3	LA 604 Studio VII – Urban Design	3
LA 503, 603, LA 547 or elective	3	LA 606 Studio VIII – Cultural Landscapes	3
LA 692A Plants in the Landscape	3	LA 544 History & Theory II	3
LA 596P Plant Lab	1	LA 691F Research Issues for LA	3
LA 613 Site Engineering	3		.
Total Credits	13	Total Credits	12

Second Year			
Fall Semester	Credits	Spring Semester	Credits
LA 607 Studio IX – Landscape Planning	3	LA 698A Masters Project or Thesis	6 / 8
LA 603, LA 609 or elective	3	Elective	3
LA 547 Landscape Pattern and Process	3	Elective	3
LA 651 Professional Practice	3		.
Total Credits	12	Total Credits	12/14

Notes:

Students entering the two-year curriculum with undergraduate design degrees usually need to take several of the first year courses to ensure that they satisfy the department's three-year curriculum requirements. These students can replace their elective courses with courses from the first year curriculum that cannot be waived. These courses can be counted toward the 48 required credits. A 3.0 average must be maintained for all courses taken, and a maximum of 2 C's is permitted during the student's entire residency.

Studio selection for advanced students will be done in consultation with the program director, based upon the student's previous studio work, projects, and portfolio.

Waivers: If a previous course covered the majority of a subject area you may be able to waive the class. You do not get course credit and must take another class in its place. In cases where the previous course covered 50-70 percent of the subject area of a core course, the student may take a 1-2 credit independent course with the instructor to satisfy the missing requirements. The appropriate path is negotiated among the student, instructor and program director. The goal is to ensure that each student satisfies all core requirements of the three-year curriculum in the shortest time period. Students must request all waivers from the program director within the first two weeks after enrollment. Waiver forms are available from the graduate secretary of the department.

2-Year MLA Program for students with a degree in Landscape Architecture

First Year			
Fall Semester	Credits	Spring Semester	Credits
LA 601 - Site Planning or elective	3	LA 604 - Urban Design or elective	3
LA 603 – Garden Design or elective	3	LA 606 – Cultural Landscapes or elective	3
Guided Elective	3	LA 691F Research Issues for LA	3
Guided Elective	3	Guided Elective	3
Total Credits	12	Total Credits	12

Second Year			
Fall Semester	Credits	Spring Semester	Credits
LA 607– Landscape Planning or elective	3	LA 698A Masters Project or Thesis	6 / 8
LA 609 - Historic Preservation or elective	3	Guided Elective	3
Guided Elective	3	Guided Elective	3
Guided Elective	3		.
Total Credits	12	Total Credits	12/14

Notes:

Studio selection for advanced students will be done in consultation with the program director, based upon the student’s previous studio work, projects, and portfolio.

Waivers: If a previous course covered the majority of a subject area you may be able to waive the class. You do not get course credit and must take another class in its place. In cases where the previous course covered 50-70 percent of the subject area of a core course, the student may take a 1-2 credit independent course with the instructor to satisfy the missing requirements. The appropriate path is negotiated among the student, instructor and program director. The goal is to ensure that each student satisfies all core requirements of the three-year curriculum in the shortest time period. Students must request all waivers from the program director within the first two weeks after enrollment. Waiver forms are available from the graduate secretary of the department.

Recommended Electives

The Landscape Architecture Program and the larger University of Massachusetts resources can provide students with exciting learning opportunities in several areas. These University resources can either broaden one's education or can help students to develop strength or expertise in a particular aspect of landscape architecture for which the student possesses a special talent or expresses an interest. Below we have listed four areas of concentration. Some students may wish to select electives in several of these areas to broaden their education. Others may wish to take several of these electives in one of the concentrations, to develop a special strength.

Recommended Electives for the Areas of Concentration:

ECOLOGICAL LANDSCAPE PLANNING AND DESIGN

Biology

485	Aquatic Vascular Plants
524	Coastal Plant Ecology
526	Plant Geography
535	Limnology
537	Ecology
426/697	New England Flora

Civil & Environmental Engineering

510	Public Transportation Systems
514	Infrastructure Management
618	Travel Demand Estimation
662	Water Resource System Analysis

Economics

582	Urban Economics
752/753	Economics
765	Economic Development: Structural Problems
766	Economic Development: Policy Issues
797A	Special Topics – Regional Economics

Geology

560	Geomorphology (1 st semester)
587	Hydrogeology (2 nd semester)

Geography

510	Natural Hazards
530	Population and the Environment
626	Spirit of Place (2 nd semester)
660	Industrial Geography
570	Housing and Urban Development

Mechanical and Industrial Engineering

586	Quantitative Decision Making (see also SOM 752)
620	Linear Programming

Natural Resource Conservation

528	Forest and Wetland Hydrology
563	Wetland Wildlife Ecology and Management
577	Ecosystem Modeling and Simulation
587	Introduction to Digital Remote Sensing
592G	Geographic Information Systems (GIS) in Fisheries and Wildlife
597C	Ecosystems Management
597G	Readings in GIS
597R	Watershed Science and Management
597W	Water Resource Management and Planning
697B	International Conservation
697I	Landscape Ecology
768	Advanced Wetland Ecology
888	Advanced System Ecology

Plant and Soil Science

565	Soil Formation, Classification and Land Use (2 nd semester)
597S	Principals of Environmental Site Assessment (2 nd semester)
587W	Wetlands for Wastewater Treatment (1 st semester)

Political Science

603	Public Policy Analysis
604	Program and Policy Evaluation
605	Economics and Public Policy
607	Policy Methods
608	Introduction to Statistical Methods for Public Policy and Administration
609	Workshop on Public Policy and Administration

Regional Planning

553	Resource Policy and Planning
558	Issues in Environmental Management
575	Planning Law and Resource Management
641	Water Resource Planning
645	Growth Management

Resource Economics

701	Quantitative Methods
702	Econometric Methods
711	Microeconomic Theory I
712	Microeconomic Theory II
720	Environmental and resource Economic

THE DESIGN AND MANAGEMENT OF CULTURAL LANDSCAPES

Anthropology

- 529 Archeology of Northeastern North America
- 582 History of Archeology
- 621 Prehistoric Cultural Ecology

Art

- 501 Advanced Drawing
- 502 Advanced Drawing Problems
- 520 Painting – Representation 1
- 521 Painting – Representation 2
- 551 Interior Design
- 557 Architectural Design Problems 1
- 597B Special Topics – Color Theory
- 597M Special Topics – Photography 1
- 632 Rendering
- 650 Interior Design III
- 651 Interior Design IV
- 656 Architectural Lighting
- 657 Architectural Design Problems II
- 659 Environmental Behavior and Design Evaluation
- 691E Seminar – Design Colloquium
- 791D Seminar – Graduate Design
- 797P Special Topics – Criticism, Theory and Practice

Art History

- 500 Greek Art
- 506 Early Medieval Art
- 507 Romanesque and Gothic Art
- 511 Early Renaissance Italian Art
- 512 Northern European Art 1460-1600
- 513 Late Renaissance and Mannerist Italian Art
- 516 Italian Baroque Art
- 517 Northern European Art 1600-1700
- 521 European Art 1780-1880
- 522 Modern Art 1880-present
- 524 American Art to 1860
- 525 American Art 1860-1940
- 527 History of the Decorative Arts
- 531 19th c. Architecture
- 532 20th c. Architecture
- 536 History of Islamic Art and Architecture I
- 537 History of Islamic Art and Architecture II
- 551 Roman Art
- 556 Medieval Painting
- 563 Vernacular Architecture
- 564 Architecture Now
- 568 Contemporary Art

Comparative Literature

791 Modernisms

Geography

626 Spirit of Place

History

658 Topics in American Social History

659 Public History

Psychology

560 Introduction to Environmental Psychology

707 Environment, Behavior and Design Evaluation

Regional Planning

574 City Planning

691S Policy Planning and Anthropology

692E Historical Preservation Planning

692L Seminar in Current Literature in Planning

*** Courses Offered at Hampshire College***

HA220 Architecture of Memory

SS209 Topics in Urban Studies

SS249 Cities and Suburbs

SS254 Colloquium on Community Development

*** Courses Offered at Mount Holyoke College***

AH 243F Building the Modern Environment: Architecture 1890-1990

AH 302 Great Cities

AH 341S Images of the Landscape and their Social Environment

* Please note these are undergraduate courses; students wishing to take these courses for graduate credit must speak with the program director and course instructor prior to registration.

URBAN PLANNING AND DESIGN

Art History

532 20th Century Architecture

Environmental Science

597R Watershed Science and Management

Economics

582 Urban Economics

Education

329 International Education

Geology

510 Natural Hazards
530 Population and Environment
626 Spirit of Place
666 The Water's Edge
670 Housing and Urban Development

History

615 Topics in the History of Early Modern Europe
646 Topics in Early American History
657 Topics in United States Urban History

Plant and Soil Science

590C Solid Waste Issues and Management
597P Pollution Control Science and Technology
597L Wetland Delineation, Federal Procedure
597W Constructed Wetlands for Wastewater Treatment

Political Science

784 Environmental Policy

Regional Planning

553 Resource Policy and Planning
558 Issues in Environmental Management
574 City Planning
575 Environmental Law and Resource Management
577 Urban Policies
625 Quantitative Methods in Planning
651 Planning History and Theory
691M Planning for Industrial Development
692M State and Local Public Finance

APPLICATION OF INFORMATION TECHNOLOGIES IN DESIGN AND PLANNING

Art

- 597D Special Topics: Computing in the Fine Arts
- 687C Special Topics: Computer Aided Design
- 697J Special Topics: Computer Animation I: Introduction to Computer Animation
- 697Q Special Topics: Computer Animation II: Introduction to Computer Animation
- 697Z Special Topics: Desktop Graphic Design

Computer Science

- 683 Artificial Intelligence

Electrical and Computer Engineering

- 660 Interactive Computer Graphics

Landscape Architecture

- 691E Seminar on Geographic Information Systems for Planning and Design
- 692 Computer Aided Design for Landscape Architects

Management

- 632 Computers and Information Systems

Natural Resource Technology

- 531 Aerial Photogrammetry
- 587 Introduction to Digital Remote Sensing
- 592G Geographic Information Systems in Fisheries and Wildlife
- 777 Advanced Systems Ecology

Course Descriptions

Landscape Architecture

- LA 501 [533] Studio I Reading and Revealing the Site Credit 3 (First Half/F)
This studio introduces students to reading and responding to the site. Goals include learning to experience and record the landscape, to design in response to the site, to think creatively, to generate design ideas and understand design as a process, to gain knowledge of design precedents and principles, and to learn tools and techniques of visual expression. Students will learn through in-class exercises, reading assignments, and design projects. Class time is divided between lectures, field trips, studio design work, desk critiques, pin-ups and presentations.
- LA 503 [553] Studio II Landscape Space, Design, and Meaning Credit 3 (Second Half/F)
An exploration into the modes of space: two-dimensional surfaces, three-dimensional objects, spatial enclosure, and the open continuous landscape. The emphasis is on the media of landform, water, plants, and structures as the defining agents of human space in the garden and landscape. The form and character of the space is further determined by the context of the site, the nature of spatial geometry with studies of form, pattern, texture, tone, and color. Students engage drawing, collage, sculptural relief, and scale models of the landscape.
- LA 504 [554] Studio III Spaces and Places in Context Credit 3 (First Half/S)
Application of spatial theory and design process to a specific site context. Work will develop map-reading skills at various scales; strengthen drawing, lettering, and cross-section representation skills. Emphasis on landform design in a public park setting.
- LA 506 [556] Studio IV Landscape Sustainability Credit 3 (Second Half/S)
Sustainability is an important, evolving paradigm of central importance to landscape architecture. It has profound implications on how we think about landscapes, and on how we intervene to make changes in landscapes. In this studio we will explore the theory and application of sustainability principles through literature and case studies. We will apply this understanding of sustainability to an integrated set of design and planning projects.
- LA 543 History and Theory I Credit 3 (F)
A survey of the evolution of structures, settlements and landscapes in the western world. Period: The origins of human societies to the close of the Medieval period.
- LA 544 History and Theory II Credit 3 (S)
Completes the survey in LD ARC 543. Period: The Renaissance to the present.
- LA 547 Landscape Pattern and Process Credit 3 (F)
Natural and cultural processes which influence landscape planning and site design; Investigations of climate, geology, land form, soils, hydrology, vegetation visual qualities; and planning and design process/models.

- LA 591A Introduction to Environmental Design Introduces landscape architecture by looking at the range of environmental design professions. Looks at contemporary designers and highlights their major contributions.
- LA 592A Plants in the Landscape Introduction to 200 basic ornamental plants used in urban and other landscapes. The course emphasizes their identification, features, uses, values, care, propagation, maintenance, and limitations.
- LA 597 Special Topics Credit 1-3
Courses of special topical interest offered periodically as needs and conditions permit (i.e. visiting scholars, recent professional development, new courses).
- LA 601 Studio V Site Planning Credit 3 (First Half/F)
Students develop an understanding of the place, the legal context and the site when dealing with site planning for housing. There is an emphasis on fundamental site design and planning criteria, development of project organization and presentation skills. Emphasis is on design process and the integration computer techniques into the process to simulate and evaluate the consequences of proposed landscape changes.
- LA 603 Studio 6 The Garden Credit 3 (Second Half/F)
The garden is the most personal, direct and intimate expression of landscape architecture. It is explored here as a contemporary art primarily through the design of individual sites; and, secondarily, through guided research and discussion sessions which explore important works and design theory in the genre. The emphasis is on developing an informed and creative personal approach that inspires while solving practical problems on real sites.
- LA 604 Studio VII Urban Design Credit 3(First Half/S)
Application of urban design theories as they apply to various scales of urban design, with special attention focused on civic scale design elements and organization of spatial and functional requirements.
- LA 606 Studio VIII Cultural Landscapes Credit 3 (Second Half/S)
The cultural landscape studio introduces students to the process of research, planning, design, and management of historically and culturally significant landscapes through selected real world site projects. Students engage in the following five steps in the process of their study: 1. Investigating a landscape's site history using primary and secondary resource; 2. Analyzing, documenting, and evaluating existing conditions;
3. Interpreting the significance of the natural, historic and cultural importance of the landscape site; 4. Recommending appropriate treatment strategies; and 5. Presenting the findings of this research process.
- LA 607 Studio IX Landscape Planning/ GIS Credit 3 (First Half/F)
The overall goal of this studio is to teach students how to plan and implement open space protection at a landscape scale. This will require the ability to synthesize information about natural features, cultural resources, and development patterns to create a greenway network that addresses the unique problems and opportunities of the study area.

- LA 609 Studio X Historic Preservation and Design Credit 3 (Second Half/F)
Landscape design proposals for sites within historically significant area. Emphasis on methods of analysis and design development. Special attention is focused on architectural and garden design principles of specific periods. Graphic and photographic documentation of existing built forms serve as the basis for design proposals.
- LA 613 Construction I/Site Engineering Credit 3 (F)
Site engineering problems related to general design including: construction processes, alignment geometry, grading, drainage systems, earthwork, and detailing. Emphasis on construction document preparation.
- LA 614 Construction II/Site Materials Credit 3 (S)
Design of site structures and required details focusing on stability, durability, and environmental compatibility. Emphasis on statistics and strength of materials of site structures. Includes sizing of water retention and detention structures.
- LA 651 Professional Practice Credit 3 (F)
Models of professional office structure: management, organization, and economics for private, public and academic practice. Topics include: ethics, compensation, contracts, specifications, and business plan preparation.
- LA 691E People and the Environment Credit 2-3 (F)
Environmental psychology is an interdisciplinary field, which studies the relationship between the physical environment and human behavior. The premise is that people's behavior (e.g., well-being, emotions, productivity, and even personal relationships) is affected by the physical environments where they live, work, and play. This graduate seminar is designed to introduce environment-behavior research to landscape architecture and regional planning students
- LA 691F Research Issues for Landscape Architecture and Regional Planning Credit 3 (S)
Survey of research issues and methods in landscape architecture and planning. This course is designed to assist students preparing their research on their Master's theses and Master's projects. Cross-listed as RP691F.
- LA 692A Advanced Computer Applications in Landscape Architecture Credit 3 (S)
Current developments in microcomputer hardware and software. Major focus on future site design methods: the collection and analysis of site data, illustration of design alternatives, and calculation of engineering requirements. Prerequisite: permission of instructor.
- LA 696 Independent Study Credit 1-3
Independent course or seminar work under direction of instructor.
- LA 698A Masters Project Credit 6
Allows a student to work on an actual or demonstration project to explore aspects of landscape planning, design or processes related to landscape architecture.
- LA 699 Master's Thesis Credit 8

Preparation of a research Master's thesis in an emerging or state-of-the-art area of landscape architecture. A full graduate committee must be appointed and calendar due dates must be met, as outlined in the Graduate School Handbook.

THE MASTER'S PROGRAM IN REGIONAL PLANNING (MRP Degree)

Core Faculty

Mark Hamin, Director
Jack Ahern
Fred Deng
Elisabeth Hamin

John Mullin
Ellen-J. Pader
Robert Ryan

General Overview

The goal of the Regional Planning Program is to stimulate creative and systematic approaches for addressing and resolving physical, economic, and social problems of towns, cities, and larger regions. Faculty and students are committed to the effort to anticipate and adequately prepare for the impact of growth and development on the environment and vice versa, and to mediate conflicts between development and the environment.

The program is based on combining theoretical, historical, social, political, cultural and technical dimensions of planning practice with strong emphasis on practice through studio and service to nearby communities. The program is oriented toward both the intellectual and the professional aspects of regional planning. Our alumni can be found in all levels of government as well as in consulting practice, real estate development, private industry, and in academic and research activities. They have been involved on the frontiers of social change since the 1960s such as urban revitalization, environmental protection, advocacy planning, historic preservation, growth management, economic development and geographic information systems.

The two-year Master's degree program offers a rich educational experience in many areas of regional planning, including the underlying theories in planning, urban form, urbanization, elements of the planning and decision-making processes, policy analysis and implementation, social planning, information technology and planning tools and techniques. The main areas of concentration within the MRP program are:

- 1) Urban and Regional Land Use Planning
- 2) Housing, Social and Community Planning
- 3) Landscape and Environmental Planning
- 4) Economic Development Planning

In addition, links with the program in landscape architecture enable advanced students to work with other faculty members and students studying opportunities and challenges of landscape architecture and urban design.

Core Courses

Of the 48 credits needed for graduation, the following classes are required for each student. * If the student pursues a Master's project, 35 credits are part of the core requirements. If the student does a Master's thesis, 33 credits are part of the core curriculum. The Concentration selected by each student requires an additional 9 credits.

RP 625 Quantitative Methods in Planning (3 credits)

RP 651 Planning History and Theory (3 credits)

RP 656 Judicial Planning Law (3 credits)

RP 675 Regional Planning Studio I (4 credits)

RP 681 Regional Planning Studio II (5 credits)

RP 691E Geographic Information Systems (3 credits)

RP 691F Seminar in Research Methods (3 credits)

RP 693S Planning with Multiple Publics (3 credits)

Either:

RP 698 Master's Project (6 credits)

RP 699 Master's Thesis (8 credits)

Three Course Option (9 credits)

* Some of these requirements may be waived when students have had comparable graduate level courses or there is another compelling reason. Waivers must be approved by the Regional Planning Program faculty.

Note: A 3.0 average must be maintained for the Regional Planning program core, for the student's area of concentration and for all courses taken. A maximum of 2 C's are permitted during the student's entire residency.

Recommended Sequence for Core Courses

First Year

Fall Semester	Credits	Spring Semester	Credits
RP 625 Quantitative Methods in Planning	3	RP 675 Regional Planning Studio I	4
RP 651 Planning History and Theory	3	RP 691E Geographical Information Systems	3
RP 693S Planning with Multiple Publics	3	RP691F Research Methods	3
Elective	3	Elective	3
Total Credits	12	Total Credits	13

Second Year

Fall Semester	Credit	Spring Semester	Credit
RP 681* Regional Planning Studio II	5	RP 698 Master's Project <i>or</i> RP 699 Master's Thesis	6
RP 656 Judicial Planning Law	3 or	Three Course Option	9
Elective	3	Elective	3
Elective	3		
Total Credits	14	Total Credits	8-12

This schedule enables each student to take several elective courses in addition to the three required for their Concentration. In most cases, concentration requirements should be completed by the end of the third semester.

First-year MRPs without any previous academic and/or professional background in planning are very strongly encouraged to take ED/RP 574 City Planning in their first semester (Fall).

*Students who are interested in environmental and landscape planning may take RP 609 Landscape Planning Studio II and RP 697A Landscape Planning Seminar in lieu of RP 681.

Regional Planning Studios

An important part of your planning education is participation in two regional planning studios. In the studios, students divide into teams of between 3-5 students each and work on a 'real' project with a client. Contracts between the client and the studio team are signed as a means of providing a 'real- life' studio experience.

The objective of the regional planning studio experience is to provide settings in which students can learn the practical skills required in the planning process. Through the studios, students will gain knowledge and expertise in the processes of planning, including: how to comprehend a planning problem, quantify and analyze its dimensions, formulate planning alternatives, and organize a work plan and planning process that may lead to the implementation of solutions. Students will also gain experience in working with the client and the public, and in the presenting of their work in oral, written and graphic form. Students will thereby gain the 'seasoning' that goes with experience in all these planning process skills.

The studio format has the following features:

1. Two 14-week studios (spring semester of the first year; fall semester of the second year).
2. Multiple and substantively diverse projects each semester (usually 4-6) providing for smaller student teams and greater student choice of studio topics.
3. Instruction by faculty and outside professionals on key topics needed to carry out studio projects, including work planning, public presentations and report preparation.
4. Selection of 'real' projects and clients, including the signing of a contract between client and studio group that sets out a 'scope of services'.
5. Selection of first year topics that are relatively simple and well defined, and second year topics that are more complex. In the first year studio, tasks will involve mostly data collection, analysis, and development of plan alternatives. In the second year studio, tasks will involve primarily plan development, public participation, and plan implementation.

Master's Program and Areas of Concentration

Note: Students must take the two required courses and choose one from the list of recommended courses unless the concentration coordinator agrees to waive core or allow alternative course/s

Urban and Regional Land Use Planning

The focus of this concentration is understanding the forces affecting urban and regional environments, the interrelationships between land use and social conditions, and ways to support and regulate development to best achieve community goals. Important skills for this concentration include comprehensive planning, urban and regional design, community participation methods and applications of planning theory.

Concentration Coordinator: E. Hamin

Core Courses:

1. Tools and Techniques in Planning (RP652), focusing on introduction to land use, municipal planning, zoning, subdivision control
2. Growth Management (RP645), focusing on state and regional policy and emerging land use management tools

Recommended Courses:

- Resource Policy Planning (ED/RP553)
- Urban Structure and Function (RP591E)
- Conflict Resolution (PPA697A)
- Industrial Development Planning (RP691M)
- Industrial Geography (GeoSci 660)
- Public Transportation Systems (CEE 510)
- Sustainable communities (RP591B)
- Urban Design (LA604)
- Urban History (Hist 657)

Housing, Social and Community Planning

This concentration focuses on social, political, and cultural analyses of the build environment. It is concerned with exploring different social and cultural responses to the build environment, analyzing policy, planning, and design criteria for building more responsible urban forms, and intervening in discriminatory practices. Topics of study include domestic and international analyses of housing policy, urban development, urban design, spatial relations, and social change.

Concentration Coordinator: E. Pader

Core Courses:

1. Urban Policies (ED/RP 577)
2. People and the Environment (RP 691R)

Recommended Courses:

Individual course selection will be made in consultation with concentration coordinator. Courses selected will likely come from departments including:

- Anthropology
- Architecture
- Education
- Geography
- Landscape Architecture
- Legal Studies
- Sociology
- Public Health
- Public Policy and Administration

Landscape and Environmental Planning

This concentration focuses on environmental policy and planning as it relates to preserving and protecting environmental quality and habitat in the face of new development. Important skill for this concentration include landscape assessment, plan formulation and evaluation of landscape units ranging from the local to watershed scale, using Geographic Information Systems as a planning tool.

Concentration Coordinator: R. Ryan

Core Courses:

1. Landscape Pattern and Process (ED 547)
2. Resource Planning and Policy (ED/RP 553)

Recommended Courses:

- Ecosystem Management (NRC 597M)
- Forest and Wetland Hydrology (FOR 528)
- Landscape Planning Studio (LA 556)
- Landscape Planning Studio 2 (RP 609/RP 697A)
- Social Conflict and Natural Resource Policy (WFCON 697D)
- The Human Impact on the Natural Environment (GEO 592B)
- The Water's Edge (GEO 666)
- Watershed Science and Management (WFCON 597R)
- Wildlife Habitat Ecology and Management (WFCON 564)

Economic Development Planning

This concentration focuses on understanding the economic and social pressures facing communities, and strategies for building local and regional economies. It explores issues such as how towns, cities, and regions will survive in a globalizing economy, and how towns and cities build communities in periods of boom and decline. Topics of study include industrial planning, regional analysis, social planning and social impact assessment, public and private finance, land-use planning, and spatial analysis.

Concentration Coordinator: Richard Taupier/Fred Deng

Core Courses:

1. Industrial Development Planning (RP 691M)
2. Urban Structure and Function (RP 591E)

Recommended Courses:

- Business and Its Environment (SOM 783)
- Industrial Geography (GEO 660)
- Industrial Organization in Resource Economics (RE 732)
- Managerial Economics (SOM 644)
- Public Finance and Public Policy (MPPA 606)
- Resource Policy and Planning (RP 553)
- Tools and Techniques In Planning (RP 652)
- Urban Policies (RP 577)

Student-Designed Concentration

Students who have interests that do not fall into the existing categories may, with the approval of a faculty member, develop their own concentration proposal. Students should prepare a one-page memo indicating the focus of their studies and the courses they propose to fulfill the concentration. The memo, signed by the student and a member of the faculty, must be given to the LARP office.

Course Descriptions

Environmental Design

- ED/RP 543 History and Theory Credit 3 (S)
A broad survey of the history of the designed human environment.
- ED/RP 547 Landscape Pattern and Process Credit (3)
This course in applied landscape ecology will explore the structure, function and dynamic processes of landscapes, at multiple scales, and in diverse contexts. This exploration will be aimed at the theoretical, technical and strategic knowledge that influences landscape planning and management decisions – in support of the globally-accepted concept of sustainability.
- ED/RP 553 Resource Policy and Planning Credit 3 (F)
Examination of natural resource policy formation and the planning process at the local, state and regional levels. The course investigates the interrelationships between resource policies, the built environment, and environmental impacts and identifies a range of current best practices for improving that relationship.
- ED/RP 574 City Planning Credit 3 (F)
Brief history of land and resource use, development of communities and urbanization. Introduction to problems of cities and metropolitan areas including population, land use, economic base, housing, transportation, municipal government, growth control, and capital budgets.
- ED/RP 577 Urban Policies Credit 3 (S)
Exploration of current debates about causes of today's urban situations and strategies for solving them. Topics include housing, disinvestment, urban-suburban relationships, inequality, discrimination, social policies and art. This class tends to have a community service learning component.
- ED/RP 591B Sustainable Communities (3 credits)
An investigation of the principles and practices of sustainable development, particularly the achievement of balance between ecology, economy and equity on a local, regional, national and global scale. Topics include green design, environmental justice, and regenerative technological systems.

Regional Planning

- RP 553 Resource Policy and Planning Credit 3 (F)
Examination of natural resource policy formation and the planning process at the local, state and regional levels. The course investigates the interrelationships between resource policies, the built environment, and environmental impacts and identifies a range of current best practices for improving that relationship.

- RP 609 Landscape Planning Studio II Credit 3 (F)
The overall goal of this studio is to teach students how to plan and implement open space protection at a landscape scale. This will require the ability to synthesize information about natural features, cultural resources, and development patterns to create a greenway network that addresses the unique problems and opportunities of the study area.
- RP 625 Quantitative Methods in Planning Credit 3 (F)
Foundation course in quantitative planning methods for Master's degree candidates in regional planning. The course focuses on information systems and data sources routinely used by professional planners. Scope of the course includes sampling theory, survey design, exploratory data analysis, and correlation and regression analysis. Spreadsheet and statistical computer applications are employed in conjunction with assignments in applied problem solving and data analysis.
- RP 645 Growth Management Credit 3 (F)
An examination of the role of policy in guiding optimal growth. Examination of controversies regarding growth management practices, constitutional issues, methods and techniques used in designing growth management strategies, and current innovations and future trends facing growth management activities across the country.
- RP 651 Planning History and Theory Credit 3 (F)
Planning as a decision-making process, the attributes of the political and administrative environment within which planning takes place, and the implications of this environment for the planning process and the planner.
- RP 652 Tools and Techniques in Planning Credit 3 (S)
Practical information, specific tools, regulatory processes, and analytic methods useful in the practice of public sector planning at the local level.
- RP 656 Judicial Planning Law Credit 3 (F)
The law of land use control as expressed in major judicial decisions in the United States. Creations, expansion and powers of municipal corporations; use of legal planning tools such as zoning, abatement of nuisance, eminent domain, etc.
- RP 675 Regional Planning Studio I Credit 4 (S)
The first in a sequence of workshop-type courses integrating skills and knowledge from other courses and applying them to representative planning problems. The instructional goals of this workshop are to develop the skills and techniques for collecting, analyzing, synthesizing and presenting of spatial and non-spatial data; and to develop a sense of judgment about the comprehensiveness and reliability of the data and its utility for planning decisions.
- RP 681 Regional Planning Studio II Credit 5 (F)
The second in a sequence of workshop courses integrating skills and knowledge from other courses and applying them to "real-life" planning problems. Preparation of regional development models and plans based upon an interdisciplinary approach to the analysis and evaluation of regional problems

and potentials. Plan development, public participation, and plan implementation.

- RP 691E Geographic Information Systems for Planning and Design Credit 3 (S)
The design and use of computerized geographic information systems for land planning and design decisions. Examination of the role of G.I.S. in the planning function and process. Information and its role in defining planning problems and shaping public discussion.
- RP 691F Research Issues for Landscape Architecture and Regional Planning Credit 3 (S)
Survey of research issues and methods in landscape architecture and planning. This course is designed to assist students preparing their research on their Master's theses and Master's projects. Cross-listed as LA691F.
- RP 691M Planning for Industrial Development Credit 3 (S)
The goal of this course is to explore the appropriate methods required for determining the optimal location, enhancement and expansion of the industrial base of communities. Topics focus upon industrial policy, land use, infrastructure, labor needs, the role of the environment, financial requirement, industrial innovation and the influence of world trend on our industrial base.
- RP 691R People and the Environment Credit 2-3 (F)
Environmental psychology is an interdisciplinary field, which studies the relationship between the physical environment and human behavior. The premise is that people's behavior (e.g., well-being, emotions, productivity, and even personal relationships) is affected by the physical environments where they live, work, and play. This graduate seminar is designed to introduce environment-behavior research to landscape architecture and regional planning students.
- RP 693S Planning with Multiple Publics Credit 3 (F)
Explores the social, cultural and political underpinnings and implications of planning practice and theory. The course focuses on appropriate planning with different social groups, the relation of planning and policy to social change and research methodologies.
- RP 696 Independent Study Credit 1-3
- RP 697A Special Topics – Landscape Planning Seminar Credit 2 (F)
This half-semester seminar is a continuation of RP609 Landscape Planning Studio II. This seminar focuses on implementing open space and other environmental planning efforts using innovative land-use planning strategies.
- RP 698A Master's Project Credit 6
Allows a student to work on an actual or demonstration project to explore various aspects of regional planning.
- RP 699 Master's Thesis Credit 8
Preparation of a research paper in an emerging or state-of-the-art area of regional planning. A full graduate committee and calendar due dates must be met, as outlined in the Graduate School Handbook.

THE DUAL DEGREE OPTION IN LANDSCAPE ARCHITECTURE AND REGIONAL PLANNING (MLA/MRP)

Program Director: Robert Ryan

A growing number of students have recognized the overlap between policy and design and have seen the importance of a strong link between the process and product of land development. The dual degree option in Landscape Architecture and Regional Planning combines the design and analysis of urban and rural landscapes with a concern for the social, political, regulatory and economic factors that shape those landscapes. This option, which normally requires one less year of study than doing the degrees one after the other, confers two separate degrees upon completion. The versatility that results from the blending of these two related fields can be a valuable asset for the student. Public agencies, such as the Massachusetts Department of Environmental Management (DEM) and private consulting firms, e.g. EDAW, Inc. have preferred employing those students who have the dual skills this option offers.

Admission

It is anticipated that most students interested in the dual degree program will identify their interest before beginning graduate study. However, for those who decide to apply for the second degree after beginning an initial course of study, we encourage you to investigate the option as early as possible. An early decision may alleviate scheduling conflicts between the required courses of both programs.

Curriculum

The student will be expected to complete the required courses of both degrees with the exception of being able to waive one regional planning studio. Electives will be selected by the students with guidance from their advisors according to a clearly defined direction of study. In Regional Planning, dual degree students are not required to select an area of concentration.

Credit Hour Requirement

Students who choose the dual degree option are expected to complete 78 credit hours. These can be roughly divided between landscape architecture and regional planning courses. The usual departmental course load is 12 credits per semester. Dual degree students take an additional 6 credits over the period of the two degrees.

Students must complete a Master's thesis or project in each area of study. In the regional planning program students may also choose the three-course option, a series of three rigorous, linked, courses.

Students entering the dual degree program without preparatory landscape architecture studies will take those prerequisite courses that make them eligible to enter the second year Landscape Architecture Program. These credits generally do not count toward the 78 credit hours. Detailed guidelines about specific exceptions to this rule are available from the Program Director.

Residency Requirements

Candidates for the dual degree will be required to spend a minimum of three years in the program. In special circumstances this requirement may be modified with the approval of the dual degree program administrator and the program directors.

THE COMBINED DEGREE IN LAW AND PLANNING (JD AND MRP)

Program Director: Ellen-J. Pader

General Overview

A combined degree in law (JD) and planning (MRP) is offered in an arrangement between the Regional Planning Program and the School of Law at Western New England College (WNEC) in Springfield. The combined degree in law and planning provides the following advantages:

1. Both degrees can be completed in four years instead of the usual five.
2. Professional status can be obtained in two fields.
3. A practice specialization is established.
4. A network of contacts in both law and planning is obtained.

Holders of such degrees are employed in a wide variety of occupations in both public and private sectors. According to a combined planning/law degree program at another institution, the University of California at Berkeley, its past graduates “have found an impressive variety of professional opportunities available to them.”

The purpose of the combined law/planning degree program is to provide a professional education of greater breadth than would otherwise be available for students interested in urban, land use, housing, or social policy problems. The planning curriculum offers students training in policy analysis and exposure to theories and programs that address urban development problems. Legal training provides additional analytic skills and substantive knowledge necessary for successful plan and program implementation. Education in planning offers an overview of theories and methods that permit identification and treatment of societal problems. Education in law offers insight into the institutional causes and possibilities for treatment of these problems.

Graduates of a combined degree program are qualified for a number of professional roles at the intersection of law and planning. These include municipal attorneys, staff personnel on legislative committees, economic development administrators, planning directors, consultant planners, advisors to private clients on land use matters, staff members of governmental agencies, public interest advocates, and executive assistants to mayors, governors, and department heads.

Admission

Applicants to the combined program must apply to and be admitted separately by the School of Law and the Regional Planning Program, prior to acceptance into the combined program. Admission to this program is limited to students who have applied simultaneously to both units or who are already completing their first year of law or planning study. Applicants must meet the separate admission requirements of each institution, including satisfactory performance on the GRE for admission to Planning and satisfactory performance on the LSAT to the law school.

Duration and Residency

The combined JD/MRP allows students to obtain the two degrees in four years rather than the five years it would take if pursued separately. Students will pursue course work at the two institutions consecutively rather than concurrently.

Students must spend their entire first year in either the Planning Program or the School of Law. The second year is normally spent full-time in the program not chosen the first year. Thereafter, the student will finish the degree requirements by spending entire semesters at either institution to complete remaining credits. After the first two years the student has three additional semesters (with 12-16 course credits per semester) to complete at the School of Law and 12 semester credits to complete in Planning. Put another way, after two years, the student will have one semester's work to complete in Planning, and three semesters (1 1/2 years) to complete in Law.

Curriculum & Cross-Credits

The successful completion of the combined program (and the awarding of the law and the planning degrees) requires the student to complete the core courses and mandatory academic requirements at each institution. In meeting these requirements, the combined program requires that each institution grant credit for one semester's academic work (what is now indicated as twelve course credits by both institutions) at the other institution. Thus for Planning's 48 credit program, 36 credits will be taken in the Regional Planning Program (including required courses and a Master's thesis or project), with law courses constituting the remaining 12 credits (cross-credits) for the MRP degree. The 12 law credits are in essence the electives allowed in the planning curriculum. At the Law School, the student must still earn the 88 credits required to obtain the JD degree, but 12 of those credits will be earned through the successful completion of courses at the Regional Planning Program.

THE DOCTORAL PROGRAM IN REGIONAL PLANNING (Doctorate of Philosophy)

Program Director: Elisabeth Hamin

The Ph.D. program in Regional Planning leads to a research degree for students interested in careers in the academic world or in research in public agencies or private corporations. We are able to supervise doctoral work in areas of planning where we have faculty strength, which includes some areas where planning and landscape architecture overlap. To learn more about faculty interests and expertise and the intellectual tone of the Department, potential applicants should review faculty descriptions and the sections on both the Master's in Regional Planning and the Master's in Landscape Architecture elsewhere in this handbook.

Applicants to this program are encouraged to visit the campus and meet with the Program Director and pertinent faculty. Admission decisions are influenced by this visit, along with preparation of a thoughtful written statement, previous accomplishments and letters of reference. A key aspect of admission decisions is determining a good match between applicants' areas of interest and the expertise and research of existing faculty. Prospective students may wish to research faculty publishing and grants via university web sources as well as research databases prior to making inquiries or applying to the program. We encourage the use of electronic mail for inquiries. Requests for admissions packets can go to Ms. Sandi Potyrala (spotyral@larp.umass.edu), while other questions can be addressed to the Program Director, Dr. Elisabeth Hamin (emhamin@larp.umass.edu).

Students admitted to this program normally have a Master's degree in planning or a closely related field such as landscape architecture or geography. Those with a Master's degree in other fields but with appropriate professional experience are given serious consideration and encouraged to apply. Most successful applicants will have several years of professional or academic full-time or equivalent work. Students holding only a baccalaureate may seek admission to the Masters program, and when graduation from that is imminent, apply to the PhD program.

Financial Support

We may offer an assistantship that carries a small stipend and a tuition waiver to students admitted to the doctoral program. If so, appointments will be either as a Teaching Assistant in one of the other academic programs offered in the Department, or a Research Assistant in one of our research programs. U.S. students may hold external assistantships in local or regional public offices. We work with students to find outside funding for their dissertation preparation years.

Course Requirements

The degree requires satisfactory completion of 60 credits, including 15 in dissertation credits (Regional Planning 899). Students with a masters degree from a PAB accredited planning program may petition to receive a maximum of 17 credits of advance standing, while students with other related degrees may receive a maximum of 12 credits of advance standing. The typical student will require three semesters to complete the course requirements, one semester for the comprehensive examinations, and another one to two years for the dissertation. The total university-allotted time to complete the degree (known as the Statute of Limitations) is four calendar years for those with a Master's degree in planning, and six years for those with degrees in other fields. Extensions to this can be requested if the student is making academic progress.

Persons interested in part-time study should be aware that Ph.D. studies at the University of Massachusetts require a minimum of one year of full-time residence (two consecutive semesters).

Required courses in the department are as follows:

- PhD Seminar (3 credits, usually taken first semester of first year)
- Planning History and Theory (3 credits, usually taken in first semester of first year)
- Great Books in Planning/Advanced Planning Theory (3 credits, usually taken second semester of the first year)
- Regional Planning Research Methods (3 credits, usually taken second semester of second year)
- PhD Workshop (1 credit, usually taken for credit in second year but attended during all semesters in residence)

Students may apply to have history and theory or RP research methods waived if they have had very similar courses previously; this does not change the total course credits required to graduate.

In addition, students are expected to pursue at least one course in advanced methods appropriate to their anticipated research topic. This course will often be from outside the department.

Foreign Language Requirement

Foreign language requirements are determined based on the student's intended research.

Comprehensive Examination

Comprehensive exams are both oral and written, and usually are completed within three months of finishing course requirements. The written examination has three parts: (1) planning history and theory (this exam must be given by a member of the Regional Planning faculty); (2) the substantive area of interest of the student; (3) research methods. The exact form of the written examination may be developed in consultation with the examination/dissertation chair and examiners, and the PhD Graduate Program Director (GPD). The examinations may include either three intensive in-class examinations, or longer take-home examinations. Students generally have completed and circulated among their committee a draft of their dissertation proposal prior to sitting for examinations. The oral examination is held within two weeks of completion of the written exams, and will deal with issues raised in the written exams, major issues in the planning field, and a defense of the dissertation proposal.

Dissertation Proposal, Supervisor and Committee

The dissertation proposal should be completed within three to six months after the passing the oral examination. The proposal must be approved by the committee and the GPD, with a copy sent to the Graduate School, and must be completed at least seven months prior to the dissertation defense.

A dissertation supervisor is generally identified by the end of the first semester in residence, and a committee by the end of the second semester. Committees consist of a minimum of three members, with the chair and one other member coming from LARP faculty who are appointed to the graduate college, plus a member from outside the department. One committee member, preferably the chair, must be an appointed member of the Regional Planning faculty. Committee members are formally appointed by the Dean of the Graduate School after submission of an acceptable research proposal, generally in the fourth semester. When the dissertation is practically complete, students will hold a dissertation defense, as per the Graduate School's requirements.

General Regulations of the Graduate School

The General Regulations of the Graduate School cover such matters as graduate credit, the course numbering system, changing or dropping of courses, requirements regarding incomplete work in a course, Statute of Limitations, the format of the doctoral dissertation, and further details regarding the dissertation committee. These Regulations are listed in the Graduate School Bulletin.

**YOUR MASTER'S THESIS OR MASTER'S PROJECT
(MLA and MRP Programs)**

Prior to or early in the final academic year, you must decide on a topic for a Master's thesis or Master's project. The topic selection is your responsibility and must be approved initially by your Program Director and other appropriate faculty. This is frequently done during the landscape architecture and regional planning courses in Research Methods.

Theses and Projects

After your initial idea is approved, you select a committee suggested by or acceptable to the Program Director and the core faculty. For a thesis or project, this committee must include the following persons:

1. For a Master's thesis, at least three but no more than four members; for a project, at least two but no more than four members. These members should be as follows:
 - a. The chair should be a member of the core graduate faculty in your Program as listed in the handbook. In exceptional circumstances students may request the Program Director in writing that another faculty member be given this role, explaining the reasons for their suitability. This letter will be placed in the student's file. This other faculty member must be from either the Department or from the list of Adjunct Professors in the handbook (Note: Adjunct Lecturers are not eligible to be chairs).
 - b. The second member should be a graduate faculty member from the University. If the chair is not a member of the Program's core faculty, then the second member must be.
 - c. Other members should be graduate faculty members from the University or Five Colleges.
 - d. Students may request in writing to have an outside member who is either a professor at another college or a practitioner. Students doing projects should write a letter to the Program Director, with a copy to the graduate secretary, explaining the reasons for the outside member's suitability. This letter will be placed in the student's file. Students doing a Master's thesis must submit the person's curriculum vitae to the graduate school along with a justification for their selection. The graduate school will then judge whether to appoint the outsider.

If you plan to write a Master's thesis, you must complete a form letter for the Graduate School (available in the Department Office), and submit that letter along with a signed copy of the approved Master's thesis outline to the Graduate School at least four months prior to submitting the final Master's thesis. Master's projects need the approval of your Program Director only.

The Three-Course Option

The Regional Planning program offers an optional, three-course sequence as an alternative to the Master's thesis/Master's project. This alternative consists of selecting a minimum of three rigorous, linked courses which, when taken, will contribute substantially to the achievement of the student's academic goals. Students should prepare a 10-page proposal outlining the theme of the option, its relevance to planning, and 4-6 possible course (to make allowance for courses that may not be offered etc.). The student will select one faculty member to chair their three-course option: This is usually the regional planning program director or the faculty member best qualified to assess the course work. The proposal must be given to the regional planning program director who will ensure it is evaluated by the entire regional planning faculty who may approve it, as for changes, or reject it. There are several additional requirements for the three-course option:

1. For MRP students, at least one but preferably two of the three courses should be outside the Regional Planning program.
2. For Dual Degree students, Landscape Architecture courses will generally not be acceptable in a three-course option. Regional Planning courses are acceptable. If choosing the three-course option, a Dual Degree student must complete at least one Master's theses or Master's project for one of the programs.
3. Undergraduate course are generally only acceptable if they are at the 300 level or above and the faculty member agrees to a graduate enrollment involving extra work to bring the course up to graduate level. Only one such course is generally acceptable as part of a three-course option. As these are often taken as a form of independent study with the professor, although it should be clear in the proposal that this is a class taken for graduate credit, including the additional work required.
4. Independent study courses, apart from those mentioned in the previous point, are generally not acceptable in a three-course option, except under highly compelling circumstances, approved by the Regional Planning faculty.

At the end of the three-course option the student will prepare a 10-12 page paper linking the three courses to issues in planning. The three-course option advisor will read the paper.

Master's Thesis and Master's Project Deadlines for MLA students

1. Master's theses and project proposals shall be due to the Graduate Program Director by November 15, the semester prior to enrolling for the Master's project. The proposal must be signed and approved by the committee prior to this date. For students wishing to complete their project in the fall semester, proposals shall be due to the Graduate Program Director by May 25.
2. Signed proposals will be kept in the student's file and the student shall register for Master's thesis or Master's project credits with their respective committee chairperson.
3. Final drafts of the Master's project are due to the committee chair by the last day of classes. (Master's thesis shall adhere to the Graduate School deadlines).
4. An oral defense of the Master's project shall occur by the last day of exams during the semester in which the student will be graduating.
5. All students shall submit one copy of their Master's thesis and three copies of their Master's project to the department. Master's theses and Master's projects shall be submitted in the official red binding approved by the graduate school. Projects may vary slightly in format with approval of the project committee. It is also customary for students to give each member of their committee a bound copy of this document in the same official red binding. Professional binding is available through local copy services.

Meetings With Committee

Students should establish with their Master's thesis/Master's project committees a realistic timetable that will allow for the meeting of due dates and should set up regular meeting times (once every week or two weeks) with the committee members to discuss progress on the Master's thesis/Master's project. Students should avoid a situation where they only work separately with individual committee members.

Formal Defense Procedures/General Examination

Every candidate for the Master's degree must pass a general examination focusing on his/her Master's project, Master's thesis, or three-course option. This examination is called the formal defense or formal presentation. The formal defense is an oral examination and is conducted by the thesis or project committee, or by the three-course option advisor.

Formal defenses are scheduled by the chair/advisor when s/he feels that the candidate has completed a substantial part of the Master's project and has shown strong indications that full completion will occur soon. The committee/chair or the student may invite others to the formal defense. These defenses are frequently conducted on one day late in the Spring semester, however from time to time that date is not convenient and separate defenses are held. The recommendation of at least two members of a two or three person committee, or three members of a four-person committee, shall be required to receive the degree. For a three-course option the chair must approve.

If the student passes the defense, s/he should have the chair/advisor sign the memorandum of "General Examination" (available from the Graduate Secretary) and see to it that it is immediately placed in the student's file. If the student does not pass the defense, s/he has the option of leaving without the degree or requesting permission to return for an additional semester as a student in residence. Approval by a majority of the defense committee is needed to approve this latter option. It should be noted that passing the General Examination is a necessary condition for receiving the degree. Students must also pass all other requirements, including having their committee approve the completed thesis or project.

Eligibility Form

All students must complete the "Certification of Eligibility for the Master's Degree" (available from the Graduate School).

Students doing a Master's thesis must satisfy the Graduate School requirements on format, typing, etc. and submit the original and one copy (both unbound) by the deadline date, plus one bound copy to the Department. Refer to the University's **Guidelines for Master's Degree Candidates** for details.

Students doing a Master's project must submit three signed, bound copies to the Department office (two are for the library and one is for the department). Final grades cannot be given without signatures on the copies, or an indication in writing from all committee members that they will sign the copies when physically present in Amherst.

The final authority on all thesis requirements is the Dean of the Graduate School. The final authority on all Master's project requirements is the Program Director.

Master's Thesis/Master's Project Abstract

A 1-2 page Abstract is required along with the three copies of the Master's project or one copy of the Master's thesis due to the Department. All of these items must be received before the Master's Degree of Eligibility Form will be signed. The Abstract has been adopted for two reasons. First, it is a valuable exercise in promoting a concise 1-2 page summary of your project or thesis. It is especially useful for briefly introducing potential contacts or employers to your work. Second, for the Department, it will provide an efficient means of organizing and retrieving student work.

Department Head Signature on Master's Project

The signature of the Department Head is required on all Master's projects (University regulations on Master's theses already require the signature of the Department Head). In addition, the Master's Degree Eligibility Form will not be signed by the Department Head until the one copy of the Master's thesis or one bound and signed copy of the Master's project due to the Department have been received by the Graduate Secretary. The Master's Degree Eligibility Form for three-course option students will not be signed until the Program Director indicates that the final 10-12 page paper has been successfully completed.

Topic Selection for a Master's Thesis or Master's Project

One of the most common questions students have concerns the difference between a Master's thesis and a Master's project. A Master's thesis can be distinguished by its formal academic

requirements regarding knowledge of scholarly literature and writing standards. A Master's project is intended to display your professional skills and knowledge. Methodology and literature review are secondary to your approach and solution to the problem.

Master's Thesis Guidelines:

The Graduate School guidelines define a thesis as:

"the written result of a study undertaken independently by a student. Typically, a thesis will test or add to existing theoretical frameworks related to the areas of study. It will include a rationale for studying the problem; specific purposes and objectives; measures of those objectives assessed by appropriate statistical means; and a cogent discussion of findings in relation to the existing body of knowledge at that time. The format must adhere to clearly established standards and conform to all requirements specified by the graduate school. All copies presented to the department will be hard-bound."

You may, for instance, choose to write your thesis on the economic impacts of regional malls on downtowns in small communities. After careful preliminary reading you would construct your hypothesis (or hypotheses). In this case, you might hypothesize that regional malls in Western Massachusetts have caused a 10% decline in sales in downtowns in those communities with a population under 5,000 that are located within 10 miles of the malls over a five-year period. Your major task is then, through a methodological framework, to validate this hypothesis. Please note that a hypothesis is a measurable statement that, with definitions, can be found to be valid. In instances where hypotheses cannot be constructed, as in theoretical works, you can pose questions. For example: Will comprehensive planning help to improve the quality of life in Western Massachusetts? There is no way in which this can be objectively validated but, by showing what has occurred elsewhere, by providing information on present tools and techniques, and by showing the response of the courts, you could probably make a strong case. In either case, the following common elements must be followed:

1. You must meet the Graduate School guidelines governing the committee, the proposal, the product and time line.
2. You must have a clearly stated objective based upon the construction of your hypotheses or research question(s).
3. You must demonstrate a comprehensive understanding of the literature.
4. You must have a rigorous methodological framework.
5. You must be prepared to defend your positions.

Master's Projects Guidelines:

The following guidelines pertain to Master's projects:

Unlike thesis requirements, the Master's project format need not conform to graduate school requirements although it may be in the student's best interest to utilize those standards as guides whenever appropriate. The Master's project requires that students illustrate their mastery of certain professional competencies. The finished product must be bound for storage in the departmental library so that it will have continued use by graduate students and faculty.

In general, a project is a creative work that is based upon your professional skills, knowledge of the field, and creativity. It is intended to be the solution to an applied planning or design problem. As such, the rules of scholarly research are not as stringently applied. You are expected to demonstrate knowledge of your topic to show how others have resolved your problem elsewhere, and you are expected to undertake some research. These are all, however, secondary to how you analyze and find solutions to your project. An example of a Master's project would be "A Design for a Five-College Bikeway". You would be expected to research national and state standards concerning bikeway projects, the process of developing bikeways, and the master plans of the communities in question. You would then set your goals and objectives, undertake your project analysis, create alternative approaches, and create your own solution. You would be evaluated not on the completeness of your research but on the results of your efforts: Does your solution work? Is there any creativity in it? Have you answered all the critical design questions involved?

Some basic points to consider regarding Master's projects:

1. You must show knowledge of the topic beyond the project itself. In other words, some research is normally required.
2. You must set a framework for your study, complete with goals and objectives.
3. Your solution must be grounded in either a specific place or point to conditions found to be common to places.
4. High quality writing is required.
5. You will be judged primarily on the professionalism of your project.

The Graduate School offers the following general guidelines for pursuing your Master's project or Master's thesis. They present a good framework, which you would be well advised to follow as far as you can within the context of your work:

Good research requires a good question; one which will be worth pursuing and which will be answerable in principle. A good project requires a good problem; one that is worth solving, and is capable of being solved given the constraints of time. The expected time input is 350-400 hours.

Proposals for Master's thesis/Master's projects should cover the information outlined below, although not necessarily in the same order:

1. A descriptive title and a brief statement about the study - what is the study all about?
2. Statement of the general problem or issue - the big picture.
3. Specific situation to be addressed - your bit of the big picture.
4. How the proposed study will help solve or point out a method of solving the problem. Why is this research or project necessary or helpful to the profession or the client?
5. An initial search of the pertinent literature indicating your understanding of the state-of-the-art.
6. Statement of the study goal and objective(s). (Objectives are usually more specific than goals.)
7. Statement of the methods or techniques to be used for achieving each study objective. Specific methods and techniques include the specification of each task: interviews, data collection, case studies, field observation, site analysis, planning and design criteria, development of procedure(s), testing, validation of alternatives, evaluation procedures, etc.
8. Form of presentation. Develop an initial table of contents (outline) of the Master's thesis or Master's project including chapter titles and subtitles and general titles of illustrations, maps, graphics, etc.
9. Supporting courses taken or planned that will support this study.
10. Bibliography by subject areas, books, journal articles, other theses, etc.
11. Budget and supporting personnel (if appropriate).
12. Recommended Committee Members.

Typical End Product of a Master's Thesis or Master's Project

While there are wide variations in terms of the size of the end product, most will range from 60-100 pages. It is expected that the product will be well written, organized, documented and illustrated.

Most Master's theses/Master's projects will have the following chapters:

1. **Introduction.** This chapter will include a discussion and definition of the problem, and specific issues or areas that are to be studied. The objectives, methods and key tasks that are to define the study should be explained as well. This chapter will normally require 5-10% of your effort.
2. **The State-of-the-Art.** This chapter will focus on past research and project efforts that contribute to an understanding of the problem under study. At times it will be an

analysis of pertinent case studies, while at other times it will be a critical analysis of the findings of previous scholars, planners, and designers. The intent of this chapter is to demonstrate that the student has a firm grasp of the literature and the critical elements of his/her study. This chapter will normally represent 20-25% of your effort.

3. **The Method(s) to be Applied.** This chapter will explain in detail how the student will carry out the work. Theoretical approaches, computer programs, survey techniques, field studies, photographic mapping techniques, and an overall procedure should be clearly described and defended. In particular, if the student is embarking on new methods in an effort to more clearly define, validate or resolve a problem, it is crucial that the methods be explained in exact detail through a step-by-step procedure. This effort will represent approximately 30-35% of your effort.
4. **The Application.** This chapter represents the findings of your research effort and the application of your plans and designs. Were your hypotheses validated? Were answers to your questions found? All elements of the effort including the data collection/ inventory, the analysis and the synthesis will be presented here. This chapter will normally represent 25-30% of your effort.
5. **The Summary.** This chapter, usually quite short, is intended to place your work in perspective. What will be the benefits of the study? Will it make a contribution to the planning or landscape architecture body of knowledge? Finally, is there a need for further research? This chapter will require up to 15% of your effort.
6. **Bibliography and Selected References.** Most students treat this section of their work as an afterthought. Yet, most researchers following your efforts will examine your bibliography in detail. A thorough, up-to-date bibliography will be a major contributor to your success. A slipshod, dated bibliography will, generally, lead to a poor effort.

Master's Thesis/Master's Project Schedule

All Master's degree candidates who are intending to write a Master's thesis or develop a Master's project are expected to select a topic by the **beginning** of the first semester of the final year at the latest. Between September and October 1, the student is expected to undertake preliminary work on his/her thesis or project to determine if the proposed work is meaningful and defined so that the work can be accomplished within a limited time frame.

The following is intended to serve as a guide to the student in managing the effort necessary to complete a first-rate product. It is a guide; it is not intended to serve as the legal code.

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| Sept 1 - Sept 30 | Formulation of an idea or problem that matches your interest and skills. The development of your proposal of Master's thesis/Master's project outline. |
| Oct 1 - Oct 30 | Discussions with faculty should occur during this period. By the end of October you should have a polished proposal and outline and be prepared to make recommendations concerning potential committee members. |

Nov 1 - Nov 15	Submission of the proposal to the Program Director. The core faculty, after reviewing the proposal, will meet together to evaluate the proposal. This meeting will be followed by a brief presentation by the student. When the proposal is approved, a committee will be appointed.
Nov 16 - Jan 31	Research. 95% of your research effort should be accomplished during this period. It requires great organization and time management to insure efficient use of this time. The failure of most students to finish on time can be directly attributed to the student's failure to use this time efficiently.
Feb 1 - Mar 30	Writing. The first draft of the entire Master's thesis or Master's project should be completed by the end of the month and ready for review by the committee.
March 20-24	Mid-Review. A public presentation will be made to faculty and students that describes the project in detail and provides a status report of progress to date. This is an opportunity for getting feedback on the project.
Apr 1 - Apr 30	Production of thesis or project This month should be spent on typing, finishing up the illustrations and the preparation of the presentation on the results and conclusions.
End of Semester	Final Defense before the committee. Public Presentation. These must be submitted to the Graduate School by April 30th for the May graduation.

Note: The faculty will not undertake any Master's thesis/Master's project work after May 29th until the day after Labor Day. Those students who do not finish within this time frame should plan to enroll as full-time students during the fall semester.

Authorship Protocol for Funded Research

For students who develop their theses/Master's projects independently, the role of the faculty committee is primarily that of advisor and critic. In some cases students are able to get their own funding through individual grants of one sort or another. However, as many as one third of the theses written in recent years have been done while students are graduate students on funded research being conducted by the Department or by interdisciplinary programs in which the Department participates. In many cases the research has been going on for a number of years under the direction of various faculty members, so the work of individual students is a component of a much larger study.

When the Master's thesis or Master's project is entirely the student's own work, the student is clearly the author. However, when this work is performed as part of research funded to the Department or to individual faculty members, authorship becomes more complicated and needs clarification at the outset to ensure fairness to all concerned and responsible use of scientific information. Research funds are normally granted to the University and administered under the direction of faculty Principal Investigators, who have developed the program on the basis of their professional interests and who are carrying out the terms of the research contract with fiscal and intellectual integrity. In many cases, the programs involve theoretical contributions on the part of the Investigator and others and represent many years of work. The student's own

independent contribution should, therefore, be acknowledged but recognized as existing within the context of a large project. Toward this end, the following protocols should be followed except in special cases:

1. All documents which report on funded research and which are submitted to the Graduate School in partial fulfillment of the requirement for the degree of Master of Landscape Architecture or Master of Regional Planning, will have the name of the author on the title page but will also carry on the following page a statement acknowledging that the work was performed under a particular grant, and list the name of the funding agency and the name(s) of the Principal Investigator(s). This is a normal procedure on publication of scientific or professional papers, and is usually required by the granting agency.
2. The theoretical contribution to the study by the principal investigators and other research associates or student assistants should be clearly stated and properly referenced along with other sources. Such acknowledgments are part of the normal protocol of scientific writing, which enable the reader to follow the development of the research, and have considerably more significance than the traditional appreciation for advice and counsel, etc., which go with theses and dissertations. This is not simply a matter of credit, but is part of the record of the evolution of scientific thought.
3. All published materials, which present the initial result of funded research (other than part 1 above), whether in the form of reports to the funding agency or of articles in professional journals, will, as a general rule, carry the name of the Principal Investigator(s). Order of authorship should be based on the degree to which the actual contribution in substance, style, and writing is the work of the various authors. In certain cases, efficient use of funds and human energies will call for the research assistant to submit the report verbatim with the appropriate title page as a Master's thesis or Master's project, but it will be understood that other credits will be given as appropriate for general distribution of the document in question.
4. For their part, Principal Investigators will fully credit student research assistants (along with other participants) in monographs or journal articles reporting on the research, whether or not they involve use of material in theses or Master's projects. Most research faculty wish to help deserving students obtain legitimate publication credits and will lend their own reputations for that purpose, but it should be understood that joint authorship or acknowledgment of collaboration implies a major role in the writing of the material or a significant theoretical or analytical contribution to the work. This is not automatic simply because a research assistant has performed a large amount of legwork for pay. Some investigators are required or prefer to do their own writing and, in this case, when student contributions are substantial they will be so acknowledged, but co-authorship is not necessarily to be expected.
5. Normally scientific information is considered public property, and publicly funded research reports are not usually copyrighted (although journal articles usually are). Students are not only permitted, but encouraged, to use data generated in research projects in their own way and to publish their own formulations under their own names if they can, with due regard to standard scientific practice in the acknowledgment of the work of others.