

LANDSCAPE ARCHITECTURE AND REGIONAL PLANNING

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, the Ph.D. Program in Regional Planning, and the Department's dual/joint degree programs, and to provide current students with official information about the specific core and concentration requirements, course offerings, as well as 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 introduction to 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:

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Sincerely,

Elizabeth Brabec, J.D.
Professor and Head
Dept. of Landscape Architecture and Regional Planning

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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 century since then, the Department has grown substantially, changed its name, and developed a number of distinct instructional, research and outreach programs.

Bachelor of 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 of 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 2006.

Associate of 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 of 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 2007.

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 now a significant number of entering and incumbent students now choose this option.

The Combined 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 (PhD)

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.

Citizen Planner Training Collaborative

The Citizen Planner Training Collaborative provides local planning and zoning officials with tools to make effective decisions regarding their community's current and future land use.

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

1. The University of Massachusetts Amherst has an enrollment of approximately 26,000 students, 22% 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 Sciences
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 10-12 students in the MLA Program, 10-20 in the MRP Program.
5. The Department offers accredited Master's degrees in both Landscape Architecture (MLA) and Regional Planning (MRP) and a PhD 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. We have begun to develop other dual degree options with the Masters program in Architecture and Masters in Public History.

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: Amherst, Hampshire, Mt. Holyoke, and Smith Colleges.
7. Almost all graduate students live off campus. However, because affordable, convenient housing can be somewhat scarce, we recommend that new students plan to arrange for housing in advance of arrival. The university and the department can assist with information and contacts.

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 an appropriate, and sustainable 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 social, cultural, 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, assessment and adaptation 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, and to promote sustainable policies and programs. Design, which is the province of architecture, whether of landscape or buildings, is the conscious ordering of real life objects and events in three-dimensional space to preserve, enhance and sustain human purposes. As a practical matter, in many instances designers plan and planners 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 disciplinarily 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 sustainable approaches to land and land-based resources as a central concept in planning and design. This concept is used as a unifying rubric, for clearly there are few human concerns that do not, in one way or another, touch upon the appropriate use of land at every scale.

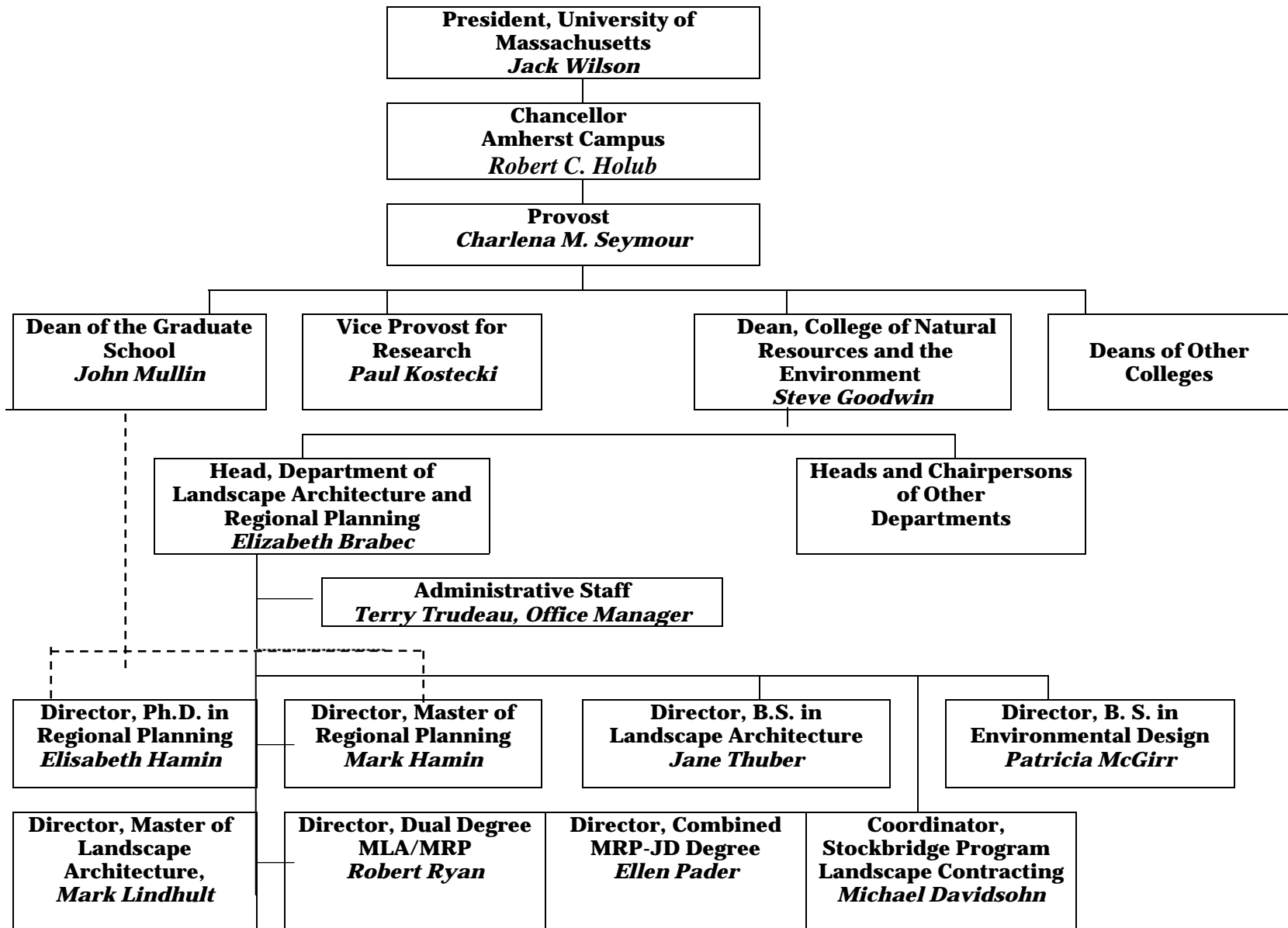
While the physical environment unites concerns within the Department, examinations of the cultural, historical, political, and economic environments broaden and diversify interests in the Department. There is the recognition that different individuals and groups see various aspects of the environment 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 those professions, 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 influences on 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 professions

Department of Landscape Architecture and Regional Planning Simplified Organization 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 PhD programs.

Faculty and their Specialties

Ahern, Jack F., FASLA: Professor of Landscape Architecture. B.S. in Environmental Design, University of Massachusetts, 1974; M.L.A., University of Pennsylvania, 1980, PhD, Wageningen University, 2002. Instructor of courses in plant materials, landscape ecology, design studio, landscape urbanism, and landscape architecture study tour. Experience in private practice involving site and environmental planning and design. Research interests include: sustainable urbanism, landscape ecology for landscape planning design and management.

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 Universitat 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.

Brabec, Elizabeth: Professor and Department. Master in Landscape Architecture from the University of Guelph, Canada, and a Juris Doctor from the University of Maryland . Founded and managed the landscape planning firm, Land Ethics, Inc. in Washington , D.C. Research interests are focused on land conservation and the design and planning of sustainable open space, complemented with a strong interest in culture and the historical basis of landscape form.

Davidsohn, Michael: Senior Lecturer II 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.

Hamin, Elisabeth M.: Associate Professor of Regional Planning and Director of the PhD in Regional Planning Program. B.A. in Business Administration, Cleveland State University; Masters of Management, Northwestern University; PhD 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. Joint editor and author of *Preserving and Enhancing Communities: A Guide for Citizens, Planners, and Policymakers*. University of Massachusetts Press, 2007. Author of *Mojave Lands: Interpretive Planning and the National Preserve*, Johns Hopkins University Press, 2002.

Hamin, Mark: Lecturer in Regional Planning and Director of the Master of Regional Planning Program. B.A. History and B.A. Philosophy, Brown University; PhD History and Sociology of Science, University of Pennsylvania. 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: the influence of life sciences on the development of the planning field; urban infrastructural and ecological history; social, economic and cultural perspectives on environmental risk, security, and 'quality of life' in cities; and technologically-transformed food ecologies/economies.

Kumble, Peter: Lecturer of Landscape Architecture. Masters Degree in Landscape Architecture from the University of Arizona (1988) and Bachelor of Arts Degree in Environmental Planning from Antioch College (1980). Prior to joining the faculty at the University of Massachusetts, Peter taught as an Assistant Professor at Utah State University and was the principal partner in a nationally recognized landscape architecture and planning consulting firm based in Ann Arbor, Michigan; The Johnson Hill – Land Ethics Studio, Inc. Professional career focused on developing broad-based land protection and sustainable land use planning approaches and promoting techniques that foster effective resource conservation. Recent research has focused on mitigating the user impacts associated with Eco Tourism on sensitive resources in third-world countries.

Lindhult, Mark S., FASLA: Professor of Landscape Architecture and Director of the Master 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, sustainable design and site engineering. Partner in The Berkshire Design Group, Inc., first computer editor for *Landscape Architecture* magazine, speaker at many national and international conferences, author of numerous articles and co-author of the book, *Digital Land: Integrating Technology into the Land Planning Process* (Wiley, 2007). Fellow of the American Society of Landscape Architects.

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 Emeritus 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; PhD, 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; PhD 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.

Renski, Henry: Assistant Professor of Regional Planning. PhD, University of North Carolina, Chapel Hill, 2006. MRP, University of North Carolina, Chapel Hill, 1998. B.A., University of Southern Maine, 1995. Prior to joining LARP, Dr. Renski worked as a Special Assistant to the Governor of the State of Maine as both the Deputy Program Manager of Maine's WIRED (Workforce Innovations in Economic Development) initiative and as a Research Economist with the Maine State Planning Office. Research focuses on understanding the forces driving regional economic competitiveness and transformation, and building upon this knowledge to improve the effectiveness of economic development policy. His current work examines regional influences on entrepreneurship; empirical tests of agglomeration theory; industrial cluster analysis and cluster-based development strategies; and the application of spatial-analytical techniques to local economic policy decision-making.

Ryan, Robert L.: Associate Professor of Landscape Architecture and Regional Planning. 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; PhD 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.

Sleegers, Frank: Assistant Professor 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 livability 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.

Taylor, John R.: Lecturer of Landscape Architecture. B.A. in Philosophy, University of Chicago, 1986; B.S. in Horticultural Science, Michigan State University, 1998; M.L.A., University of Michigan, 2005. Teaches landscape architecture studios and design drawing. Has practiced in Michigan, Maryland, and Virginia. Professional work has focused on urban design and private residential design. Research interests include landscape aesthetics, urban agriculture, and ecological restoration.

Thurber, Jane: Lecturer of Landscape Architecture. B.A. in Studio Art and English, Hamilton College, 1980; Master of Landscape Architecture, Harvard University, 1985. Teaches landscape architecture studios and design drawing. Has practiced in Massachusetts, Florida, and New Mexico; and taught in Miami and Tampa. Professional work has focused on the design of public projects--plazas, parks, campuses, streetscapes, and playgrounds.

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.

Dipasquale, Michael: director of UMass Amherst's Extension of Citizen Planner Training Collaborative (CPTC).

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.

Garber, Glenn: Adjunct Lecturer of Regional Planning, Master of City and Regional Planning, Rutgers University. Bachelor of Arts, Boston University. Work experience includes Director of Planning in Lexington, MA. Director at Devens Enterprise Commission. Independent Planning and Development Consultation. Senior Project Manager at Sasaki Associates in Watertown, MA.

Graham, Julie: Professor of Geography and Adjunct Professor of Regional Planning. B.A. in English Literature, Smith College, 1968; PhD, 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.

Helmund, Paul Cawood, ASLA: Adjunct Lecturer of Landscape Architecture and Regional Planning. PhD candidate, Wageningen University, the Netherlands. PhD candidate, Harvard University 1993. M.S. Landscape Architecture, Harvard Graduate School of Design, 1983. B.S. Landscape Horticulture (Design), Colorado State University. Professor of Landscape Planning and Design at Conway School of Landscape Design. Focus of his publications, design research, practice and teaching is fundamentally about improving the relationship between people and nature, especially in urban, suburban, and degraded landscape.

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.A., 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.

Kotval, Zenia: Adjunct Lecturer of Landscape Architecture and Regional Planning. PhD in Regional Planning, concentration on Industrial and Economic Development, University of Massachusetts Amherst, 1994. M.S. Regional Planning, concentration in Land Use and Industrial Development, University of Massachusetts Amherst 1989. B.A. in Architecture, concentration in Design and Structural Engineering, Academy of Architecture, Bombay, India, 1987.

Loomis, David K.: Associate Professor of Wildlife and Fisheries and Adjunct Associate Professor of Regional Planning. PhD 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".

Lyon, Martha H., ASLA: Adjunct Lecturer of Landscape Architecture and Regional Planning. M.S. Landscape Architecture University of Massachusetts Amherst 1993. Bachelor of Arts, concentration in art history, Colgate University, Hamilton, NY 1980.

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 PhD, 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: Adjunct Lecturer of Landscape Architecture and Regional Planning. Has been chair of the Massachusetts Senate Committee on Way and Means. Membership in Special Commission on Historic Preservation. Experience consulting including Community Development and Human Services Program, Division of Continuing Education, UMass. International experience including active participation in the UMass/Pskov Partnership.

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; PhD 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. PhD 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.

Thompson, Elizabeth M.: Adjunct Lecturer of Regional Planning and Landscape Architecture. M.S. in Landscape Architecture, University of Massachusetts Amherst 1992. Masters Gardener Program, Waltham Cooperative Extension 1989. B.S. in Education, Boston University 1970. Work includes a wide range of projects for public, institutional, and residential clients.

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., PhD, 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; PhD 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 Regional Planning. B.S. in Mechanical Engineering, 1964; M.R.P., 1972; M.A. in City Planning, 1976; PhD 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 PhD, 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. Taught courses in plant identification, ecology and physiography and the use of plants in 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, University of Massachusetts Amherst, 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; PhD, 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_schedule.htm

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 413-545-5279 or by e-mail at gsgs@grad.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, as well as posting on department listserves.

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 2.75.
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 (*MLA only)
 - f. A resume or c.v. is not required but is strongly encouraged for the MRP Program

These materials (except the portfolio) should be submitted to the Graduate School. Portfolios must be submitted to the LARP main office. 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"x 17"** (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 program director during their first year, as well as by an appropriate faculty member. 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 for MLA and dual degree students, 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

Classes begin on the day after Labor Day. There is a morning meeting of all entering graduate students and the Department faculty at 9am. After this general orientation session students meet with their program director and faculty to discuss program related issues. Students should schedule an appointment if they wish to meet individually with the program director. On-line registration is done through SPIRE – use your same user name and password as for your OIT e-mail account. In the evening there is an informal Department reception for all entering students and faculty.

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 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, as appropriate, either the American Planning Association (APA), the student chapter of the American Society of Landscape Architects (ASLA) 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.

The LARP Zube Lecture Series – The Zube 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. Carrel requests should be made at the Dubois Library.

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) or <http://www.library.umass.edu/ask/index.html>

Madeleine Charney is the Reference Librarian for the department of Landscape Architecture and Regional Planning. Madeleine is knowledgeable in using the numerous database resources available to the University in our field. She is available both by appointment and during drop-in help sessions in Hills throughout the academic year. Contact information is mcharney@library.umass.edu or 577- 0784.

Computer Facilities

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

Both of these labs are networked into a printing system. Room 205A contains a black and white laser jet printer, a color laser jet printer, a large full scale plotter, and a flatbed scanner. Room 404 contains a black and white printer, a large full-scale plotter, and a flatbed scanner. 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. Wireless internet is available throughout the building and campus.

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 a dial-in connection.

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. Information regarding low-cost software can be found at the Office of Information Technologies website: <http://www.oit.umass.edu/software/index.html>

THE MASTER OF LANDSCAPE ARCHITECTURE PROGRAM (MLA Degree)

Core Faculty

Mark Lindhult, Director
Jack Ahern
Annaliese Bischoff
Elizabeth Brabec
Mike Davidsohn
Jane Thurber
Joseph S.R. Volpe

Patricia McGirr
Robert Ryan
Frank Slegers
John Taylor
Peter Kumble

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 types of students. The first type of student is someone who discovered an interest in landscape architecture after earning a college degree in an unrelated discipline. These students must take a year of preparatory courses. Then they take the required 48 credits toward their Master's degree over the next two years .

The second type of student is someone who has earned a degree in a related field such as architecture. These students can enter into the program's 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 type of student is someone with a degree in landscape architecture. 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. There are also opportunities for advanced students to support a more specialized inquiry into specific area of concentration.

Areas of Concentration:

There are four areas of concentration which reflect the research interests of the faculty. Students do not need to select one of these areas as their focus during their time in the department.

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 abiotic (physical), biotic, 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 554 Studio III – Land Form	3
LA 503 Studio II - Models	3	LA 556 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	LA 692F Computers in LA	3
LA 692O Design Drawing	3		
Total Credits	16	Total Credits	15

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
Elective	3	Elective	3
Total Credits	12	Total Credits	12

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

Notes:

Students entering the two-year curriculum with undergraduate degrees in architecture or other related 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 they are not able to waive. 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 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 or elective	3	LA 606 Studio VIII – Cultural Landscapes	3
LA 582A Plants in the Landscape	3	LA 544 History & Theory II	3
LA 696P 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 609 Studio IX – Landscape Planning	3	LA 698A Masters Project or Thesis	6 / 8
LA 603, LA 603 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 609– Landscape Planning or elective	3	LA 698A Masters Project or Thesis	6 / 8
LA 607 - 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:

Your program director can suggest specific courses related to each individual concentration within different departments throughout the University as listed below.

ECOLOGICAL LANDSCAPE PLANNING AND DESIGN

Biology
Civil & Environmental Engineering
Economics
Forestry
Geology
Geography
Mechanical and Industrial Engineering
Natural Resource Conservation
Plant and Soil Science
Political Science
Regional Planning
Resource Economics

THE DESIGN AND MANAGEMENT OF CULTURAL LANDSCAPES

Anthropology
Art
Art History
Comparative Literature
Geography
History
Psychology
Regional Planning
* Courses Offered at Hampshire College*
* Courses Offered at Mount Holyoke College*

* 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
Environmental Science
Economics
Education
Geosciences
History
Plant and Soil Science
Political Science
Regional Planning

APPLICATION OF INFORMATION TECHNOLOGIES IN DESIGN AND PLANNING

Art
Architecture
Computer Science
Electrical and Computer Engineering
Landscape Architecture
Management
Natural Resource Technology

Course Descriptions

Landscape Architecture

- LA 501 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 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 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 556 Studio IV Landscape Sustainability Credit 3 (Second Half/S)
Sustainability is a central, evolving paradigm of central importance to landscape architecture. It has profound implications on how we think, plan and design landscapes. In this studio we will explore the theory and application of sustainability principles to a broad region (watershed, city) as well as at finer, scales relating to the larger context.
- 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; Based on landscape ecology introduces physical science, and reviews current and practice of sustainable planning and design at multiple scales. With labs to explore natural history, and ecology of the region.
- LA 591A Introduction to Environmental Design Credit 3 (S) 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 Credit 4 (F) Introduction to 200 basic woody plants used in urban and other landscapes. The course emphasizes plant identification, features, uses, values, care, 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 VI 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 609 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 607 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 692F 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 OF REGIONAL PLANNING PROGRAM (MRP Degree)

Core Faculty

Mark Hamin, Director
Jack Ahern
Elizabeth Brabec
Elisabeth Hamin
Peter Kumble

John Mullin[?]
Ellen-J. Pader
Henry Renski
Robert Ryan

General Overview

The goal of the Regional Planning Program is to stimulate creative and sustainable approaches for addressing and resolving the 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 resolve conflicts between development and the environment.

The program is based on combining theoretical, historical, social, political, 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, nonprofit service, 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 and equity planning, historic preservation, growth management, economic development strategy, 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, sustainable development, 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) Social and Community Planning
- 3) Landscape and Environmental Planning
- 4) Economic Development Planning

In addition, there is the option of an independently-designed concentration, as well as the opportunity to link with the program in landscape architecture, enabling advanced students to work with other faculty members and students studying problems of landscape architecture and urban design.

MRP Program and Areas of Concentration

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

Economic Development Planning

Concentration Coordinator: H. Renski

Economic development is the process by which communities secure the resources necessary to provide for and sustain economic opportunities for their residents. New technologies and global trade have altered the competitive landscape of business—creating new opportunities for some cities and towns while posing great challenges for others. Economic developers continue to deal with the on-going challenges of aging infrastructure, persistent disparities between metropolitan suburbs relative to inner-cities and rural places, dislocated and underemployed workers, and growing income inequality. Rapid environmental change potentially poses an even greater challenge, as planners and economic developers must now balance the demands for economic growth with the demands for environmental sustainability.

The field of economic development has undergone rapid changes, as well. In the past, economic development was primarily a profession of place marketing, real estate development and the use of financial incentives to recruit mobile businesses from other regions or states. Today, the most successful regions are those that have developed the capacity for spawning innovation and entrepreneurship. Successful economic development in today's environment requires a greater understanding of the forces that are driving economic change. It also entails a long-term, integrated, and strategic approach to economic development planning that mobilizes all the institutional and policy resources that the region has to offer: development finance tools, workforce development programs, funds for financing new businesses, technical assistance with product commercialization and technological modernization, university R&D and technology transfer, natural assets and amenities, not to mention the regional strengths of businesses and the workers themselves.

The economic development concentration at LARP provides students with a strong foundation needed to become leaders in the growing field of economic development planning. The curriculum integrates theory, methods and practice. Topics of study include state and local economic development policy, science and technology- and entrepreneurship-based economic development, challenges of rural economic development, workforce development, industrial planning, public and private developmental finance, applied economic and spatial analysis.

Core Courses:

- Economic Development Issues in Planning (RP 643) Spring (1st year)
- Spatial Analysis and Regional Development (RP 693G) Fall (2nd Year)

Possible electives include:

- Independent study and research in Economic Development (RP 696)*
- Urban Policies (RP 577)
- Growth Management (RP 645)
- Real Estate Law and Development Finance (RP 692R)

- Planning Tools and Techniques (RP 652)
- Microeconomics for Public Policy and Administration (PubP 605)
- Public Economics (PubP 606)
- Topics in Urban and Housing Policy (PubP 697BB)
- Business and Its Environment (SOM 783)
- Tourism Planning and Development (HT-MGT 633)
- Economic Development: Structural Problems (ECON 765)
- Economic Development: Policy Issues (ECON 766)
- Spatial Data Analysis (GEO-SCI 591D)
- Rethinking Economy (GEO-SCI 660)
- Housing and Urban Development (GEO-SCI 670)

Other electives courses will be considered, subject to permission of the Economic Development Concentration Head and Regional Planning Program Director.

* Independent studies require prior approval of the Economic Development Concentration Head and the faculty supervisor. The proposed independent study is expected to address a topic of mutual interest to both the student and the instructor.

Landscape and Environmental Planning

Concentration Coordinator: R. Ryan

This concentration focuses on environmental policy and planning as they relate to preserving, protecting, restoring and enhancing the environmental quality of habitats and landscapes in the context of built form and regional growth. Important knowledge and skills gained in this concentration include landscape assessment, plan formulation and evaluation of landscape units ranging from the site to the watershed and ecosystem scale, and use of Geographic Information Systems as a tool of spatial analysis and assessment.

Core Courses:

- Landscape Pattern and Process (ED/RP 547)
- Resource Policy and Planning (ED/RP 553) or Sustainable Cities (ED/RP 591b)

Recommended Courses:

- Air Pollution and Climate Change Biology (ENVIRSCI 504)
- Case Studies in Land Conservation (NRC 597C) [for 3 credits]
- Ecosystem Management (NRC 597M)
- Forest and Wetland Hydrology (FOR 528)
- The Human Impact on the Natural Environment (GEO 592B)
- Land Use and Watershed Management (FOREST 697Q)
- Landscape Planning Studio (LA 536)
- Landscape Planning Studio II (RP 609/RP 697A)
- [only if not taken as a core alternative to Planning Studio II]
- Social Conflict and Natural Resources Policy (NRC 697D)
- Urban Natural Resource Management (FOREST 597U)
- Urban Forestry (FOREST 697U)
- Watershed Science and Management (WFCON 597R)
- Wetlands Ecology and Conservation (WFCON 768)
- Wildlife Habitat Ecology and Management (WFCON 564)

Social, Policy and Community Planning

Concentration Coordinator: E. Pader

This concentration focuses on equitable, sustainable planning, policy and design for diverse publics. It builds on the assertion that regardless of project, successful planning in the 21st century requires reconciling a multitude of often conflicting frameworks of thought and action. The primary goals of this concentration are 1) To understand how culture, class, race/ethnicity, physical and cognitive health, social philosophy, stakeholder interests, and other human factors influence an individual's/group's potentials, preferences and policy decisions; 2) To apply this knowledge to the exploration of the appropriate questions to ask and learn research and interpretive methods for an engaged, inclusive and responsible planning process. Substantial topics of study include, but are not limited to, the built environment, housing policy, urban development, urban design, spatial relations, public health, discriminatory practices and social change.

Core Courses:

- Urban Policies (RP 577) or Housing and Public Health (RP 591G)
- People and the Environment (RP 691R)

Recommended Courses:

- Anthropological Research Methods (Anth 775)
- Conflict Resolution (Pub Pol 621)
- Culture, Community & Health (Pub Health 590C)
- Ethics of Public Policy (Pub Pol 622)
- Gender & Health (Pub Health 582)
- Housing and Urban Development (Geog 670)
- Landscape and Memory (Hist 697U)
- Public Anthropology (Anth 697EE)
- Public Welfare Policy (PoliSci 783)
- Qualitative Policy Research (Anth 775)
- Qualitative Research Methods (Pub Health 608)
- Race, Ethnicity and the Social Imagination (Soc 723)
- Rethinking Economy (Geog 660)
- Social Class Inequality (Soc 724)
- Sociology of Culture (Soc 729)
- Spirit of Place (Geog 626)
- Sustainable Cities (RP 591b)
- Visual and Graphic Thinking (Geog 692W)

Urban and Regional Land Use Planning

Concentration Coordinator: E. Hamin

Core Courses:

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

Recommended Courses:

Landscape Architecture and Regional Planning

- Sustainable Communities (RP591)
- Urban Policies (RP 577)
- Resource Policy and Planning (RP 553)
- Site Design (LA 601; permission of instructor)
- Urban Design (LA604; permission of instructor)
- People and the Environment (LA 691E)
- Landscape Pattern and Process (LA 547)

Other Departments:

- Public Transportation Systems (CEE 510; statistics prereq)
- Transportation Systems Analysis (CEE 509; statistics prereq)
- Courses in Public Policy (601, 602, 605, 697S)
- Courses in GeoSciences (510, 530, 666, 670)
- Urban History (HIS 657)
- Tourism Policy (HT-MGT 633)
- Hospitality-Financial Management (HT-MGT 693A)

Student-Designed Concentration

Concentration Coordinator: M. Hamin

Students who have interests that do not fall into the existing categories may, with the approval of the GPD, 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 GPD, must be given to the LARP office.

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, 30 credits are part of the core requirements. If the student does a Master's thesis, 32 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 (6 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)

* 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

MRP Core Curriculum – 2-Year Program

First Year			
Fall Semester	Credits	Spring Semester	Credits
RP 625 Quantitative Methods in Planning	3	RP 656 Judicial Planning Law	3
RP 651 Planning History & Theory	3	LA RP 691F Research Methods	3
RP 693S Planning with Multiple Publics	3	RP 691E Geographic Information Systems	3
Elective	3	Elective	3
Total Credits	12	Total Credits	12

Second Year			
Fall Semester	Credits	Spring Semester	Credits
RP 675 Planning Studio	6	RP 698 Master's Project or	6
Elective	3	RP 699 Master's Thesis	8
Elective	3	Elective	3
		and/or Elective	3
Total Credits	12	Total Credits	12-14

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.

Regional Planning Studios

An important part of your planning education is participation in a regional planning studios. In the studio, students divide into teams of between 3-5 students each and work on a 'real' project with a client. Scope of work 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. A 6-credit, 14-week studio (fall semester of the second year).
2. Multiple and substantively diverse projects (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. In the first half of the semester, studio tasks will involve data collection, analysis, and development of plan alternatives. In the second half, tasks will involve primarily plan development, public participation, and plan implementation.

Course Descriptions

Environmental Design

- 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 Cities
Core principles and practices of sustainability, addressing a variety of questions: appropriate spatial and temporal scale of planning and design; the role of 'high' and 'low', 'hard' and 'soft' science/technology paths for sustainable development; expertise and equity; individual vs. collective responsibilities.
- ED/RP 5?? 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.

Regional Planning

- 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 643 Economic Development Issues in Planning Credit 3 (S)
This course surveys the contemporary practice of economic development in the United States. Its goal is to provide students with the requisite background to undertake a critical evaluation of economic development strategies. The course begins with an overview of the contemporary practice, history and politics of economic development. Next it addresses the broader concept of economic development by contrasting it with similar concepts such as economic growth, community development, sustainable development, etc. The second half of the course focuses on particular strategies used by state and local economic development and contemporary debates of practice. Topics include: recruitment and location incentives; redevelopment finance strategies (BIDs, TIFs, IRBs); entertainment-based economic development; import-substitution and replacement; the role of the university; venture capital and entrepreneurial finance; workforce development; and quality of life based development strategies.
- 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 Credit 4 (S)
A course integrating skills and knowledge from other courses and applying them to representative planning problems. The instructional goals of this studio are to develop the skills and techniques for collecting, analyzing, synthesizing and presenting of spatial and non-spatial data: as well as to develop a sense of

judgment about the comprehensiveness and reliability of the data and its utility for planning decisions. 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 691H Housing Policy Credit 3 (S)
Critical analyses of the historical, political, socio-cultural and economic aspects of housing policy, leading to an understanding of the development, implementation and impact of current policies at the local, state and federal levels, as well as issues of housing discrimination.
- 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 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 692B Seminar in Transportation and Infrastructure Planning Credit 3
Transportation and infrastructure facilities such as roads and water systems influence the quality of our lives in a profound and complex way. The purpose of this course is to understand the functions and impacts of transportation and infrastructure facilities and to analyze the role of the planner in setting public policies related to the construction and maintenance of such facilities.
- RP 693G Spatial Analysis and Regional Development Credit 3 (F)
The goal of this course is to deepen each students understanding of the contemporary forces that effect regional economies and how practice has responded to these challenges. This course integrates classroom discussion, hands-on applications of analytical techniques, and 'field-work' involving

interviews with business leaders, industry association representatives, and local development professionals. Each semester focuses on a different industry of interest to policymakers in the Pioneer Valley, such as clean energy, life sciences and biotechnology, or precision manufacturing. As a final product the class will collectively produce a professional report summarizing the current and future economic health of the cluster within the Pioneer Valley.

- 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 seminar deals with landscape planning strategies, and applies them to a studio-based project, such as conservation easements.
- 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. 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

We offer a combined degree in law (JD) and planning (MRP) through an arrangement with the School of Law at Western New England College (WNEC) in Springfield. The combined degree enables you to:

1. Complete JD and MRP degrees in four years instead of the five if pursued separately;
2. Earn professional degrees in two fields;
3. Establish a practice specialization;
4. Create a network of contacts in both planning and law.

The combined Law and Planning degree program provides a professional and scholarly education of greater depth and breadth than would otherwise be available for students interested in urban studies, land use, housing, environment, social policy and other related fields. For instance, the planning curriculum offers training in policy analysis and exposure to theories and programs that critically assess urban development. 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 JD/MRP degree program are qualified for a variety of public and private sector jobs 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 accepted by both the School of Law and the Regional Planning Program prior to acceptance into the combined program. Applicants must meet the separate admission requirements for each institution, including satisfactory performance on the GRE for admission to Planning and satisfactory performance on the LSAT for 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 (PhD)

Program Director: Elisabeth Hamin

The PhD 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 most areas of planning, plus some areas where planning and landscape architecture overlap. We generally seek to admit students whose research interests align well with faculty expertise, so that we can provide a high level of mentoring to all students. To learn more about faculty interests and expertise and the intellectual tone of the Department, potential applicants should review faculty publications, as well as descriptions on the website and elsewhere in this handbook.

Applicants to this program are encouraged to visit the campus and meet with the Program Director and pertinent faculty. If such a visit is impractical, then communication via email or telephone may help take the place of a visit. We encourage the use of electronic mail for inquiries; program inquiries can be addressed to Dr. Elisabeth Hamin, emhamin@larp.umass.edu, questions on status, forms and university process may also be directed to Sandi Potyrala at spotyral@larp.umass.edu.

Students admitted to this program normally have a Master's degree in planning or a closely related field. Those with a Master's degree in other fields but with appropriate professional experience are given serious consideration and encouraged to apply. A student making good progress will require two to two and a half years to complete the course requirements and the comprehensive examinations and proposal, and another one or two years to complete the dissertation. The total time allowed 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.

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

Financial Support

We attempt to offer an assistantship that carries small stipend and a tuition waiver to all students admitted to the doctoral program, as either a Teaching Assistantship in one of the other academic programs offered in the Department, or a Research Assistantship in one of our research programs.

Course Requirements

The degree requires satisfactory completion of 60 credits, of which 15 are dissertation credits (Regional Planning 899). At the Program Director's discretion, a maximum of 17 credits may be waived for students holding a PAB accredited Masters degree, 12 for Masters degrees from other majors/non-accredited programs. The course program is initially developed by the student and the Director of the Ph.D. Program, and is subsequently adjusted in consultation with the dissertation supervisor. The following are the required core classes taken by all students:

- RP 651 – Planning History and Theory
- RP 891 – Seminar in Advanced Planning Theory
- RP 691F – Research Methods
- RP 892D – PhD workshop (1 credit)
- 3 Elective courses in Regional Planning
- 1 or 2 courses in advanced methods appropriate to the student's research

The principal criteria for selecting courses are preparation for the comprehensive examinations and relevance to the student's research field and dissertation. As a result, beyond the core classes each student will have a highly individualized curriculum.

Foreign Language Requirement

The Program has no foreign language requirement.

Comprehensive Examination

A written and oral Preliminary Comprehensive Examination must be taken after course requirements are completed. The written examination has three parts: (1) planning history and theory; (2) the substantive area of interest of the student; (3) research methods. The oral examination will deal with issues raised in the written exam and major issues in the planning field. At the committee chair's discretion, the oral exam may include defense of the dissertation proposal, or the defense may be held at a subsequent date.

Dissertation Supervisor and Committee

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. They are formally appointed by the Dean of the Graduate School after submission of an acceptable research proposal, generally in the fourth semester.

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, and the format of the doctoral dissertation. These Regulations are listed in the Graduate School Bulletin.

PhD Handbook

Students upon matriculating will receive a PhD handbook which goes into greater depth on the types of acceptable dissertations (single manuscript or three-article format), the roles of the committee, and similar issues. This is understood to be part of this Graduate Handbook.

YOUR MASTER'S THESIS OR PROJECT OR PhD DISSERTATION (MLA ,MRP, PhD 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 10-15 page proposal outlining the key themes of the option, its relevance to planning, and 4-6 possible courses (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. 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 thesis or Master's project for one of the programs.
3. Undergraduate courses 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, 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 20-25 page paper linking the three courses to issues in planning. The three-course option advisor will evaluate the paper

Master's Thesis and Master's Project Deadlines for MLA and MRP 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 thesis, project or three-course option 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 so) 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 for all committee members and so separate defenses may be 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.

The Graduate School now offers a method by which masters students deliver electronic copies of their thesis manuscripts to the graduate school. All of our electronic submissions are processed through the University of Massachusetts Amherst ScholarWorks website. Please note that a different process is used for submissions of Doctoral Dissertations. More information about this can be obtained at the University's Graduate School website.

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 in a project.

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 significant 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 test and 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 timeline.
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 follow those standards as basic 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 60-120 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 generally 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.

[PhD Dissertation info]

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.