

*Department of*

# *Landscape Architecture and Environmental Planning*

*College of Humanities, Arts and Social Sciences*

**Head: Professor Karen C. Hanna**, GIS applications in regional planning and site design for landscape architects, open space and park planning, and construction

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**Undergraduate Program Director: Associate Professor Michael L. Timmons**, site planning and design, recreation planning, and landscape history

**Graduate Program Director: Associate Professor John C. Ellsworth**, visual resources management, computer applications, and disturbed lands rehabilitation

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**Professor Craig W. Johnson**, planting design, land rehabilitation, wildlife habitat planning and design; **Associate Professors David L. Bell**, residential design, landscape construction, and community planning and design; **Vern J. Budge**, landscape construction and recreation planning; **Caroline Lavoie**, urban design/theory; **John K. Nicholson**, urban and regional planning, and computer applications; **Adjunct Instructors David G. Garce; Deborah L. Jensen**

**Degrees offered:** Bachelor of Landscape Architecture (BLA) and Master of Landscape Architecture (MLA); Master of Science (MS) in Bioregional Planning. BLA and first professional MLA programs are fully accredited by the American Society of Landscape Architects.

**Graduate specializations:** *MLA*—Land Rehabilitation/Revegetation, Small Town Rehabilitation, Urban Wildlife, Visual Resource Management, Water Resources Management

## *Department Objectives*

The objectives of the department are to (1) provide an educational and technical program responsive to current societal needs related to environmental planning, landscape architecture, and urban design; (2) give students the opportunity to participate in collaborative learning experiences with other disciplines on campus; (3) prepare students for professional careers in the private or public sector, and (4) conduct original research to advance the body of knowledge in landscape architecture, environmental planning, and design.

## *Undergraduate Programs Admission and Graduation Requirements*

The Bachelor of Landscape Architecture (BLA) degree program is an intensive four-year studio-based course of study, fully accredited by the American Society of Landscape Architects. Accreditation standards require the department to maintain a reasonable faculty/student ratio. Space in the program is limited by available facilities, faculty, and qualified applicants. Admission to the upper division is competitive, and is limited to students who are determined by the faculty to have the best potential for academic success. Matriculation into the upper division will normally be limited to 25 students, although additional students may be ma-

tricated in special circumstances at the discretion of the LAEP faculty.

Any student admitted to USU is eligible for enrollment in lower-division LAEP courses. Declared LAEP majors will be advised of their relative class standing at the end of their freshman year and at the mid-point of their sophomore year, to assist in their personal academic career planning. At the end of the sophomore year, a selection process will determine which students will matriculate into the upper division of the program.

Eligibility for matriculation requires the completion of the following prerequisite courses: LAEP 1030, 1200, 1350, 2300, 2600, 2650, 2700, 2720; PISc 2620; and ITE 1200. Students applying for matriculation must have a minimum USU GPA of 2.5.

Selection of students to be matriculated to the upper division is based on a letter of intent; a portfolio demonstrating creative potential, problem solving skills, and graphic fluency; and cumulative GPA earned in the eight LAEP prefix courses listed above. Portfolios and letters of intent are to be submitted by the last Monday in March. Detailed information regarding the letter of intent and portfolio requirements may be obtained from the LAEP Office. The final selection of students to matriculate to the upper division is a decision of the LAEP faculty. The review of students for matriculation will take place during the week following spring semester final exams, and students will be notified as soon as possible thereafter.

Students who have had LAEP courses waived or covered by articulation from another institution will have their GPA calculated only on the basis of LAEP grades actually earned at USU.

Transfer students from other programs of landscape architecture who have completed the equivalent of the lower-division USU LAEP coursework may apply for admission to the upper division of the program through submission of a portfolio, letter of intent, transcript of grades, and description of landscape architecture courses taken. Students who have previously been enrolled and matriculated into the upper division at USU, and must interrupt their education for up to three academic years, may resume their studies at the same level of the program which they departed upon returning to USU. Students who have stopped-out longer than three years must reapply, following the guidelines specified for transfer students. The decision on applications from transfer students and for readmission rests with the LAEP faculty and will be considered on a case-by-case basis.

**Note:** Students eligible for matriculation during spring semesters 2002 and 2003 will be evaluated under the previous policy, as described in the USU 2000-2002 *General Catalog*.

High school students planning to major in landscape architecture may enhance their preparation with courses in art, natural sciences, social sciences, and math through college algebra.

**BLA Degree.** The Bachelor of Landscape Architecture (BLA) degree is a four-year program consisting of courses relating to theory, design, history, and the various technical areas of the profession. The degree provides a substantial basis for a professional career, as well as an excellent foundation for advanced graduate studies. In addition to the courses required for upper-division status, the following LAEP courses are required for graduation: LAEP 3100, 3120, 3300, 3500, 3610, 3700, 4100, 4110, 4120, and 4920. Additional non-LAEP courses required are: Math 1050, ASTE 3050, Geol 3100, AWER 1200 or FRWS 2200, and Soc 3610 or 4620. Students must also complete the University Studies requirements. For more detailed information, see major requirement sheet available from the department.

**Specialized Service Courses.** LAEP 1030, 1200, 2300, and 3700 are available for majors in other fields who may wish to gain an exposure to the different aspects of landscape architecture and environmental planning. A minor is not given in LAEP; however, these service courses are available, without prerequisites, for those requesting them.

## Graduate Programs

### Admission Requirements

The application deadline for consideration in the first round of reviews is March 15. Applications received later than March 15 will be considered as space availability allows. February 1 is the application deadline for consideration for some scholarships, fellowships, and other financial aid. For general admissions requirements, see the appropriate sections of this catalog.

### Master of Landscape Architecture

The program for the Master of Landscape Architecture (MLA) emphasizes both traditional site scale planning and design, as well as broader areas of the profession, such as large-scale regional landscape analysis and planning, and computer-aided design and planning techniques. The MLA first professional degree is fully accredited by the Landscape Architectural Accreditation Board of the American Society of Landscape Architects.

The Master of Landscape Architecture program is designed to prepare the student for the landscape architect's challenging role of providing a holistic approach to environmental planning and design. In order for landscape architects to contribute effectively to an interdisciplinary effort, they must be competent in the fundamentals of landscape architecture and also have an understanding of the subject matter of other professions. Landscape architects must master the communication skills necessary to achieve meaningful collaboration. In support of this philosophy, the following are the major objectives of the MLA program.

1. To provide a well-structured curriculum in fundamental professional knowledge and skills.
2. To research, analyze, and resolve land use and design issues related specifically to the Intermountain West. The scope of the program examines national, regional, and local issues; and their impact on the visual, physical, and cultural setting of the Intermountain West.
3. To integrate field experience and research into major graduate studio courses structured around real-world projects.
4. To provide opportunities for each student for exploration and development of an area of specialization as noted elsewhere.
5. To draw upon the regional, national, and international relationships of Utah State University to facilitate a program of academic and professional excellence which will allow the student to achieve eminence in practice, research, or education.

### Areas of Faculty Expertise

The Master of Landscape Architecture Program provides opportunities for each student to study and conduct research in areas which take advantage of the strengths of Utah State University and the landscape context of the Intermountain West centered around the expertise of the LAEP Department faculty, including: *Land Rehabilitation/Revegetation*—Ellsworth and Johnson; *Regional Landscape Planning*—Hanna and Nicholson; *Visual Re-*

*sources Management*—Ellsworth; *Urban Wildlife/Refuge Planning*—Johnson; *Riparian Systems*—Johnson and Bell; *Community Planning*—Nicholson, Hanna, and Bell; *Public Lands/Recreation*—Timmons, Ellsworth, and Budge; *Urban Design/Theory*—Lavoie; *Historic Landscapes and Preservation*—Timmons.

These areas of faculty expertise include an assessment of the relevant environmental, design, social, economic, and public policy issues utilizing a wide range of computer-compatible techniques and models.

### Specializations

Graduate specializations (MLA) may be designated on a student's transcript with the approval of the supervisory committee after completion of a Plan A original research thesis. There are currently five specializations: Land Rehabilitation/Revegetation, Small Town Rehabilitation, Urban Wildlife, Visual Resource Management, and Water Resources Management.

### Course of Study

The graduate program director advises all incoming students until they have selected a thesis topic. A major professor whose interests are closely aligned to those of the student (see *areas of faculty expertise* above) supervises thesis work. A minimum of 30 graduate-level credits, including thesis work, is required. Students supplement requirements with courses negotiated with the major professor and supervisory committee. An outside area of emphasis or graduate specialization (see above) may be pursued by concentrating elective coursework in another department.

The department offers two MLA programs. One is for students who have previously earned baccalaureate degrees in landscape architecture from accredited programs and the other is for students with degrees from other fields.

### MLA—Advanced Professional Degree

The MLA—Advanced Professional Degree is a two-year program of study. Applicants must hold baccalaureate degrees in landscape architecture from accredited programs. The advanced degree allows outstanding students to expand their knowledge in areas of special interest under the supervision of a major professor and supervisory committee.

For information about currently required and recommended coursework, as well as other requirements for this degree, contact the LAEP Department.

### MLA—First Professional Degree

A three-year program leading to the MLA degree is available for candidates with previous baccalaureate degrees in fields other than landscape architecture. The curriculum includes a substantial lecture and studio sequence designed to establish fundamental professional skills.

For information about currently required and recommended coursework, as well as other requirements for this degree, contact the LAEP Department.

### *Master of Science in Bioregional Planning (joint degree program with Environment and Society)*

Good planning and management of natural resources and systems supersedes individual disciplines, requiring an interdisciplinary approach for the successful resolution of environmental issues. The intent of this program's curriculum is to integrate the biophysical disciplines more closely while also addressing the social and political sciences.

This program consists of a two-year period of study with a required thesis or paper/project. To maintain a program focus, the student selects from three clusters of coursework (research methods/case studies, landscape ecology, and natural resource policy). A minimum of 33 graduate-level credits, including 3-6 credits of thesis or paper/project is required. An interdisciplinary capstone sequence is required. The program contains a total of nine elective credits from which the candidate and his or her committee can formulate an area of specialization.

### Course of Study

This two-year MS program is comprised of an interdisciplinary core of courses and faculty for addressing complex issues in the areas of bioregional planning and management. Emphasis is placed on four problematic content areas: biophysical, social/demographic, economic, and public policy. The spatial focus is on the planning for large landscape areas with dispersed populations with a primary economic base in agriculture, energy development, tourism/recreation, retirement communities, and natural resources.

The program requires a minimum of 33 graduate-level credits, including 3-6 credits of work on a thesis or paper/project. Nine of the required credits may be in an area of specialization within the candidate's home department. These nine credits are to be negotiated with the candidate's major professor and supervisory committee. Requirements for the MS in Bioregional Planning are as follows:

**Research Methods (3-4 credits).** One of the following courses is required: FRWS 6500, Soc 6100, 6150.

**Ecology (3-4 credits).** One of the following courses is required: FRWS 5400, 5610, 6710, AWER 6750. For those students without a background in ecology, Biol 2220 (General Ecology) or equivalent is also required. Credits earned for Biol 2220 or equivalent *do not apply* to the graduate program.

**Public Policy (7 credits).** One of the following courses is required: EnvS 6000, PolS 5180, Soc 6630, Econ 5560 or 6500. Also, the following two courses are required *for all students*: LAEP 6900 (Special Problems: NEPA/GIS) and FRWS 6900 (Special Topics: GIS).

**Capstone Sequence (8 credits).** The following courses are required *for all students*: LAEP 6100, 6740.

**Areas for Department Emphasis (9 credits).** Nine credits should be available to the candidate for an area of emphasis within his or her home department.

**Thesis or Project (3 or 6 credits).** A thesis or Plan B paper/project option is required and is to be negotiated with the candidate, major professor, and supervisory committee.

**Total Credits: 33-38**

### *Environmental Field Service*

**Practical Education and Community Service.** The department sponsors a program of planning and design services in which MS, MLA, and BLA students may participate. The Environmental Field Service program offers students the opportunity to interact with community leaders and citizens and to test concepts and skills acquired in the classroom while working on real projects.

## ***Internships and Cooperative Education***

Many students take advantage of the practical learning opportunities available through internships and cooperative education programs. The department, student, and government agency or private firm make the necessary arrangements. Internships and cooperative education experiences are not required for degree completion. In some cases, these experiences may be used as the basis for waiver of selected courses, subject to approval in advance by the major professor, graduate program director, and department head. Students completing these experiences are required to make a summary presentation to department faculty and students.

## ***Financial Assistance***

The application deadlines for scholarships and financial assistance vary. For current application deadline information, contact the LAEP Department, the USU Financial Aid Office, and the School of Graduate Studies. Acceptance to pursue graduate study does not guarantee the student financial assistance.

## ***Career Opportunities***

The Department of Landscape Architecture and Environmental Planning provides education for careers in landscape architectural site planning, design, environmental planning, and management, with special consideration for conditions in the Intermountain West. Graduates are employed by local, state, and federal agencies, as well as by private sector professional firms. LAEP graduates also find employment in academia at both the undergraduate and graduate levels.

# ***Landscape Architecture and Environmental Planning Courses (LAEP)***

**LAEP 1030 (BCA). Introduction to Landscape Architecture.** Environment as a basis for land use and design decisions. Topics discussed include environmental awareness, the planning and design process, and design related to open space, communities, and the region. Three one-hour lectures per week. (3 cr) (F,Sp,Su) ©

**LAEP 1200. Basic Graphics in Landscape Architecture.** Graphic techniques for landscape architectural drawings, including plans, elevations, isometrics, perspective, rendering, and model construction. Various media explored for preparing drawings and sketches for presentation. Two three-hour studios per week. (4 cr) (F)

**LAEP 1350. Theory of Design.** Basic elements of design with emphasis upon their relationship to landscape architecture. Form and spatial relationships are stressed through student development of two- and three-dimensional design models. Design theory applied to materials of landform, vegetation, water, and architecture. Two three-hour studios per week. Prerequisite: Must be declared LAEP major or have permission of instructor. (4 cr) (Sp)

**LAEP 2250. Internship and Cooperative Education.** Course credit for professional experience outside the classroom prior to graduation. A statement of professional goals and a summary report following the experience are required. (1-5 cr) ©

**LAEP 2300. History of Landscape Architecture.** An examination of landscape change in the context of its history from ancient to present times, with a primary em-

phasis on the visual qualities of designed landscapes. Three one-hour lectures per week. (3 cr) (F)

**LAEP 2600 (QI). Landscape Construction I.** Introduction to site engineering, grading, cut and fill calculation, stormwater drainage, and erosion control. Two one-hour lectures and two two-hour studios per week. Prerequisite: LAEP 1200 (may be taken concurrently). (4 cr) (F)

**LAEP 2650. Architecture and the Built Environment.** Exploration of architectural form and structure in exterior environments. Emphasis placed on space created by architectural forms and their relationship to the surrounding landscape. Energy and water conservation measures with respect to the built environment. Prerequisite: LAEP 1200. (4 cr) (Sp)

**LAEP 2700 (CI). Site Analysis and Design.** Site survey, analysis, and design synthesis. Focuses on human behavior and natural resources as design considerations for future land use planning. Student teams survey and analyze sites' landscape and cultural resources for future land use planning. (5 cr) (F)

**LAEP 2720. Site Planning and Design.** Serves as a capstone course, synthesizing lower-division landscape architecture coursework and applying that knowledge to site scale design projects. Includes units on design methodology, site planning and circulation, and creative problem solving. Three three-hour studios per week. Prerequisite: LAEP 2700. (5 cr) (Sp)

**LAEP 3100. Recreation/Open Space.** Focuses on regional and urban open space planning and design including project scale recreation design. Includes design seminars, field trips, and guest lecturers. Three three-hour studios per week. Prerequisite: LAEP 2720 or permission of instructor. (5 cr) (F)

**LAEP 3120. Residential Planning and Design.** Focuses on large-scale residential projects, planned unit developments, and community facilities. Three three-hour studios per week. Prerequisite: LAEP 3100. (5 cr) (Sp)

**LAEP 3300. Advanced Computer Applications in Landscape Architecture.** Emphasizes the major analytical and technical components of resource planning and design using computer techniques. Two three-hour studios per week. Prerequisite: LAEP 2720 or instructor's permission. (4 cr) (F)

**LAEP 3500. Planting Design.** Emphasizes plant and environment relationships and plant community dynamics as they relate to planting design. In addition, basic planting design principles will be introduced. Involves application of planting design principles to a variety of project types. One segment will focus on land reclamation planting in nonirrigated landscapes. Two three-hour studios per week. Prerequisite: PISc 2620. (2-4 cr) (F)

**LAEP 3610. Landscape Construction II.** Introduction to construction materials, wood construction, and free-standing and retaining walls. Introduction to layout and dimensioning, basic theory and technical aspects of roadway alignment, and theory and design of sprinkler irrigation. Two three-hour studios per week. Prerequisites: LAEP 2600, Math 1050. (4 cr) (Sp)

**LAEP 3700. City and Regional Planning.** Introduction to historic and current theory and methods of city and regional planning. Includes legislative, administrative, and implementation practices of the general comprehensive plan. Three lectures per week. (3 cr) (Sp)

**LAEP 4100. Urban Theory, Systems, and Design.** Emphasizes historical, cultural, and functional aspects of the city. Planning and design activities focus on social and behavioral contributions to urban form. Three three-hour studios per week. Prerequisite: LAEP 3120. (5 cr) (F)

**LAEP 4110. Construction Document Preparation.** Design project through detail design development and completion of the working drawings and specifications. Two three-hour studios per week. Prerequisite: LAEP 3120. (4 cr) (F)

**LAEP 4120. Emerging Areas in Landscape Architecture.** Exploration of new and emerging areas in the profession of landscape architecture. National and international

issues in regional landscape planning, landscape restoration/bioengineering, and visual resource management are among several issues which may be examined. Three three-hour studios per week. Prerequisite: LAEP 4100. (5 cr) (Sp)

**LAEP 4250. Internship and Cooperative Education.** Course credit for professional experience outside the classroom prior to graduation. Statement of professional goals and a summary report following the experience are required. (1-5 cr) (F,Sp,Su) ®

**LAEP 4350. Travel Course.** Major field trip to examine a variety of projects in planning and design. (1 cr) (Sp) ®

**LAEP 4810. Tutorial.** Directed readings and discussions of landscape issues. Prerequisite: Instructor's permission. (1 cr) (F,Sp,Su) ®

**LAEP 4900. Special Problems.** Selected problems to meet individual needs for students' completion of professional education. Hours arranged. Prerequisite: Instructor's permission. (1-5 cr) (F,Sp,Su) ®

**LAEP 4920 (CI). Professional Practice.** Readings and reports on current topics and trends in professional practice. Also covers contracts, specifications, professional ethics, and general office management. (2 cr) (Sp)

**LAEP 4950. Seminar.** Directed readings and reports on current and emerging areas of the profession. One recitation hour per week. (1 cr) (F,Sp,Su)

**LAEP 6100. Regional Landscape Analysis and Planning.** Landscape planning theory, methods, and case studies focusing on analysis of major physiographic region. Alternative planning scenarios are proposed, including their evaluation. (5 cr) (F)

**LAEP 6110. Landscape Planning for Wildlife.** Application of principles of landscape ecology to planning for wildlife in urban, suburban, and exurban landscapes. Discussion of restoration of disturbed habitats in these environments. Includes real-world projects and field trips. Addresses issues of landscape restoration and bioengineering. (3 cr) (Sp)

**LAEP 6120. Regional Landscape Policy and Implementation.** Case studies and/or implementation strategies for planning alternatives developed in LAEP 6100. (2 cr) (Sp)

**LAEP 6160. Professional Practice.** Assigned readings and reports on current topics and trends in the practice of landscape architecture and environmental planning. (2 cr) (Sp)

**LAEP 6250. Internship and Cooperative Education Program.** Course credit given for professional experience outside the classroom prior to graduation. Statement of professional goals and summary report following the experience are required. (1-5 cr) (F,Sp,Su) ®

**LAEP 6300. Planting Design for Low Water Use Landscapes.** Examines arid ecosystems, emphasizing the Intermountain West, and recreating such ecosystems in a range of amenity landscapes. Also covers procurement, propagation, establishment, and maintenance of plants appropriate for low water landscapes. Also taught as PISC 6300. (3 cr) (F)

**LAEP 6740. Planning Theory and Methods.** Review of planning theory and implementation techniques based on advanced readings, case studies, and research projects. Scale of material proceeds from regional landscape planning to rural and town planning. (3 cr) (F)

**LAEP 6750. Implementation and Regulatory Techniques in Planning.** Analysis of techniques utilized to implement the comprehensive plan. Major topics include zoning, capital improvements, subdivision regulations, code enforcement, and growth controls. (3 cr) (Sp)

**LAEP 6860. Faculty/Interdisciplinary Seminar.** Landscape architecture and planning program options and research potential presented by departmental faculty. Also introduces students to other interdisciplinary programs and faculty within the University. (1 cr) (F)

**LAEP 6890. Seminar on Research Methods and Thesis Proposals.** Explores various research methods from both case studies and faculty presentations. Also includes preparation of thesis proposals and abstracts, and discussion of graduate degree completion requirements. (2 cr) (Sp)

**LAEP 6900. Special Problems.** Selected problems to meet individual student interests and areas of concentration. Registration by permission of departmental faculty. (1-5 cr) (F,Sp,Su) ®

**LAEP 6910. Reading Seminar I.** Selected readings directed by department faculty. (1 cr) (F)

**LAEP 6930. Reading Seminar II.** Selected readings directed by department faculty. (1 cr) (Sp)

**LAEP 6960. Master's Project.** Requires research, analysis, and production of a given subject area, including its final planning, design, and documentation. (1-6 cr) (F,Sp,Su) ®

**LAEP 6970. Thesis Research.** (1-6 cr) (F,Sp,Su) ®

**LAEP 6990. Continuing Graduate Advisement.** (1-3 cr) (F,Sp,Su) ®

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® Repeatable for credit. Check with major department for limitations on number of credits that can be counted for graduation.

© This course is also offered by correspondence through Continuing Education Independent and Distance Education.