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  - Major Requirements
  - Current Courses
  - New Courses Needed
  - Faculty Information
  - Four-Year Plan
  - Student Learning Outcomes and Curriculum Map
  - Assessment Plan for Student Learning
  - Program Assessment Plan
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Executive Summary

Request for Authorization to Implement Bachelor of Landscape Architecture and Minor

<table>
<thead>
<tr>
<th>Requested by</th>
<th>School of Landscape Architecture and Planning, CAPLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP Code</td>
<td>30.3301, Sustainability Studies</td>
</tr>
</tbody>
</table>
| Purpose of Program    | The Bachelor of Landscape Architecture (BLA) program prepares students for professional licensure in landscape architecture through a robust, responsive, and professionally-rooted curriculum. Classwork and design studios instill a comprehensive understanding of landscape architectural practice, creative problem-solving, and the knowledge, skills, and values necessary to become sustainability-minded landscape architecture professionals prepared to enter the workforce upon graduation. The BLA is a first-professional degree program that will seek accreditation from the Landscape Architectural Accreditation Board (LAAB). The program is steeped in applied learning and professional practice with an emphasis on natural resources, sustainable design strategies, and interdisciplinary partnerships. The place-based curriculum takes advantage of the Sonoran Desert to demonstrate sustainable design solutions in areas including energy and water conservation, use of native plant species, ecological stewardship, and urban heat island mitigation. BLA students will have the option to continue on to the Master of Landscape Architecture degree program.

The program prepares students for entry-level professional practice by involving them in a variety of real-world learning experiences which enable them to meet the challenges of the 21st century. Studio experiences focus on design and planning for a variety of project types and scales including community and campus master plans; urban park systems, plazas and green streets; adaptive reuse of urban infrastructure, ecological restoration; habitat creation; neighborhood design; and more.

The 77 unit major consists of design studio coursework, landscape construction and ecology, intro to GIS, and professional practice, among other courses.

BLA Learning Outcomes:
1. Students will define and develop design processes, methods, and solutions. Students will be able to identify appropriate methods of design inquiry and problem-solving processes (including research methods) to produce creative solutions to identified problems and questions.

2. Students will develop effective written, oral, and graphic communication skills. Students will be able to communicate design methods and processes including analyses, programs, concept development, and solutions in written, oral, and graphic ways using appropriate media.
3. Students will understand sustainable design strategies. Students will be able to create design concepts and solutions that use best practices for stormwater management, urban heat island mitigation, plant and ecosystem design, and landscape performance assessment.

4. Students will gain knowledge and awareness of professional practices. Students will apply the principles of social justice, diversity and inclusion, cultural heritage, and ethics and act responsibly towards the public, profession, and environment.

5. Students will demonstrate critical thinking skills and an understanding of the theoretical and historical context of the profession of landscape architecture. Students will understand the history and theory of landscape architecture and appropriate applications for practice.

The 19 unit minor consists of 10 units of core and 9 units of electives.

<table>
<thead>
<tr>
<th>5-year projected annual enrollment</th>
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<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; year</td>
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<tr>
<td>25</td>
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Source(s) of Funding

- UG RCM Revenue

Anticipate a career-track lecturer may be hired. Additionally, a replacement tenure-line hire approved for the existing Master in Landscape Architecture program will have an anticipated 0.25 FTE role in the new BLA program beginning Spring 2023.

Anticipate additional support for advising, coordination, and business over the next three years.

Approvals:

ABOR
Undergraduate Council 2/11/2020
CAAC 12/17/2019
Faculty Senate

For use by Curricular Affairs:

- Create approval memo
- Send memo to college/dept and acad_org listserv
- Create UAccess Plan Table code(s) (secondary?)
- Upload approval memo and proposal documents to UAccess Plan Table
- Notify acad_org of the plan code creation
- Notify ADVIP team
- Update API, if necessary
New Academic Program Workflow Form

General

**Proposed Name:** Bachelor of Landscape Arch

Transaction Nbr: 00000000000042

Plan Type: Major

Academic Career: Undergraduate

Degree Offered: Bachelor of Landscape Architecture

Do you want to offer a minor? Y

Anticipated 1st Admission Term: Fall 2020

Details

Department(s):

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<td>School of Landscape Architecture and Planning</td>
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Campus(es):  

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<tbody>
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<td>TUCSON</td>
<td>Tucson</td>
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**Admission application terms for this plan:** Spring: Y Summer: Y Fall: Y

**Plan admission types:**

Freshman: Y Transfer: Y Readmit: Y Graduate: N

Non Degree Certificate (UCRT only): N

Other (For Community Campus specifics): N

**Plan Taxonomy:** 30.3301, Sustainability Studies.
Program Length Type: Program Length Value: 0.00

Report as NSC Program:
SULA Special Program:

Print Option:
Diploma: Y   Bachelor of Landscape Architecture in Landscape Architecture
Transcript: Y   Bachelor of Landscape Architecture in Landscape Architecture

Conditions for Admission/Declaration for this Major:
None.

Requirements for Accreditation:
The program will seek accreditation through the accrediting body, the Landscape Architectural Accreditation Board.

Because we intend to apply for accreditation for the proposed BLA program, we are required to maintain certain accreditation standards and conduct ongoing program assessment as defined by the Landscape Architecture Accreditation Board (LAAB). LAAB requires that the program covers approximately fifty learning outcomes. The faculty have created a detailed curriculum map to show how our proposed BLA curriculum will meet the accreditation standards of LAAB. This curriculum map is included as an attachment as part of the New Academic Program - Undergraduate Major Additional Information Form.

The program will seek Candidacy accreditation status during the initial semesters of program implementation. The program will seek full accreditation upon the successful graduation of the first cohort in accordance with LAAB accreditation procedures. See p.6 "Accreditation Procedures": https://www.asla.org/uploadedFiles/CMS/Education/Accreditation/LAAB_ACCREDITATION_PROCEEDURES_March2016.pdf

Program Comparisons

University Appropriateness
The University of Arizona will be the first university to comprehensively address the grand challenges of the built environment by creating a fully integrated multidisciplinary approach to these challenges through its recently adopted strategic plan. CAPLA’s strategic plan, Building a Changing World, aligns our land grant mission with the university strategic plan. CAPLA aspires to be innovators of transformational strategies, championing a future-oriented perspective where students are engaged in hands-on design and planning. By maintaining a close alignment with CAPLA and University-wide strategic planning
initiatives and partnerships, this BLA program will advance innovation in the Built Environment and increase CAPLA leadership and visibility in this critical domain at the forefront of the 4th industrial revolution.

CAPLA infrastructure provides opportunities for success in the BLA program through existing resources including courses, faculty, staff, and facilities. Existing CAPLA undergraduate programs—Bachelor of Architecture (BArch) and Bachelor of Science in Sustainable Built Environments (SBE)—provide BLA students the opportunity to collaborate with undergraduates in allied disciplines. For example, several existing courses (LAR 420 Plant Materials, LAR 423 Landscape Ecology, LAR 440 History, Theory and Contemporary Landscape Architecture, LAR 470 Introduction to GIS for Planning and Landscape Architecture) will be shared with SBE students pursuing the SBE Sustainable Landscapes Emphasis. Two new BLA design studio courses will be co-convened with BArch students to create interdisciplinary studios that simulate professional office experiences. Additionally, the university's undergraduate Sustainable Plant Systems program proposes to offer an Urban Horticulture emphasis area with courses including LAR 420 Plant Materials, LAR 423 Landscape Ecology, and LAR 440 History, Theory and Contemporary Landscape Architecture. Since landscape architecture is an historically multi-disciplinary field drawing from agriculture, civil engineering, fine art, plant and soil science, hydrology, health, and sociology, the program will seek university partners (faculty and students) as studio project collaborators. These multidisciplinary studio opportunities occur in the third year (spring semester) and fourth year (fall semester). The structure of these project-based studios creates opportunities for external funding through public agencies (city, county, native nations, NPS), industry (private firms), and grants (e.g., NSF, USDA, NIH, EPA). The newly reinstated CAPLA Drachman Institute will be a resource in identifying appropriate university and community projects and partnerships. Typically, the ideas generated by students in the studio setting prove useful as catalysts for future professional work and funding.

Arizona University System

<table>
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<tr>
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<th>DEGREE</th>
<th>#STDNTS</th>
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<td>BS</td>
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<td>Arizona State Univ, Tempe</td>
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Peer Comparison

The UArizona BLA degree will distinguish itself from the ASU BSLA in that it is not a Bachelor of Science degree. This allows room in the curriculum for students to learn more design, language and communication skills, equipping them with the skills needed to write formal, technical, and legal information and effectively communicate with communities and public agencies. Additionally, practitioners and LAAB have indicated that there is a shortage of qualified graduates entering the profession, and undergraduate enrollments in
landscape architecture programs are growing. ASU has also expressed their support for the BLA program and does not view it as a potential duplication. In their letter of support for this proposal, Jason Schupbach, director of The Design School at the Herberger Institute for Design and the Arts, writes: "In conversation with Landscape Architecture Professor Kenneth Brooks and Landscape Architecture Associate Professor and Program Head Joseph Ewan, we all believe the ASU BSLA and the proposed U of A BLA can complement the diverse and growing needs of the nation and planet for more professional landscape architects prepared to analyze, plan, design, manage, and nurture the built and natural environment."

The BLA program will exemplify the spirit of the land-grant mission that has characterized The University of Arizona since its founding. This professional degree program reflects the practical land stewardship values that led to the establishment of the profession in 1899. Our program will provide education, research, and outreach on the systematic organization of public and private outdoor places for human and environmental health, social well-being, preservation of cultural heritage, and visual beauty. Our vision is to advance sustainable design in arid environments for global application.

Faculty & Resources

Faculty

Current Faculty:

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<tr>
<th>INSTR ID</th>
<th>NAME</th>
<th>DEPT</th>
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<th>DEGREE</th>
<th>FCLTY/%</th>
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<tr>
<td>06209395</td>
<td>Lauri Johnson</td>
<td>1005</td>
<td>Professor</td>
<td>Master Landscape Arc</td>
<td>.25</td>
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<tr>
<td>03008108</td>
<td>Margaret Livingston</td>
<td>1005</td>
<td>Professor</td>
<td>Doctor of Philosophy</td>
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<tr>
<td>22075795</td>
<td>Bo Yang</td>
<td>1005</td>
<td>Assoc. Prof</td>
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<tr>
<td>22067236</td>
<td>Kirk Dimond</td>
<td>1005</td>
<td>Assit. Prof</td>
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<tr>
<td>14402773</td>
<td>Gina Chorover</td>
<td>1005</td>
<td>Lecturer</td>
<td>Master Landscape Arc</td>
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<tr>
<td>02930621</td>
<td>Travis Mueller</td>
<td>1005</td>
<td>Adj. Lect.</td>
<td>Master Landscape Arc</td>
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<tr>
<td>00744016</td>
<td>Kelly Cederberg</td>
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<tr>
<td>14603466</td>
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<tr>
<td>22075059</td>
<td>Nancy Pollock-Ellwand</td>
<td>1005</td>
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<tr>
<td>22067856</td>
<td>Daniel Hoffman</td>
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<td>Bachelor of Arch</td>
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<tr>
<td>22075892</td>
<td>Shujuan Li</td>
<td>1005</td>
<td>Assoc. Prof</td>
<td>Doctor of Philosophy</td>
<td>.13</td>
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</tbody>
</table>
Additional Faculty:

A new tenure-line hire initially approved for the existing MLA program: Assistant Professor of Landscape Architecture - Urban Design, will have an anticipated 0.25 FTE role in the new BLA program beginning in Spring 2023. This is a replacement hire approved by the college and university. (UA job posting: F22089. Desired start date: 8/3/20.)

It is currently anticipated that a career-track lecturer may be hired to co-teach LAR 4** Design Studio V - Interdisciplinary Outreach Studio with existing architecture faculty in Fall 2023.

Current Student & Faculty FTE

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<th>DEPARTMENT</th>
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<th>GRAD HEAD COUNT</th>
<th>FACULTY FTE</th>
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Projected Student & Faculty FTE

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<td>7.50</td>
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Library

Acquisitions Needed:

None. The liaison librarian to the School of Landscape Architecture does not anticipate any new expenditures. A review of the UA library’s current print and online resources for landscape architecture indicated that the subject matter was already well covered.

Physical Facilities & Equipment

Existing Physical Facilities:

Currently, there is no need for additional facilities or infrastructure. However, it is expected that CAPLA will grow enrollments in existing undergraduate and graduate programs. To accommodate this growth, CAPLA has launched a new building initiative.

Additional Facilities Required & Anticipated:

None.

Other Support
Other Support Currently Available:

The School of Landscape Architecture and Planning has several full-time and part-time staff members who devote their time to all programs in the school:

Administrative Assistant: Works immediately under the director and handles course management and scheduling; Promotion and Tenure packets; travel authorizations and disbursement vouchers for faculty; event coordination; and other administrative duties for the school as they arise.

Program Coordinator - Laura Jensen, MLA: Organizes and disseminates student and faculty achievements and activities through social media and the CAPLA website; shares job and internship opportunities with students; maintains and updates website content for the programs in the school; assists with accreditation for all school programs; and creates print and digital promotional materials for school events, courses, and programs, with a focus on the Landscape Architecture and MS Planning Programs.

Program Coordinator - Spencer Warmuth, MAS: Coordinates the Master of Real Estate Development, Sustainable Built Environments, and Heritage Conservation programs. Spencer provides support for all three programs by managing and operating their social media presence; communicating and assisting prospective students; interfacing with professional and corporate partners; and organizing outreach across various outlets.

Assessment Coordinator - Kelly Eitzen Smith, PhD: Collects program and student data and oversees and coordinates the assessment of all programs in the school for outside accrediting bodies as well as for internal University of Arizona program assessment.

Student worker: The programs in the school share a work-study student who works 20 hours per week, and is available to provide assistance with organizational and office related tasks as needed.

CAPLA staff:

Graduate Program Coordinator - Emilio Romero: Serving all graduate programs in the college, Emilio’s duties include recruiting, advising, admissions, and scholarship administration for students. She works in coordination with the Graduate College.

Senior IT Manager - Lucas Guthrie and Senior IT Support Analyst - Adam Katz: Manage and maintain CAPLA’s IT infrastructure and equipment and manage student IT staff.

Course Design Specialist: Works closely with subject matter experts and faculty on online course instructional design, maintenance and troubleshooting of online d2l courses, and course mapping.

Materials Lab Coordinator - Paulus Musters: Oversees CAPLA’s materials lab and maintains equipment.

Business office staff:

Assistant Dean of Finance and Administration - Simon White: Focuses on
business development and identifying funding sources necessary to meet the college and university missions. Simon has worked at the University of Arizona for 15 years in a variety of departments holding financial and business positions.

Analyst, Data and Financial - Jeff Guba, MBA: Provides CAPLA with various types of reports relating to financial and student data. He also provides critical analysis support relating to a range of business areas (i.e. accounting).

Accountant: Provide support to the CAPLA community relating to accounting, human resources, and other important business areas.

Development and Alumni Relations staff:

Development Director: Directs and manages the identification, qualification, cultivation, and solicitation of major individual, corporate, and foundation prospects in support of CAPLA.

Director of Alumni and Community Engagement: Develops and maintains relationships with CAPLA alumni and donors by organizing alumni and scholarship events, maintaining contact with alumni and donors through newsletters and direct communication. Kay is the main point of contact for CAPLA alumni.

Development and Alumni Relations Coordinator: Assists the Director of Alumni and Community Engagement in all aspects of alumni and donor relations.

Marketing Manager: Works in conjunction with the dean, associate dean, directors, faculty, program coordinators, and other related staff in the coordination of marketing and promotional materials and efforts.

Recruitment Coordinator: Responsible for college-wide student recruitment efforts.

Associate Dean for Research and Academic Affairs - Barbara White Bryson, EdD, FAIA: Coordinates promotion and tenure activities, holds research workshops, oversees building operations, and manages studio and office assignments for students, faculty, and staff.

These individuals work well as a team committed to all programs in the college. Dean Nancy Pollock-Ellwand, who holds degrees in Landscape Architecture (BLA), Architecture (MA), and Planning (PhD), the college and the school are well supported and staffed, thus ensuring the attainability of program mission and goals.

Other Support Needed over the Next Three Years:

Advising FTE Required:
2020-21: 0.10
2021-22: 0.20
2022-23: 0.30
2023-24: 0.40

Coordination FTE Required:
2020-21: 0.25
2021-22: 0.25  
2022-23: 0.25  
2023-24: 0.25  

Business Support FTE Required:  
2020-21: 0.10  
2021-22: 0.10  
2022-23: 0.20  
2023-24: 0.20  

Comments During Approval Process  

11/27/2019 9:32 AM  
MARTINMARQUEZ  

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<th>Comments</th>
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NEW ACADEMIC PROGRAM-UNDERGRADUATE MAJOR
ADDITIONAL INFORMATION FORM

I. MAJOR DESCRIPTION - provide a marketing/promotional description for the proposed program. Include the purpose, nature, and highlights of the curriculum, faculty expertise, emphases (sub-plans; if any), etc. The description will be displayed on the advisement report(s), Degree Search, and should match departmental and college websites, handouts, promotional materials, etc.

The Bachelor of Landscape Architecture (BLA) program prepares students for professional licensure in landscape architecture through a robust, responsive, and professionally-rooted curriculum. Classwork and design studios instill a comprehensive understanding of landscape architectural practice, creative problem-solving, and the knowledge, skills, and values necessary to become sustainability-minded landscape architecture professionals prepared to enter the workforce upon graduation.

The BLA is a first-professional degree program that will seek accreditation from the Landscape Architectural Accreditation Board (LAAB). The program is steeped in applied learning and professional practice with an emphasis on natural resources, sustainable design strategies, and interdisciplinary partnerships. The place-based curriculum takes advantage of the Sonoran Desert to demonstrate sustainable design solutions in areas including energy and water conservation, use of native plant species, ecological stewardship, and urban heat island mitigation. BLA students will have the option to continue on to the Master of Landscape Architecture degree program with advanced standing.

The program prepares students for entry-level professional practice by involving them in a variety of real-world learning experiences which enable them to meet the challenges of the 21st century. Studio experiences focus on design and planning for a variety of project types and scales including community and campus master plans; urban park systems, plazas and green streets; adaptive reuse of urban infrastructure, ecological restoration; habitat creation; neighborhood design; and more.

The program has a strong, committed, and energetic faculty who seamlessly integrate teaching, research, and outreach. Studio courses, classroom instruction, and real-world community outreach projects create a diverse learning environment that maximizes professional skill building. Faculty members prepare students for professional practice and interdisciplinary
collaboration through design projects that address site and landscape planning issues and explore the ways in which designed landscapes can educate and inspire communities toward environmental health and cultural identity.

*Note: For details on this course progression, please refer to the attached BLA to MLA AMP proposal document.*
II. **NEED FOR THE MAJOR/JUSTIFICATION** - describe how the major fulfills the needs of the city, state, region, and nation. Provide market analysis data or other tangible evidence of the need for and interest in the proposed major (and emphases, if applicable). This might include results from surveys of current students, alumni, and/or employers or reference to student enrollments in similar programs in the state or region. Include an assessment of the employment opportunities for graduates of the program for the next three years. Curricular Affairs can provide a job posting/demand report by skills obtained/outcomes/CIP code of the proposed major. Please contact Martin Marquez to request the report for your proposal.

**Overview:**
The University of Arizona Master of Landscape Architecture (MLA) program has been recognized by the Landscape Architectural Accreditation Board (LAAB) as “a strong program with a long history of excellence.”¹ They note that the program’s mission, goals, and objectives are in line with those of the university and are appropriate for a professional school in a land-grant institution. By offering an undergraduate level degree in landscape architecture, the University of Arizona can attract a larger share of students interested in the landscape architecture profession. Nationwide enrollments in MLA programs represent only the minority share of student demand. The Bachelor of Landscape Architecture (BLA) program as proposed will capture a growing market demand, promote interdisciplinary education and research, support future graduate enrollments, and implement key provisions of the CAPLA Strategic Plan. The first step to becoming a licensed landscape architect is completing a first-professional baccalaureate or first-professional master’s level degree in landscape architecture. Subsequent steps entail gaining sufficient professional experience and completing a four-part professional exam. Therefore, BLA graduates are workforce ready, and employment in the field is high and growing. Ninety-six percent of our recent MLA graduates are actively employed in the field in both public and private sectors. Our graduates compete well in the national and international job market.

According to the CAPLA undergraduate recruiting and advising team, there has been consistent interest from prospective students in a BLA program over the last five years. They report many student-initiated inquiries about a bachelor’s level program in landscape architecture at recruiting events and campus tours, at the rate of about 15-20 students per year. For example, on November 7, 2019 staff from CAPLA’s recruitment team spoke to five prospective students at the Phoenix Unified School District College Recruitment Fair who expressed interest in a BLA degree program. Additionally, approximately five to ten currently enrolled University of Arizona undergraduate students contact CAPLA advisors or school staff annually to

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¹ Landscape Architectural Accreditation Board Master of Landscape Architecture Re-Accreditation report, University of Arizona, February 2019
seek advice about preparing themselves for future enrollment in the Master of Landscape Architecture program. We believe that some of these students would seek a BLA if the option was available to them.

In response to such inquiries, we have performed additional market research to confirm these findings, identifying significant projected demand for careers in landscape architecture nationally. Local and national landscape architecture firms have reported difficulty finding suitable candidates given limited historic graduate numbers and extended pathways to employment.

Many industry groups attribute this employment gap to a lack of exposure and education about the field, and this becomes more apparent when considering the geographic dispersion of programs. Of the 44 accredited undergraduate landscape architecture programs in the United States, a significant number exist in the Northeast and Mid-Atlantic regions of the country. While there are several programs throughout the West, distribution throughout the Southwest is relatively limited with just three undergraduate programs; ASU is the only institution serving the Arizona market with a Bachelor of Science in Landscape Architecture (BSLA) offering. As a land-grant institution, our program differentiates itself by being focused on natural resources including energy and water conservation, urban heat island mitigation, and landscape performance. Studios engage students in community outreach and interdisciplinary approaches to design of the built environment. Development growth, in the west, southwest and throughout the US creates opportunities for growth in the profession. However, nationwide landscape architecture programs are not keeping up with this demand.
**Market Size:**
The estimation of demand is evidenced in a 2018 report published by the American Society of Landscape Architecture (ASLA) which identified a total of 5,376 students enrolled in a landscape architecture program. Of those enrollments, 3,320 of students (62%) are classified undergraduate and 2,056 (38%) are enrolled at the graduate-level.

![Figures showing total enrolled students, total undergraduate students, total graduate students, and net change 2017-2018.](Figure credit: American Society of Landscape Architects)

Based on an analysis of existing programs and market size, we expect to have approximately 25 students entering the program on an annual basis. With approximately 3,320 students enrolled in an accredited BLA/BLSA Program in the United States, this suggests a market size based on a US Core-Based Statistical Area population = approximately 325 million (3,320 students / 325 million = approximately 10 students/million). With approximately 1 million people in the Tucson metro area, we can estimate a local market demand of approximately 10 enrollments per year. Within CAPLA, there is further opportunity to capture students with an interest in design in the built environment who begin studies as pre-architecture students in the Bachelor of Architecture program and find the program is not a match for their specific interests. An entry level studio has been designed for all incoming students interested in design of the built environment. At the end of this studio students will have the ability to choose either architecture or landscape architecture.

Modest market leakage can further be assumed from neighboring states given the higher cost of living, education related expenses, and limited number of undergraduate programs in the Southwest region. Given the population density of this
relatively underserved area, strength of historic BLA/BLSA enrollments\(^2\), and potential transfer of existing CAPLA pre-
architecture students we can reasonably expect a market capture of approximately 25 students per year. Without a BLA offering, CAPLA is becoming increasingly misaligned with market trends and shifts in student preference. Obtaining a high-paying job post undergraduate-level study becomes an attractive option for students, as suggested by the spread between graduate and undergraduate enrollments. Provision of an undergraduate BLA program could further induce demand for the existing Master of Landscape Architecture degree program, by establishing a complementary product in the CAPLA portfolio. BLA students would be able to complete the MLA with one additional year of study.

Local and national professionals value the existing MLA program and feel that graduates are well prepared to enter the profession. Practitioners and LAAB have indicated that there is a shortage of qualified graduates entering the profession. Adding a BLA program to the UA provides a four-year path to a profession that is in high demand. BLA programs provide greater access to the field as not all students have the ability to attend graduate school. This will help advance the school, college, and university goals in serving underrepresented populations.

\(^2\) The University of Arizona once had a BLA program with robust enrollments. The program was eliminated in an era when faculty wanted to focus on research and budgets were not a concern.
**Competitive Landscape:**
At present, there are 96 accredited or candidacy status programs in 70 universities identified by the American Society of Landscape Architects (ASLA)\(^3\). Nearly half of these programs (48%) maintain a BLA or BSLA program. There are 44 undergraduate and 52 graduate programs nationwide, with a significant distribution in the Northeast and Mid-Atlantic regions\(^4\). While there are several programs throughout the West, distribution throughout the Southwest\(^5\) is relatively limited with just three undergraduate programs: University of Nevada Las Vegas, Utah State University, and Arizona State University. ASU is the only institution with an undergraduate program (BSLA) serving the Arizona market.

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\(^3\) [www.asla.org/FullListofAccreditedPrograms.aspx](https://www.asla.org/FullListofAccreditedPrograms.aspx)
\(^4\) [www.asla.org/schools.aspx](https://www.asla.org/schools.aspx)
\(^5\) Nevada, Arizona, New Mexico, and Utah.
**Employment Opportunities:**
Graduates from our existing MLA program are well prepared for employment in landscape architecture. According to LAAB’s February 2019 re-accreditation report of our program:

“...there are sufficient program opportunities for students to pursue academic interests and alumni are actively employed in the profession. Interviews with employers also reinforce the perception that students are well prepared to enter the profession.”

Additionally, as reflected in the attached report from Program Insight by Burning Glass Technologies there is significant projected demand for careers in landscape architecture nationwide (see inserted graph).

**Program Structure:**
The Bachelor of Landscape Architecture (BLA) program will prepare students for professional licensure in landscape architecture through a robust, responsive, and professionally-rooted curriculum. The BLA curriculum addresses emerging technologies, challenges, and innovations in landscape architectural practice. Through tackling grand challenges facing the built environment, students solve real-world problems in service learning projects that engage and serve Arizona’s diverse communities.

A series of progressive landscape architecture design studios and support courses instill a comprehensive understanding of landscape architectural practice, creative problem-solving, and the knowledge, skills, and values necessary for professional success. In accordance with LAAB accreditation standards, the BLA curriculum includes courses on 1) history, theory, and criticism; 2) design and design methods; 3) natural processes and sustainable design strategies; 4) socio-cultural factors in
design; 5) design implementation; 6) professional communication documentation, and technology; 7) professional practice; and 8) research and scholarly methods. With an existing first-professional MLA program in place, these professional standards are currently being taught at the graduate level. The existing MLA curriculum and courses will help guide the development of the BLA courses in accordance with accreditation standards.

Qualified BLA students will have the opportunity to progress into one of our graduate programs, allowing them to earn both a bachelor’s and master’s degree in an accelerated amount of time. This would allow students to diversify their skills and enhance their interdisciplinary capabilities. CAPLA offers the following graduate degrees: Master of Architecture, Master of Science in Architecture, Master of Science in Urban Planning, Master of Landscape Architecture, and Master of Real Estate Development. In landscape architecture the master’s degree is considered the terminal degree thus students receiving the BLA and MLA would be qualified for academic positions. There is currently a high demand for applicants in these faculty positions.
III. **MAJOR REQUIREMENTS**— complete the table below by listing the major requirements, including required number of units, required core, electives, and any special requirements, including emphases* (sub-plans), thesis, internships, etc. Note: information in this section must be consistent throughout the proposal documents (comparison charts, four-year plan, curricular/assessment map, etc.). Delete the **EXAMPLE** column before submitting/uploading. Complete the table in Appendix A if requesting a corresponding minor.

<table>
<thead>
<tr>
<th>Total units required to complete the degree</th>
<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-division units required to complete the degree</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foundation courses</th>
<th>Second semester proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second language</strong></td>
<td>Moderate Math Strand: BLA foundation math: MATH 108 (4) Modeling with Algebraic and Trigonometric Functions or higher depending on placement:</td>
</tr>
<tr>
<td></td>
<td>- MATH 120R (4) Calculus Preparation or</td>
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<tr>
<td></td>
<td>- MATH 122B (4) First-Semester Calculus or</td>
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<tr>
<td></td>
<td>- MATH 125 (3) Calculus I</td>
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<tr>
<td><strong>Math</strong></td>
<td>2 courses/ 6 units- Tier I 150 (INDV)</td>
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<td></td>
<td>2 courses/ 6 units-Tier I 160 (TRAD)</td>
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<tr>
<td></td>
<td>2 courses/ 6 units-Tier I 170 (NATS)</td>
</tr>
<tr>
<td></td>
<td>0 units-Tier II Arts (per college exception)</td>
</tr>
<tr>
<td></td>
<td>1 course/ 3 units-Tier II Humanities</td>
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<tr>
<td></td>
<td>1 course/ 3 units-Tier II Individuals and Societies</td>
</tr>
<tr>
<td></td>
<td>1 courses/3 units-Tier II Natural Sciences</td>
</tr>
</tbody>
</table>

<p>| Pre-major? (Yes/No). If yes, provide requirements. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department. | No. |
| List any special requirements to declare or gain admission to this major (completion of specific coursework, minimum GPA, interview, application, etc.) | None. |</p>
<table>
<thead>
<tr>
<th><strong>Major requirements</strong></th>
<th><strong>BLA Core (77)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum # of units required in the major (units counting towards major units and major GPA)</td>
<td>77</td>
</tr>
<tr>
<td>Minimum # of upper-division units required in the major (upper division units counting towards major GPA)</td>
<td>46</td>
</tr>
</tbody>
</table>
| Minimum # of residency units to be completed in the major | - Students transferring from another accredited BLA program are required to complete the following courses (31 cu):  
  o LAR 470 Intro to GIS for Planning and Landscape Architecture (4)  
  o LAR 3** Design Studio III (6)  
  o LAR 3** Design Studio IV (6)  
  o LAR 423 Landscape Ecology (3)  
  o LAR 4** Design Studio V (6)  
  o LAR 4** Design Studio VI (6)  
  *These students may receive advanced standing for equivalent previous coursework.*  
  - All other transfer students not coming from an accredited BLA program are required to complete all 77 units of the BLA core in addition to university requirements. These students would have the option of completing ARC 102 Foundation Studio II (Proposed name change: Built Environment Foundation Studio II) during the summer making it possible to enter the program in their sophomore year. |
| Required supporting coursework (courses that do not count towards major units and major GPA, but are required for the major). Courses listed must include prefix, number, units, and title. Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department. | None. |
| Major requirements. List all major requirements including core and electives. If applicable, list the emphasis requirements for each proposed | - ARC/LAR 101A/B (2/2) Foundation Studio 1A/1B *(Proposed name change: Built Environment Foundation Studio)* |
emphasis*. Courses listed count towards major units and major GPA. Courses listed must include prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.

<table>
<thead>
<tr>
<th>Courses listed count towards major units and major GPA. Courses listed must include prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ARC/LAR 131 A/B (1/1) Thinking About Architecture <em>(Proposed name change: Thinking About Design in the Built Environment)</em></td>
</tr>
<tr>
<td>- (New) LAR 2** (4) Landscape Architecture Intro Studio</td>
</tr>
<tr>
<td>- (New) LAR 2** (6) Design Studio I</td>
</tr>
<tr>
<td>- (New) LAR 2** (6) Design Studio II</td>
</tr>
<tr>
<td>- (New) LAR 3** (6) Design Studio III</td>
</tr>
<tr>
<td>- (New) LAR 3** (6) Design Studio IV</td>
</tr>
<tr>
<td>- (New) LAR 4** (6) Design Studio V</td>
</tr>
<tr>
<td>- (New) LAR 4** (6) Design Studio VI</td>
</tr>
<tr>
<td>- (New) LAR 2** (3) Site Engineering</td>
</tr>
<tr>
<td>- (New) LAR 2** (3) Landscape Construction</td>
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<tr>
<td>- (New) LAR 2** (3) History and Theory of Landscape Architecture</td>
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</tbody>
</table>

Notes:
- Both ARC/LAR 101A/B and ARC/LAR 131A/B will be co-convened with first semester BArch students.
- Course content from several of the MLA courses would be adaptable for the BLA. For example, all studio courses, LAR 2** Site Engineering, LAR 2** Landscape Construction, and LAR 2** History and Theory of Landscape Architecture already exist at the graduate level in the first-professional MLA program.
- LAR 460 Professional Practice/Working Drawings is currently listed for 2 credits and will be modified to 3 credits.

<table>
<thead>
<tr>
<th>Internship, practicum, applied course requirements (Yes/No). If yes, provide description.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td><strong>Senior thesis or senior project required (Yes/No). If yes, provide description.</strong></td>
</tr>
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<tr>
<td><strong>Additional requirements (provide description)</strong></td>
</tr>
<tr>
<td><strong>Minor (specify if optional or required)</strong></td>
</tr>
<tr>
<td><strong>Any double-dipping restrictions (Yes/No)? If yes, provide description.</strong></td>
</tr>
</tbody>
</table>

*Emphases are officially recognized sub-specializations within the discipline. [ABOR Policy 2-221 c. Academic Degree Programs Subspecializations](#) requires all undergraduate emphases within a major to share at least 40% curricular commonality across emphases (known as “major core”). Total units required for each emphasis must be equal. Proposed emphases having similar curriculum with other plans (within department, college, or university) may require completion of an additional comparison chart. Complete the table found in Appendix B to indicate if emphases should be printed on student transcripts and diplomas.*
IV. **CURRENT COURSES**—using the table below, list all existing courses included in the proposed major. You can find information to complete the table using the [UA course catalog](https://catalog.uah.edu/) or [UAnalytics](https://analytics.uah.edu/) (Catalog and Schedule Dashboard> “Printable Course Descriptions by Department” On Demand Report; right side of screen). If the courses listed belong to a department that is not a signed party to this implementation request, upload the department head’s permission to include the courses in the proposed program and information regarding accessibility to and frequency of offerings for the course(s). Upload letters of support/emails from department heads to the “Letter(s) of Support” field on the UAccess workflow form. Add rows to the table, as needed.

<table>
<thead>
<tr>
<th>Course prefix and number (include cross-listings)</th>
<th>Units</th>
<th>Title</th>
<th>Course Description</th>
<th>Pre-requisites</th>
<th>Modes of delivery (online, in-person, hybrid)</th>
<th>Typically Offered (F, W, Sp, Su)</th>
<th>Dept signed party to proposal? (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC/LAR 101 A/B</td>
<td>2/2</td>
<td>Foundation Studio 1A/1B <em>(Proposed name change: Built Environment Foundation Studio)</em></td>
<td>A studio-based course introducing the fundamentals of design and its role in the built environment through drawing, modelling and a lecture component.</td>
<td>None</td>
<td>In-person</td>
<td>F</td>
<td>Yes</td>
</tr>
<tr>
<td>LAR 420</td>
<td>4</td>
<td>Plant Materials</td>
<td>This course focuses on the examination and evaluation of plants effectively used in landscapes of the Southwest. Emphasis is placed on strategies useful for plant identification and appropriate plant selection for a variety of landscape uses. Field studies will be the primary mode of instruction whereas classroom lectures provide support material for the field work.</td>
<td>None</td>
<td>In-person</td>
<td>F</td>
<td>Yes</td>
</tr>
<tr>
<td>LAR 423</td>
<td>3</td>
<td>Landscape Ecology</td>
<td>The emphasis of this course is the understanding and subsequent use of principles of landscape ecology. This will be accomplished through the study of how spatial heterogeneity in landscapes influences various ecological processes in natural and created landscapes.</td>
<td>None</td>
<td>Hybrid</td>
<td>Sp</td>
<td>Yes</td>
</tr>
<tr>
<td>Course Code</td>
<td>Credits</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Mode</td>
<td>Term</td>
<td>Offered</td>
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<tr>
<td>LAR 470</td>
<td>4</td>
<td>Intro to GIS for Planning and Landscape Architecture</td>
<td>This course is an introduction to Geographic Information Systems (GIS) for undergraduate students interested in design and the built environment. We will focus on three core usage domains of GIS: data management, communication/visualization, and analysis. Specifically, this class focuses on how fluency in these domains contributes to better design and planning of the built environment.</td>
<td>None</td>
<td>In-person</td>
<td>F</td>
<td>Yes</td>
</tr>
<tr>
<td>LAR 440</td>
<td>3</td>
<td>History, Theory and Contemporary Landscape Architecture</td>
<td>This course examines landscape architecture from an historic and contemporary perspective as reflected in theory and practice. Through case reviews of built works including significant estates, gardens, urban designs, park systems, corporate landscapes, restored natural sites, heritage sites, waterfront projects, resorts, et al., students will explore the evolution of design ideology and application of theory in the practice of landscape architecture.</td>
<td>None</td>
<td>In-person</td>
<td>F</td>
<td>Yes</td>
</tr>
<tr>
<td>LAR 426</td>
<td>4</td>
<td>Planting Design</td>
<td>Principles of planting design, planting design process, and functional and aesthetic uses of plants in designs are discussed. Studio projects focus on development of planting plans for sites with various scopes and conditions.</td>
<td>C or better in LAR 420 Plant Materials.</td>
<td>In-person</td>
<td>Sp</td>
<td>Yes</td>
</tr>
<tr>
<td>CRN</td>
<td>Section</td>
<td>Title</td>
<td>Description</td>
<td>Delivery</td>
<td>Term</td>
<td>Offered</td>
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<tr>
<td>LAR 460</td>
<td>3</td>
<td>Professional Practice</td>
<td>The practice of landscape architecture including professionalism, registration, the landscape architectural profession, services and fees, construction contract documents, bid documents and procedures, and business organization and operation.</td>
<td>In-person</td>
<td>Sp</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>LAR 496A*</td>
<td>1</td>
<td>Landscape Architecture Seminar I~</td>
<td>This course exposes students to various components of professional scholarship.</td>
<td>In-person</td>
<td>F</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

* Undergraduate 400-level sections need to be created for existing 500-level courses
~ Proposed name change to *Special Topics in Landscape Architecture*

**Note:** The following BLA courses are included in the Bachelor of Sustainable Built Environments Sustainable Landscapes Emphasis: LAR 420 *Plant Materials*; LAR 423 *Landscape Ecology*; and LAR 440 *History, Theory and Contemporary Landscape Architecture*.

The following BLA courses are listed for inclusion in the proposed Urban Horticulture sub-plan for the Bachelor of Science in Sustainable Plant Systems degree offered by the School of Plant Sciences, Department of Biosystems Engineering, and the Department of Environmental Science at the University of Arizona:

- **Required:** LAR 420 *Plant Materials*
- **Elective option:** LAR 423 *Landscape Ecology*
V. **NEW COURSES NEEDED** – using the table below, list any new courses that must be created for the proposed program. If the specific course number is undetermined, please provide level (ie CHEM 4**). Add rows as needed. Is a new prefix needed? If so, provide the subject description so Curricular Affairs can generate proposed prefix options.

<table>
<thead>
<tr>
<th>Course prefix and number (include cross-listings)</th>
<th>Units</th>
<th>Title</th>
<th>Course Description</th>
<th>Pre-requisites</th>
<th>Modes of delivery (online, in-person, hybrid)</th>
<th>Status*</th>
<th>Anticipated first term offered</th>
<th>Typically Offered (F, W, Sp, Su)</th>
<th>Dept signed party to proposal? (Yes/No)</th>
<th>Faculty members available to teach the courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 131A/B</td>
<td>1/1</td>
<td>Thinking About Architecture <em>(Proposed name change: Thinking About theBuilt Environment)</em></td>
<td>The course provides an overview of the role of architecture in the design of the built environment using examples of notable buildings and structures.</td>
<td>None</td>
<td>In-person</td>
<td>D</td>
<td>Fall 2020</td>
<td>F</td>
<td>Yes</td>
<td>Lecturer Gina Chorover Co-teaching with Professor of Practice Daniel Hoffman</td>
</tr>
<tr>
<td>LAR 2**</td>
<td>4</td>
<td>Landscape Architecture Intro Studio</td>
<td>This studio course introduces students to design thinking and the principles of design. The course incorporates design theory, creative problem solving, and oral, written and visual communication skills including hand drawing and digital media graphics. Students are exposed to the basics of design processes including: site analysis, program and concept development, and design synthesis.</td>
<td>none</td>
<td>In-person</td>
<td>D</td>
<td>Spring 2021</td>
<td>Sp</td>
<td>Yes</td>
<td>Lecturer Travis Mueller</td>
</tr>
<tr>
<td>Course Code</td>
<td>Credits</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Delivery</td>
<td>Term</td>
<td>Grade</td>
<td>Concurrent Enrollment Required</td>
<td>Lecturer</td>
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<tr>
<td>LAR 2**</td>
<td>6</td>
<td>Design Studio I</td>
<td>This studio course incorporates design thinking, principles of design, and design processes in the execution of site design problems that utilize site analysis skills, incorporate background research, and demonstrate concept and iterative design development resulting in schematic design solutions. Design communication skills including hand drawing and digital media graphics in 2D and 3D are practiced. Spatial sequences are diagramed and developed with focus on built and natural materials including plant masses and forms.</td>
<td>Concurrent enrollment or C or better in LAR 1** Intro to Landscape Architecture</td>
<td>In-person</td>
<td>Fall 2021</td>
<td>F</td>
<td>Yes</td>
<td>Kelly Cederberg, MLA or CT Practitioner TBD</td>
<td></td>
</tr>
<tr>
<td>LAR 2**</td>
<td>6</td>
<td>Design Studio II</td>
<td>This studio course advances skills and knowledge from Design Studio I with application of design thinking, principles of design, design processes, and design communication in the comprehensive execution of several site design projects. Creative problem-solving techniques are reviewed and reinforced and the skills learned in LAR 2XX Site Engineering are practiced. Students will have the opportunity to participate in a travel study program during spring break.</td>
<td>Concurrent enrollment or C or better in LAR 2** Landscape Architecture Intro Studio.</td>
<td>In-person</td>
<td>Spring 2022</td>
<td>Sp</td>
<td>Yes</td>
<td>Gina Chorover</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td>Title</td>
<td>Description</td>
<td>Grade Required</td>
<td>Format</td>
<td>Term</td>
<td>Grade</td>
<td>Instructor</td>
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<tr>
<td>LAR 3**</td>
<td>6</td>
<td>Design Studio III</td>
<td>This studio course expands the scope of student design practice to include greater attention to real-world complex scenarios. Knowledge, skills, and values learned in previous semesters are incorporated into coursework with projects that include a variety of scales, such as site, neighborhood, and landscape. The course advances critical thinking skills; students conduct appraisals of their design work based on identified project goals. Students formulate professional presentations (graphic, written, and oral) that describe their design intentions and results.</td>
<td>C or better in LAR 2** Design Studio II.</td>
<td>In-person</td>
<td>Fall 2022</td>
<td>F</td>
<td>Yes</td>
<td>Lecturer Travis Mueller</td>
<td></td>
</tr>
<tr>
<td>LAR 3**</td>
<td>6</td>
<td>Design Studio IV - Interdisciplinary Urban Design Studio</td>
<td>This interdisciplinary studio courses includes BLA and BArch students. Through collaborative methods, multi-disciplinary work, and urban design outreach, students prepare for interdisciplinary professional practice. Students will have expanded creative freedom to collectively explore, in team approaches, built environment solutions to the grand challenges that face society. Sustainable design strategies, socio-cultural frameworks, health and well-being, and aesthetic theory and innovation will inform design decisions. (co-convened with ARCH 451a) Note: Faculty and students from other programs may be invited to participate as project consultants.</td>
<td>C or better in LAR 3** Design Studio III.</td>
<td>In-person</td>
<td>D</td>
<td>Spring 2023</td>
<td>Sp</td>
<td>Yes</td>
<td>New tenure track hire – Assistant Professor of Landscape Architecture, Urban Design. (Anticipated FTE: .75 MLA, .25 BLA) UA job posting: F22089. Desired start date: 8/3/2023 This hire was approved for the existing MLA program.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Credits</td>
<td>Course Title</td>
<td>Description</td>
<td>Corequisites</td>
<td>Instructor</td>
<td>Delivery</td>
<td>Term</td>
<td>Grade</td>
<td>Notes</td>
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<tr>
<td>LAR 4** 6</td>
<td>Design Studio V - Interdisciplinary Outreach Studio</td>
<td>This interdisciplinary studio course includes BLA and BArch students. Students will work with community clients and campus partners to address real world complex urban and rural design projects. Through collaborative methods, and multi-disciplinary work, students will use research and technology to develop solutions that advance practice. Students will also develop design implementation strategies. Sustainable design strategies, socio-cultural frameworks, health and well-being, and aesthetic theory and innovation will inform design decisions. (co-convened with ARCH 451b) Note: Faculty and students from other programs may be invited to participate as project consultants.</td>
<td>C or better in LAR 3** Design Studio IV.</td>
<td>In-person</td>
<td>D</td>
<td>Fall 2023</td>
<td>F</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>LAR 4** 6</td>
<td>Design Studio VI - Capstone studio</td>
<td>This studio course requires students to identify and develop independent projects that demonstrate proficiency in landscape architecture. Students will employ skills, knowledge, and values learned and applied in all previous courses. Projects will have a research component aimed at advancing practice.</td>
<td>C or better in LAR 4** Design Studio V.</td>
<td>In-person</td>
<td>D</td>
<td>Spring 2024</td>
<td>Sp</td>
<td>Yes</td>
<td>Associate Professor Bo Yang</td>
<td></td>
</tr>
</tbody>
</table>

Lecturer Tim Johnson, MLA or CT Lecturer TBD co-teaching with architecture faculty TBD
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course Title</th>
<th>Description</th>
<th>Pre-requisites</th>
<th>Delivery</th>
<th>Term</th>
<th>Grade</th>
<th>Co-teaching</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 2**</td>
<td>3</td>
<td>Site Engineering</td>
<td>This technical course introduces students to the engineering aspects of landscape architecture and site planning. Student gain technical competency in grading and earthwork design, storm water management, and road alignment while incorporating design principles and sustainability strategies.</td>
<td></td>
<td>In-person</td>
<td>Fall 2021</td>
<td>F</td>
<td>Yes</td>
<td>Assistant Professor Kirk Dimond co-teaching with CT Practitioner TBD</td>
</tr>
<tr>
<td>LAR 2**</td>
<td>3</td>
<td>Landscape Construction</td>
<td>This technical course prepares students to complete construction documents according to industry standards established by the Council of Landscape Architectural Registration Boards (CLARB) and the American Society of Landscape Architects (ASLA). Students develop site grading and drainage plans, site material specification plans, dimensioning plans, and construction details. Students learn professional standards for technical drawing layout applicable for construction. The course prepares students for professional practice and licensure.</td>
<td>C or better in LAR 2** Site Engineering</td>
<td>In-person</td>
<td>Spring 2022</td>
<td>Sp</td>
<td>Yes</td>
<td>Assistant Professor Kirk Dimond co-teaching with CT Practitioner TBD</td>
</tr>
<tr>
<td>LAR 2**</td>
<td>3</td>
<td>History and Theory of Landscape Architecture</td>
<td>This course examines landscape architecture from an historic and contemporary perspective as reflected in theory and practice. Through case reviews of built works including significant estates, gardens, urban designs, park systems, corporate landscapes, restored natural sites, heritage sites, waterfront projects, resorts, etc., students will explore the evolution of design ideology and application of theory in the practice of landscape architecture.</td>
<td>None.</td>
<td>In-person</td>
<td>D</td>
<td>Spring 2022</td>
<td>Sp</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*In development (D); submitted for approval (S); approved (A)

Subject description for new prefix (if requested). Include your requested/preferred prefix, if any:
VI. **FACULTY INFORMATION** - complete the table below. If UA Vitae link is not provided/available, attach a short CV (2-3 pages) to the end of the proposal or upload to the workflow form (in the “Letter(s) of Support” field). UA Vitae profiles can be found in the UA directory/phonebook. Add rows as needed. Delete the **EXAMPLE** rows before submitting/uploading. **NOTE:** full proposals are distributed campus-wide, posted on committee agendas and should be considered “publicly visible”. Contact Pam Coonan and Martin Marquez if you have concerns about CV information being “publicly visible”.

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Involvement</th>
<th>UA Vitae link or “CV attached”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gina Chorover, MLA, AICP</td>
<td>co-teach ARC 101A/B Foundation Studio w/current architecture faculty; Co-teach: ARC/LAR 131A/B Thinking about Architecture; Co-teach: LAR 2** History and Theory of Landscape Architecture; LAR 2** Design Studio II</td>
<td>CV attached</td>
</tr>
<tr>
<td>Kirk Dimond, MLA</td>
<td>Co-teach LAR 2** Site Engineering; co-teach LAR 2** Landscape Construction</td>
<td>CV attached</td>
</tr>
<tr>
<td>Jennifer Patton, MLA</td>
<td>Teach: LAR 2** Site Engineering; Teach: LAR 2** Landscape Construction</td>
<td>CV attached</td>
</tr>
<tr>
<td>Margaret Livingston, PhD</td>
<td>LAR 420 Plant Materials; LAR 423 Landscape Ecology; LAR 426 Planting Design;</td>
<td>CV attached</td>
</tr>
<tr>
<td>Lauri Macmillan Johnson, MLA, FCELA</td>
<td>LAR 440 History, Theory and Contemporary Landscape Architecture</td>
<td>CV attached</td>
</tr>
<tr>
<td>Travis Mueller, MLA</td>
<td>co-teach ARC 101A/B Foundation Studio (Proposed name change Built Environment Foundation Studio) w/current architecture faculty; LAR 2** Landscape Architecture Intro Studio; LAR 3** Design Studio III;</td>
<td>CV attached</td>
</tr>
<tr>
<td>Daniel Hoffman, AIA</td>
<td>ARC 101A Foundation Studio 1A Lecture; Co-teach ARC 101A Foundation Studio 1A – Studio; Co-teach ARC/LAR 131A/B Thinking about Architecture (Proposed name change: Thinking About Design in the Built Environment)</td>
<td>CV attached</td>
</tr>
<tr>
<td>Shujuan Li, PhD</td>
<td>LAR 470 Intro to GIS for Planning and Landscape Architecture</td>
<td>CV attached</td>
</tr>
<tr>
<td>Bo Yang, PhD</td>
<td>co-teach LAR 4** Design Studio VI - Capstone Studio</td>
<td>CV attached</td>
</tr>
<tr>
<td>Kelly Cederberg, MLA or CT</td>
<td>LAR 2** Design Studio I (6)</td>
<td>CV attached</td>
</tr>
<tr>
<td>Nate Richie, MLA</td>
<td>LAR 460 Professional Practice</td>
<td>CV attached</td>
</tr>
<tr>
<td>Tim Johnson, MLA⁶</td>
<td>LAR 4** Design Studio V - Interdisciplinary Outreach Studio</td>
<td>CV attached</td>
</tr>
<tr>
<td>Nancy Pollock-Ellward, PhD</td>
<td>LAR 496A Landscape Architecture Seminar I</td>
<td>CV attached</td>
</tr>
</tbody>
</table>

---

VII. **FOUR-YEAR PLAN** – provide a sample four-year degree plan that includes all requirements to graduate with this major and takes into consideration course offerings and sequencing. Refer to [Degree Search](#) for examples. Use generic title/placeholder for requirements with more than one course option (e.g. Upper Division Major Elective, Minor Course, Second Language, GE Tier 1, GE Tier 2). Add rows as needed.

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
<th>Semester 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course prefix and number</td>
<td>Units</td>
<td>Course prefix and number</td>
<td>Units</td>
</tr>
<tr>
<td>GE Tier 1</td>
<td>3</td>
<td>Second Language</td>
<td>4</td>
</tr>
<tr>
<td>Second Language</td>
<td>4</td>
<td>MATH 108</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>ARC/LAR 101A/B Foundation Studio</td>
<td>2/2</td>
<td>LAR 2** Landscape Architecture Intro Studio</td>
<td>4</td>
</tr>
<tr>
<td>ARC/LAR 131 A/B Thinking About Architecture</td>
<td>1/1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td><strong>Total</strong></td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 5</th>
<th>Semester 6</th>
<th>Semester 7</th>
<th>Semester 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course prefix and number</td>
<td>Units</td>
<td>Course prefix and number</td>
<td>Units</td>
</tr>
<tr>
<td>GE Tier 1</td>
<td>3</td>
<td>GE Tier 1</td>
<td>3</td>
</tr>
<tr>
<td>LAR 470 Intro to GIS for Planning and Landscape Architecture</td>
<td>4</td>
<td>GE Tier 2</td>
<td>3</td>
</tr>
</tbody>
</table>

---

7 Proposed name change: Built Environment Foundation Studio  
8 Proposed name change: Thinking about Design in the Built Environment
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Code</th>
<th>Credits</th>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 420 Plant Materials</td>
<td>4</td>
<td>LAR 423 Landscape Ecology</td>
<td>3</td>
<td>LAR 496A Special Topics in Land Arch</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAR 3** Design Studio III</td>
<td>6</td>
<td>LAR 3** Design Studio IV</td>
<td>6</td>
<td>LAR 4** Design Studio V</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
<td><strong>Total</strong></td>
<td>15</td>
<td><strong>Total</strong></td>
<td>14</td>
</tr>
</tbody>
</table>
VIII. **STUDENT LEARNING OUTCOMES AND CURRICULUM MAP**—describe what students should know, understand, and/or be able to do at the conclusion of this major. Work with [Office of Instruction and Assessment](#) to create a curricular map using Taskstream. Include your curricular map in this section (refer to Appendix C for sample Curriculum Map generated using Taskstream).

### Detailed Description of Student Learning Outcomes

<table>
<thead>
<tr>
<th>Outcome 1</th>
<th><strong>Students will define and develop design processes, methods, and solutions.</strong> Students will be able to identify appropriate methods of design inquiry and problem-solving processes (including research methods) to produce creative solutions to identified problems and questions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 2</td>
<td><strong>Students will develop effective written, oral, and graphic communication skills.</strong> Students will be able to communicate design methods and processes including analyses, programs, concept development, and solutions in written, oral, and graphic ways using appropriate media.</td>
</tr>
<tr>
<td>Outcome 3</td>
<td><strong>Students will understand sustainable design strategies.</strong> Students will be able to create design concepts and solutions that use best practices for stormwater management, urban heat island mitigation, plant and ecosystem design, and landscape performance assessment.</td>
</tr>
<tr>
<td>Outcome 4</td>
<td><strong>Students will gain knowledge and awareness of professional practices.</strong> Students will apply the principles of social justice, diversity and inclusion, cultural heritage, and ethics and act responsibly towards the public, profession, and environment.</td>
</tr>
<tr>
<td>Outcome 5</td>
<td><strong>Students will demonstrate critical thinking skills and an understanding of the theoretical and historical context of the profession of landscape architecture.</strong> Students will understand the history and theory of landscape architecture and appropriate applications for practice.</td>
</tr>
</tbody>
</table>
### Curriculum Map:

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
<th>Outcome 4</th>
<th>Outcome 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC/LAR 101A/B Foundation Studio</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
</tr>
<tr>
<td>ARC/LAR 131A/B Thinking about Architecture</td>
<td>I/P</td>
<td>P</td>
<td>I</td>
<td>I</td>
<td>I/P</td>
</tr>
<tr>
<td>LAR 2**: Landscape Architecture Intro Studio</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
</tr>
<tr>
<td>LAR 2**: Studio I</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
<td>I/P</td>
</tr>
<tr>
<td>LAR 2**: Site Engineering</td>
<td>I</td>
<td>I/P</td>
<td>I/P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>LAR 2**: Studio II</td>
<td>I/P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>LAR 2**: Landscape Construction</td>
<td>I/P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>LAR 2**: History and Theory of LA</td>
<td>I/P</td>
<td>P</td>
<td>I</td>
<td>I</td>
<td>I/P</td>
</tr>
<tr>
<td>LAR 420: Plant Materials</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>-</td>
</tr>
<tr>
<td>LAR 3**: Studio III</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>LAR 423: Landscape Ecology</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>LAR 470: Intro to GIS</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Course Description</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>LAR 3**: Studio IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAR 4**: Studio V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAR 440: History, Theory and Contemporary Landscape Architecture</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>I/P</td>
</tr>
<tr>
<td>LAR 426: Planting Design</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>LAR 496A: Special Topics in Landscape Architecture</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>LAR 460: Professional Practice/Working Drawings</td>
<td>I</td>
<td>I/P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
</tbody>
</table>

**Program Outcome-Assessment Activities**

- **Direct Measure:**
  - LAR 4** Studio VI (Capstone)
  - Final Design Project and Oral Presentation
    - A

- **Indirect Measure:**
  - Graduating Senior Survey
    - A
IX. **ASSESSMENT PLAN FOR STUDENT LEARNING** - using the table below, provide a schedule for program assessment of intended student learning outcomes 1) while students are in the program and 2) after completion of the major. Add rows as needed. Delete **EXAMPLE** row.

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Sources(s) of Evidence</th>
<th>Assessment Measures</th>
<th>Data Collection Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1: Students will define and develop design processes, methods, and solutions</td>
<td>Capstone project&lt;br&gt;Exit survey of graduating students</td>
<td>Grading Rubric&lt;br&gt;Self-assessed rating</td>
<td>End of LAR 4** Design Studio VI Capstone course&lt;br&gt;Exit survey just prior to graduation</td>
</tr>
<tr>
<td>Outcome 2: Students will develop effective written, oral, and graphic communication skills</td>
<td>Capstone project&lt;br&gt;Exit survey of graduating students</td>
<td>Grading Rubric&lt;br&gt;Self-assessed rating</td>
<td>End of LAR 4** Design Studio VI Capstone course&lt;br&gt;Exit survey just prior to graduation</td>
</tr>
<tr>
<td>Outcome 3: Students will understand sustainable design strategies</td>
<td>Capstone project&lt;br&gt;Exit survey of graduating students</td>
<td>Grading Rubric&lt;br&gt;Self-assessed rating</td>
<td>End of LAR 4** Design Studio VI Capstone course&lt;br&gt;Exit survey just prior to graduation</td>
</tr>
<tr>
<td>Outcome 4: Students will gain knowledge and awareness of professional practices</td>
<td>Capstone project&lt;br&gt;Exit survey of graduating students</td>
<td>Grading Rubric&lt;br&gt;Self-assessed rating</td>
<td>End of LAR 4** Design Studio VI Capstone course&lt;br&gt;Exit survey just prior to graduation</td>
</tr>
<tr>
<td>Outcome 5: Students will demonstrate critical thinking skills and an understanding of the theoretical and historical context of the profession of landscape architecture</td>
<td>Capstone project&lt;br&gt;Exit survey of graduating students</td>
<td>Grading Rubric&lt;br&gt;Self-assessed rating</td>
<td>End of LAR 4** Design Studio VI Capstone course&lt;br&gt;Exit survey just prior to graduation</td>
</tr>
</tbody>
</table>
X. **PROGRAM ASSESSMENT PLAN** - using the table below, provide a schedule for program evaluation 1) while students are in the program and 2) after completion of the major. Add rows as needed. Delete **EXAMPLE** rows.

<table>
<thead>
<tr>
<th>Assessment Measure</th>
<th>Source(s) of Evidence</th>
<th>Data Collection Point(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>In program.</em> Student retention and graduation rates</td>
<td>UAccess Analytics</td>
<td>Census date each semester</td>
</tr>
<tr>
<td><em>After program completion.</em> Job Placement or Graduate School Enrollment, and Student Satisfaction</td>
<td>Student/Alumni Survey</td>
<td>At graduation exit survey and alumni survey annually</td>
</tr>
<tr>
<td>Academic Program Review/Accreditation Self-Study Report and Site Visit*</td>
<td>Report from external APR or Accreditation committee</td>
<td>Every 7 years, or as dictated by our accrediting board</td>
</tr>
<tr>
<td>Adherence to accreditation standards as defined by the Landscape Architecture Accreditation Board (LAAB)*</td>
<td>Annual Reports to LAAB</td>
<td>Annually, due August 1st</td>
</tr>
</tbody>
</table>

*Note: Our existing MLA program is accredited by the Landscape Architecture Accreditation Board (LAAB). As we intend to apply for accreditation for the proposed BLA program, we are required to maintain certain accreditation standards and conduct ongoing program assessment. The five learning outcomes identified on page 28 are condensed in order to meet the requirements of the UArizona Taskstream reporting system. However, LAAB requires that the program covers approximately fifty learning outcomes. We have included in our attachments the detailed curriculum map which demonstrates how our proposed curriculum will meet the standards of LAAB.*
XI. **ANTICIPATED STUDENT ENROLLMENT**-complete the table below. What concrete evidence/data was used to arrive at the numbers?

<table>
<thead>
<tr>
<th>5-YEAR PROJECTED ANNUAL ENROLLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Number of Students</td>
</tr>
<tr>
<td>25</td>
</tr>
</tbody>
</table>

Data/evidence used to determine projected enrollment numbers:

Based on data provided in Section II, and the marginal cost considerations included in the budget documentation, we expect to maintain an ongoing enrollment of 25 incoming students per year, 85% of whom will go on to graduate within 6-years (see Section IX). Due to the nature of our studio-centric curriculum and need for low student-faculty ratios, it is vital to keep class sizes small to maintain a high quality of instruction throughout the program.

XII. **ANTICIPATED DEGREES AWARDED**- complete the table below, beginning with the first year in which degrees will be awarded. How did you arrive at these numbers? Take into consideration departmental retention rates. Use National Center for Education Statistics College Navigator to find program completion information of peer institutions offering the same or a similar program.

<table>
<thead>
<tr>
<th>PROJECTED DEGREES AWARDED ANNUALLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Number of Degrees</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

Data/evidence used to determine number of anticipated degrees awarded annually:

Our school has an historically high retention and graduation rate. For example, over the last three years our undergraduate Bachelor of Science in Sustainable Built Environment has seen an on-time graduation rate of 80%, and our three-year Master of Landscape Architecture program has seen an on-time graduation rate of approximately 90%.
When looking at the graduation rates of three selected peer institutions: University of Illinois Urbana-Champaign, Texas A&M University, and Pennsylvania State University, we see 4- and 6-year graduation rates of 66% and 85%; 70% and 84%; and 52% and 82%, respectively. When considering our school’s graduation rates in addition to the average across these peer institutions, we arrive at an 80% 4-year graduation rate and an 85% 6-year graduation rate for students in the BLA program.
XIII. PROGRAM DEVELOPMENT TIMELINE - describe plans and timelines for 1) marketing the major and 2) student recruitment activities.

Marketing the Major
Post-Degree Approval: Immediate

- Add program description and major information to CAPLA web page
- Development of marketing materials in coordination with CAPLA marketing staff, faculty and UA Marketing and Brand Management
  - Google Ad-words
  - Web banner ads
  - Social media campaigns through main UA and CAPLA channels
  - Collateral/print materials for distribution

- Undergraduate Recruitment Coordinator and Advising Team to begin educating prospective students about BLA program
  - NACAC/RMAC\(^9\) HS Recruitment fairs
  - High school/community college visits & fairs
  - High school & Transfer Advisor/Counselor visits and info sessions
  - Non-degree seeking/partner programs, student major info sessions
  - Weekly Tours and other UA campus recruitment events (ie: Arizona Experience Days)
  - UA Admissions Recruitment training/updates and fly-in or site visits

- Engage with local landscape architecture firms to increase awareness of program
  - Provide opportunities for prospective students to learn about Landscape Architecture through firm visits and engage with alumni from the MLA program

- Electronic trade journal and professional association program announcement – American Society of Landscape Architects, Council of Educators in Landscape Architecture (CELA)

Post-Degree Approval: Ongoing

- Distribute printed/digital marketing material to:
  - Recruitment Coordinators, Admissions Counselors, Program coordinators and advisors for distribution across campus

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\(^9\) National Association for College Admission Counseling/Rocky Mountain Association for College Admission Counseling
- Traditional (physical) and digital billboards across campus (ie: student union, library resource centers and student recreation centers)
  - Update dynamic CAPLA webpage content to include student work and student outreach activities
  - Continued engagement with local landscape architecture firms to increase awareness of program and maintain professional-student relationships and engagement activities.
    - Job Fair participation
    - Firm Visits/Alumni professional engagement

**Student Recruitment**

- In-person recruitment efforts, beginning Spring 2020:
  - On-Campus:
    - Presentations to relevant general education classes and to undeclared students by current BLA/MLA faculty and MLA students.
    - Host brown-bag, Lunch-n-Learns or other similar information sessions at the college for interested current students.
    - Invite interested students to community events hosted or supported by the program, encouraging interaction with the current student population and faculty.
  - Off-Campus:
    - Make presentations to high schools and community colleges with a focus on resident student retention. Consider sending current students from related programs as ambassadors.
    - Provide training and information to UA International recruiters about program.
    - Elementary engagement and outreach through community events (ie: STEM Fairs, HS/Elementary classroom visits)
    - Participate in college fairs across Arizona and the nation highlighting the strength of our program.
      - NACAC/RMACAC HS Recruitment fairs
      - High school/community college visits & fairs
      - High school & Transfer Advisor/Counselor visits and info sessions
      - Non-degree seeking/partner programs, student major info sessions
      - Weekly Tours and other UA campus recruitment events (ie: Arizona Experience Days)
      - UA Admissions Recruitment training/updates and fly-in or site visits
    - Assess recruitment efforts at the end of recruitment cycle to determine efficacy and create plan for following
semester.
  - Manage student prospects through UA Admissions (SLATE platform) to communicate with inquires as early as Freshman cohorts in High Schools
  - Track students through admissions pipeline from inquiry to application to matriculation.

Program Accreditation
The program will seek Candidacy accreditation status during the initial semesters of program implementation. The program will seek full accreditation upon the successful graduation of the first cohort in accordance with LAAB accreditation procedures. See p.6 “Accreditation Procedures”:
XIV. **DIVERSITY AND INCLUSION**—describe how you will recruit diverse students and faculty to this program. In addition, describe retention efforts in place or being developed in order to retain students.

A primary goal identified in the CAPLA strategic plan is to make CAPLA a leader in inclusive excellence. In October 2018, the Diversity and Inclusive Excellence College Subcommittee produced a report with specific recommendations for the college in order to achieve this goal (see attached report: DIVERSITY AND INCLUSIVE EXCELLENCE COMMITTEE REPORT AND ACTION PLAN - CAPLA). The School of Landscape Architecture is dedicated to inclusive excellence; the recognition and acceptance of the talents, worldviews, perceptions, cultures, and skills that diverse communities bring to the educational enterprise that can be harnessed to prepare students for leading, living, and working in a diverse world. Design of the built environment must include diverse perspectives. Thus it is critical we recruit underrepresented candidates into the field. The faculty have identified the following recruitment best practices to maximize the pool of diverse faculty and students:

**Recruitment of Diverse Faculty**
- Utilize search committees that are committed to diversity and inclusive excellence
- Identify a diverse pool of candidates through professional networking/connections of existing faculty
- Advertise faculty positions across a wide array of media
- Contact all promising candidates directly and encourage them to apply
- Provide opportunities for candidates to meet with diverse faculty, staff and students and provide a welcoming environment for all candidates during campus visits
- Highlight the university’s status as a Hispanic-Serving Institution to all prospective candidates
- Include diversity and inclusiveness statements in all job searches, marketing, and promotional materials

**Recruitment of Diverse Students**
- Use social media and the website to attract diverse candidates
- Attend recruiting events held in a variety of settings, including locations that have underrepresented candidates
- Utilize student ambassadors from the MLA program to recruit students from diverse student clubs and organizations across campus. A comprehensive list of these clubs is available from the University’s office of Equity, Inclusion & Title IX at: https://diversity.arizona.edu/student-clubs-organizations
- Engage in recruitment activities at local high schools and Pima Community College
XV. **ABOR REQUIREMENT: New Academic Program Request.** This section is required by ABOR. Most of the information can be copied/pasted from completed sections above. Instructions/clarification for completing the table below, from ABOR, can be viewed/downloaded [here](#).

**University:** University of Arizona

<table>
<thead>
<tr>
<th><strong>Name of Proposed Academic Program:</strong></th>
<th>Bachelor of Landscape Architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Department:</strong></td>
<td>School of Landscape Architecture and Planning, College of Architecture, Planning and Landscape Architecture</td>
</tr>
<tr>
<td><strong>Geographic Site:</strong></td>
<td>University of Arizona Main Campus (Tucson)</td>
</tr>
<tr>
<td><strong>Instructional Modality:</strong></td>
<td>In-person</td>
</tr>
<tr>
<td><strong>Total Credit Hours:</strong></td>
<td>122</td>
</tr>
<tr>
<td><strong>Proposed Inception Term:</strong></td>
<td>Fall 2020</td>
</tr>
</tbody>
</table>

**Brief Program Description:**

**Why Landscape Architecture?**

Landscape architecture is a profession of increasing importance in the face of climate change and swelling urban populations. According to the American Society of Landscape Architects (ASLA), “Landscape architects are involved in regional master planning, conservation and restoration efforts, urban design, and park and green roof design and construction. At all scales, they bring a critical eye for social and artistic value to the design process.” Landscape architects work closely with architects and city planners to create high-performing green spaces and implement solutions to improve quality of life, protect natural resources, preserve cultural heritage, manage stormwater, and create quality, healthful public places.

The Bachelor of Landscape Architecture (BLA) is a first professional four-year degree that will prepare students to successfully enter the job market and become licensed professionals. The robust curriculum includes classwork and design studios that instill a...
comprehensive understanding of professional practice, creative problem-solving, and the knowledge, skills, and values necessary to become sustainability-minded landscape architects prepared to enter the workforce upon graduation.

**Workforce Demand**
Demand for trained landscape architects is high, and is growing at the local and national levels. Based on data from the Landscape Architectural Accreditation Board, Burning Glass Technologies’ Program Insight Report, and letters of support from local and national practitioners, it is clear that there is a shortage of qualified graduates entering the profession. This professional undergraduate BLA degree will fill this gap while advancing college and university strategic plan goals.

**College Expertise and Resources**
The program draws on the expertise of faculty in the College of Architecture, Planning, and Landscape Architecture to teach students the core competencies of the profession: history, theory, and criticism; design and design methods; sustainable design strategies and natural processes; socio-cultural design factors; design implementation; professional communication, documentation, and technology; and professional practice policies, procedures, and ethics.

By leveraging college resources, including those in our existing Master of Landscape Architecture program, we are confident in our ability to successfully launch the BLA program in Fall 2020. Course content from many existing Master of Landscape Architecture (MLA) courses will be incorporated into equivalent BLA courses, select upper division BLA courses will be co-convened with MLA students. Two upper division studio courses will have an interdisciplinary component, being co-convened with Bachelor of Architecture students. Opportunities exist for BLA students to earn graduate degrees in an accelerated period of time. Qualified students will be able to earn an MLA with one additional year of study (4+1); or can pursue other graduate degrees in CAPLA on an accelerated schedule: MS Architecture, M Architecture, M Real Estate Development, and MS Urban Planning.

Additionally, the BLA program gives students who enrolled in the pre-architecture program another built environment design degree option should they discover that architecture is not a good fit for their career interests. The pre-architecture program loses approximately 25% of its students in the first semester.

**Strategic Plan Goals and Community Partnerships**
Consistent with the university’s strategic plan goals, the curriculum will prepare students with the advanced technologies and design and planning skills needed to meet the challenges and opportunities that will arise during the Fourth Industrial Revolution (4IR). The BLA program will equip students with the skills and mindsets to lead in the 4IR and tackle the grand challenges in the built environment, and will utilize the diverse professional, entrepreneurial, and technological resources available in our community. In alignment with CAPLA’s strategic plan, interdisciplinary studios will engage students with local landscape architects and allied
professionals on community design projects, which can lead to funding sources and local industry/practitioner growth. Students will graduate with the essential methods and tools needed to become future leaders in the built environment.

**Diversity and Inclusion**
In keeping with the university’s strategic plan goal of increasing student diversity and success, specific efforts will be made to recruit a diverse student body. The recognition and acceptance of the talents, worldviews, perceptions, cultures, and skills that diverse communities bring to the educational enterprise can be harnessed to prepare students for leading, living, and working in a diverse world. Design of the built environment must include diverse perspectives. Therefore, it is critical we recruit underrepresented candidates into the field. In direct service of this goal, CAPLA’s Diversity and Inclusive Excellence College Subcommittee produced a report in October 2018 with specific recommendations for the college in order to achieve this goal.

**Learning Outcomes and Assessment Plan:** The faculty have identified 5 learning outcomes* for the BLA program:

### Detailed Description of Student Learning Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1</strong></td>
<td>Students will define and develop design processes, methods, and solutions. Students will be able to identify appropriate methods of design inquiry and problem-solving processes (including research methods) to produce creative solutions to identified problems and questions.</td>
</tr>
<tr>
<td><strong>Outcome 2</strong></td>
<td>Students will develop effective written, oral, and graphic communication skills. Students will be able to communicate design methods and processes including analyses, programs, concept development, and solutions in written, oral, and graphic ways using appropriate media.</td>
</tr>
<tr>
<td><strong>Outcome 3</strong></td>
<td>Students will understand sustainable design strategies. Students will be able to create design concepts and solutions that use best practices for stormwater management, urban heat island mitigation, plant and ecosystem design, and landscape performance assessment.</td>
</tr>
<tr>
<td><strong>Outcome 4</strong></td>
<td>Students will gain knowledge and awareness of professional practices. Students will apply the principles of social justice, diversity and inclusion, cultural heritage, and ethics and act responsibly towards the public, profession, and environment.</td>
</tr>
<tr>
<td><strong>Outcome 5</strong></td>
<td>Students will demonstrate critical thinking skills and an understanding of the theoretical and historical context of the profession of landscape architecture. Students will understand the history and theory of landscape architecture and appropriate applications for practice.</td>
</tr>
</tbody>
</table>
Measures
Direct measure: a grading rubric applied to the LAR 4** Design Studio VI Senior Capstone project.
Indirect measure: a survey of graduating students in which they self-assess their knowledge in each of the learning outcomes. The survey will be administered just prior to graduation from the program.

*Because we intend to apply for accreditation for the proposed BLA program, we are required to maintain certain accreditation standards and conduct ongoing program assessment as defined by the Landscape Architecture Accreditation Board (LAAB). LAAB requires that the program covers approximately fifty learning outcomes. The faculty have created a detailed curriculum map to show how our proposed BLA curriculum will meet the full accreditation standards of LAAB.

Projected Enrollment for the First Three Years:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>47</td>
<td>68</td>
</tr>
</tbody>
</table>

Evidence of Market Demand:

Market Size and Projected Enrollments
The estimation of demand is evidenced in a 2018 report published by the American Society of Landscape Architecture (ASLA) which identified a total of 5,376 students enrolled in a landscape architecture program. Of those enrollments, 3,320 of students (62%) are classified undergraduate and 2,056 (38%) are enrolled at the graduate-level. Without a BLA offering, CAPLA is becoming increasingly misaligned with market trends and shifts in student preference which indicate growth in undergraduate BLA programs.

Based on an analysis of existing programs and market size, we expect to have approximately 25 students entering the program on an annual basis. With approximately 3,320 students enrolled in an accredited BLA/BSLA program in the United States this suggests a market size based on US CBSA population = approximately 325 million (3,320 students / 325 million = approximately 10 students/million). With approximately 1 million people in the Tucson metro area, we can estimate 10 local students per year. Modest market leakage can further be assumed from neighboring states given the higher cost of living, education related expenses, and limited number of undergraduate programs in the Southwest region.

According to the CAPLA undergraduate recruiting and advising team, there has been consistent interest from prospective students in a BLA program over the last five years. They report many student-initiated inquiries about a bachelor’s level program in landscape
architecture at recruiting events and campus tours, at the rate of about 15-20 students per year. Within CAPLA, there is further opportunity to capture students with an interest in design in the built environment who begin studies as pre-architecture students in the Bachelor of Architecture program and find the program is not a match for their specific interests.

Given the population density of this relatively underserved area, strong anecdotal evidence of interest in a BLA offering, the strength of historic BLA/BSLA enrollments*, and potential transfer of existing CAPLA pre-architecture students we can reasonably expect a market capture of approximately 25 students per year.

**Career Outlook**

As reflected in a report from Program Insight by Burning Glass Technologies there is significant projected demand for careers in landscape architecture and the overall employment outlook remains strong. In fact, their report indicates a 10% increase nationwide in landscape architecture jobs in the next ten years. Local and national practitioners and LAAB have also indicated that there is a shortage of qualified graduates entering the profession. CAPLA remains in active discussions with landscape architecture professionals who express support for an undergraduate offering, seeing this program as the most direct path to satisfying this market need. These practitioners value the existing MLA program and feel that graduates are well prepared to enter the profession.

According to the US Bureau of Labor Statistics, the median pay for landscape architects was $68,230 or $32.80 per hour in 2018. Projections Central State Occupational Projections foresees a 14.7% increase of landscape architects in Arizona by 2026, and average annual openings of 60. Nationally these figures are 6.5% and 1,900, respectively.

(https://projectionscentral.com/Projections/LongTerm)

<table>
<thead>
<tr>
<th>Area</th>
<th>Title</th>
<th>Base</th>
<th>Projected</th>
<th>Change</th>
<th>% Change</th>
<th>Avg. Annual Openings</th>
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</thead>
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<td>Arizona</td>
<td>Landscape Architects</td>
<td>680</td>
<td>780</td>
<td>100</td>
<td>14.7</td>
<td>60</td>
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</table>

* The University of Arizona once had a BLA program with robust enrollments. The program was eliminated in an era when faculty wanted to focus on research and budgets were not a concern.

**Similar Programs Offered at Arizona Public Universities:**

Bachelor of Science in Landscape Architecture, Arizona State University
A letter of support from Jason Schupbach, Director of the Design School at ASU’s Herberger Institute for Design and the Arts, states, “In conversation with Landscape Architecture Professor Kenneth Brooks and Landscape Architecture Associate Professor and Program Head Joseph Ewan, we all believe the ASU BSLA and the proposed U of A BLA can complement the diverse and growing needs of the nation and planet for more professional landscape architects prepared to analyze, plan, design, manage, and nurture the built and natural environment.”

**New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):**
- **Infrastructure:** Currently, there is no need for additional facilities or infrastructure. However, it is expected that CAPLA will grow enrollments in existing undergraduate and graduate programs. To accommodate this growth, CAPLA has launched a new building initiative.
- **Library resources:** The liaison librarian to the School of Landscape Architecture does not anticipate any new expenditures. A review of the UA library’s current print and online resources for landscape architecture indicated that the subject matter was already well covered.
- **Faculty:** The School of Landscape Architecture and Planning is currently conducting a faculty search for a new tenure-line faculty member who will serve both the MLA (.75 FTE) and new BLA (.25 FTE) programs. This is a replacement hire approved by the college and university.

**EXPENDITURE ITEMS**

<table>
<thead>
<tr>
<th>Continuing Expenditures</th>
<th>30,000</th>
<th>72,000</th>
<th>96,000</th>
<th>120,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other Personnel</td>
<td>24,500</td>
<td>29,500</td>
<td>39,500</td>
<td>44,500</td>
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<tr>
<td>Employee Related Expense</td>
<td>17,100</td>
<td>31,900</td>
<td>42,500</td>
<td>51,700</td>
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<tr>
<td>Graduate Assistantships</td>
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<td>-</td>
<td>26,600</td>
<td>46,600</td>
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<tr>
<td>Other Graduate Aid</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operations (materials, supplies, phones, etc.) - Marketing</td>
<td>20,000</td>
<td>20,000</td>
<td>10,000</td>
<td>-</td>
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<tr>
<td>Additional Space Cost</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Items (attach description)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

| Total Continuing | $91,600 | $153,400 | $214,600 | $262,800 |

<table>
<thead>
<tr>
<th>One-time Expenditures</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction or Renovation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Start-up Equipment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Replace Equipment</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Library Resources</td>
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<td>-</td>
</tr>
<tr>
<td>-------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Other Items - Course Build</td>
<td>2,000</td>
<td>5,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Total One-time</td>
<td>$2,000</td>
<td>$5,000</td>
<td>$2,000</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>TOTAL EXPENDITURES</strong></td>
<td>$93,600</td>
<td>$158,400</td>
<td>$216,600</td>
<td>$264,800</td>
</tr>
<tr>
<td>Net Projected Fiscal Effect</td>
<td>$ (4,631)</td>
<td>$ 67,805</td>
<td>$ 148,724</td>
<td>$ 231,809</td>
</tr>
</tbody>
</table>

**Program Fee/Differentiated Tuition Required?** YES ☐ NO ☒

**Estimated Amount:**

**Program Fee Justification:**

**Specialized Accreditation?** YES ☒ NO ☐

**Accreditor:** Landscape Architectural Accreditation Board (LAAB) [https://www.asla.org/accreditationlaab.aspx](https://www.asla.org/accreditationlaab.aspx)
**Appendix A. Minor Requirements.** Complete if requesting a corresponding minor. Delete EXAMPLE column before submitting.

<table>
<thead>
<tr>
<th>Minimum total units required</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum upper-division units required</td>
<td>10</td>
</tr>
<tr>
<td>Total transfer units that may apply to the minor</td>
<td>3</td>
</tr>
</tbody>
</table>

List any special requirements to declare/admission to this minor (completion of specific coursework, minimum GPA, interview, application, etc.)

None.

**Minor requirements. List all minor requirements including core and electives. Courses listed must include course prefix, number, units, and title. Mark new coursework (New). Include any limits/restrictions needed (house number limit, etc.). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.**

**Minor in Landscape Architectural Studies**

**Required (10)**
- LAR 2** History and Theory of Landscape Architecture (3)
- LAR 420 Plant Materials (4)
- LAR 423 Landscape Ecology (3)

**Choose three of the following (9-10)**
- SBE 201 Sustainable Design and Planning (3)
- PLG 408 Planning for Urban Resilience (3)
- LAR 440 History, Theory and Contemporary Landscape Architecture (3)
- LAR 450 Green Infrastructure
- LAR 470 GIS for Planning and Landscape Architecture (4)
- PLG 495A Geodesigning Landscape Linkages (3)

**Internship, practicum, applied course requirements (Yes/No). If yes, provide description.**

No.

**Additional requirements (provide description)**

None.

Any double-dipping restrictions (Yes/No)? If yes, provide description.

Yes. Minor coursework may not double dip with another minor or undergraduate degree emphasis area, with the exception of LAR 420 Plant Materials for students pursuing the Sustainable Plant Sciences BS, Urban Horticulture emphasis. Students in this emphasis area who are also interested in pursuing the Minor in Landscape Architectural Studies may count this course toward both the emphasis area and the minor.
**Name of Proposed Program or Unit:** Bachelor in Landscape Architecture

**Budget Contact Person:** Simon White

### METRICS

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net increase in annual college enrollment UG</td>
<td>25</td>
<td>47</td>
<td>68</td>
<td>88</td>
</tr>
<tr>
<td>Net increase in annual college enrollment Grad</td>
<td>200</td>
<td>662</td>
<td>1,143</td>
<td>1,599</td>
</tr>
<tr>
<td>Net increase in college SCH UG</td>
<td>88,969</td>
<td>226,205</td>
<td>365,324</td>
<td>496,609</td>
</tr>
<tr>
<td>Net increase in college SCH Grad</td>
<td>30,000</td>
<td>72,000</td>
<td>96,000</td>
<td>120,000</td>
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<tr>
<td>Number of enrollments being charged a Program Fee</td>
<td>24,500</td>
<td>29,500</td>
<td>39,500</td>
<td>44,500</td>
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<tr>
<td>New Sponsored Activity (MTDC)</td>
<td>17,100</td>
<td>31,900</td>
<td>42,500</td>
<td>51,700</td>
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<tr>
<td>Number of Faculty FTE</td>
<td>-</td>
<td>-</td>
<td>26,600</td>
<td>46,600</td>
</tr>
</tbody>
</table>

### FUNDING SOURCES

**Continuing Sources**
- UG RCM Revenue (net of cost allocation): 88,969
- Grad RCM Revenue (net of cost allocation): 226,205
- Program Fee RCM Revenue (net of cost allocation): 365,324
- F and A Revenues (net of cost allocations): 496,609
- UA Online Revenues
- Distance Learning Revenues
- Reallocation from existing College funds (attach description)
- Other Items (attach description)

**One-time Sources**
- College fund balances
- Institutional Strategic Investment
- Gift Funding
- Other Items (attach description)

**Total Continuing**

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total One-time</td>
<td>88,969</td>
<td>226,205</td>
<td>365,324</td>
<td>496,609</td>
</tr>
<tr>
<td>TOTAL SOURCES</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

### EXPENDITURE ITEMS

**Continuing Expenditures**
- Faculty: 30,000
- Other Personnel: 24,500
- Employee Related Expense: 17,100
- Graduate Assistantships: -
- Other Graduate Aid: -
- Operations (materials, supplies, phones, etc.) - Marketing: 20,000
- Additional Space Cost: -
- Other Items (attach description)

**Total Continuing**

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total One-time</td>
<td>91,600</td>
<td>153,400</td>
<td>214,600</td>
<td>262,800</td>
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<tr>
<td>TOTAL EXPENDITURES</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
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</tbody>
</table>

**One-time Expenditures**
- Construction or Renovation
- Start-up Equipment
- Replace Equipment
- Library Resources
- Other Items - Course Build: 2,000

**Total One-time**

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2,000</td>
<td>5,000</td>
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<td>$</td>
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**Net Projected Fiscal Effect**

<table>
<thead>
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<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
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<td></td>
<td>(4,631)</td>
<td>67,805</td>
<td>148,724</td>
<td>231,809</td>
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</table>
BUDGET PROJECTION FORM

Name of Proposed Program or Unit: Bachelor in Landscape Architecture

Budget Contact Person: Simon White

<table>
<thead>
<tr>
<th>METRICS</th>
<th>1st Year 2020 - 2021</th>
<th>2nd Year 2021 - 2022</th>
<th>3rd Year 2022 - 2023</th>
<th>4th Year 2023 - 2024</th>
</tr>
</thead>
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<td>Net increase in annual college enrollment Grad</td>
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</tr>
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**FUNDING SOURCES**

**Continuing Sources**
- UG RCM Revenue (net of cost allocation) $88,969 $226,205 $365,324
- Grad RCM Revenue (net of cost allocation)
- Program Fee RCM Revenue (net of cost allocation)
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- UA Online Revenues
- Distance Learning Revenues
- Reallocation from existing College funds (attach description)
- Other Items (attach description)

**One-time Sources**
- College fund balances
- Institutional Strategic Investment
- Gift Funding
- Other Items (attach description)

**Total Sources**
- $ - $88,969 $226,205 $365,324

**EXPENDITURE ITEMS**

**Continuing Expenditures**
- Faculty $30,000 $72,000 $96,000 $120,000
- Other Personnel $24,500 $29,500 $39,500 $44,500
- Employee Related Expense $17,100 $31,900 $42,500 $51,700
- Graduate Assistantships $ - $ - $26,600 $46,600
- Other Graduate Aid
- Operations (materials, supplies, phones, etc.) - Marketing $20,000 $20,000 $10,000 $ -
- Additional Space Cost
- Other Items (attach description)

**Total Continuing**
- $91,600 $153,400 $214,600 $262,800

**One-time Expenditures**
- Construction or Renovation
- Start-up Equipment
- Replace Equipment
- Library Resources
- Other Items - Course Build $2,000 $5,000 $2,000 $2,000

**Total One-time**
- $2,000 $5,000 $2,000 $2,000

**Total Expenditures**
- $93,600 $158,400 $216,600 $264,800

**Net Projected Fiscal Effect**
- $(93,600) $(69,431) $9,605 $100,524
Bachelor of Landscape Architecture  
Income and Expense Statement  
Fiscal Year 2021 Values from fy20_rcm_model_final_0

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<thead>
<tr>
<th>Student Credit Hours Revenue</th>
<th>Non-Weighted</th>
<th>Weighted</th>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPLA Admin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drachman Institute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SfA</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LAR</td>
<td>125.00</td>
<td>75.00</td>
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</tr>
<tr>
<td>Planning</td>
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<tr>
<td>TOTAL CAPLA SCH</td>
<td>125.00</td>
<td>75.00</td>
<td>200.00</td>
</tr>
</tbody>
</table>

| SCH taken outside of CAPLA | $200,246 | $218,972 |
| SCH taken by non-SLA students |      |        |

| Total Student Credit Hours Revenue | $259,578 | $283,852 |
|Less UA Support Units & Institutional Costs | $(18,369) | $(20,087) |
|Less UA Strategic Investment Fund | $(1,578) | $(1,726) |
|NET SCH REVENUE AFTER UA TAX | $39,385 | $43,068 |

<table>
<thead>
<tr>
<th>Majors Revenue</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>Majors</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Less UA Support Units &amp; Institutional Costs</td>
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</tr>
<tr>
<td>Less UA Strategic Investment Fund</td>
<td>$(1,839)</td>
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<tr>
<td>NET MAJOR REVENUE AFTER UA TAX</td>
<td>$45,902</td>
<td>$45,902</td>
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| TOTAL CAPLA REVENUE | $85,286 | $88,969 |
Bachelor of Landscape Architecture  
Income and Expense Statement  
Fiscal Year 2022 Values from fy20_rcm_model_final_0

<table>
<thead>
<tr>
<th>Student Credit Hours Revenue</th>
<th>Non-Weighted</th>
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<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>CAPLA Admin</td>
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<td>339.00</td>
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<tr>
<td>Drachman Institute</td>
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<tr>
<td>SaFA</td>
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<td>-</td>
</tr>
<tr>
<td>LARC</td>
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<tr>
<td>Planning</td>
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<tr>
<td>TOTAL CAPLA SCH</td>
<td>323.00</td>
<td>339.00</td>
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<tr>
<td>SCH taken outside of CAPLA</td>
<td>482.00</td>
<td>491.00</td>
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<tr>
<td>SCH taken by non-SLA students</td>
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</table>

- Total Student Credit Hours Revenue: $456,632, $489,336
- Total CAPLA Student Credit Hours Revenue: $196,932, $215,349
- Less UA Support Units & Institutional Costs: $(62,034), $(67,835)
- Less UA Strategic Investment Fund: $(5,908), $(6,460)
- NET SCH REVENUE AFTER UA TAX: $128,990, $141,053

<table>
<thead>
<tr>
<th>Majors Revenue</th>
<th>Non-Weighted</th>
<th>Weighted</th>
</tr>
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<td>Spring</td>
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<td>Majors</td>
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<td>47.00</td>
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<tr>
<td>Less UA Support Units &amp; Institutional Costs</td>
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<tr>
<td>Less UA Strategic Investment Fund</td>
<td>-</td>
<td>-</td>
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</table>
- NET MAJOR REVENUE AFTER UA TAX: $85,151, $85,151

TOTAL CAPLA REVENUE: $214,142, $226,205
### Student Credit Hours Revenue

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<tr>
<td>SAFA</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Planning</td>
<td>615.60</td>
<td>527.10</td>
<td>1,142.70</td>
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<td>1,142.70</td>
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<td>544.70</td>
<td>516.40</td>
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### University Tax Base in RCM Model fy20_rcm_model_final_0

<table>
<thead>
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<th>Note - Subject to change</th>
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<tr>
<td>12.60%</td>
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<td>31.50%</td>
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### Student Credit Hours Revenue

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<tr>
<td>Majors</td>
<td>67.90</td>
<td>67.90</td>
<td>135.80</td>
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### Majors Revenue

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Less UA Support Units & Institutional Costs

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<th>Weighted</th>
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<tbody>
<tr>
<td>Majors</td>
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Less UA Strategic Investment Fund

<table>
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<th>Weighted</th>
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</tr>
</thead>
<tbody>
<tr>
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### NET SCH Revenue AFTER UA TAX

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<tbody>
<tr>
<td>Majors</td>
<td>222,151</td>
<td>242,928</td>
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### TOTAL CAPLA REVENUE

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<th>Weighted</th>
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<tbody>
<tr>
<td>Majors</td>
<td>344,547</td>
<td>365,324</td>
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Bachelor of Landscape Architecture
Income and Expense Statement
Fiscal Year 2024 Values from fy20_rcm_model_final_0

<table>
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<tbody>
<tr>
<td></td>
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<tr>
<td>CAPLA Admin</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Drachman Institute</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SaFA</td>
<td>-</td>
<td>4,758</td>
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<td>Planning</td>
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<td>893.57</td>
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<tr>
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<td>544.70</td>
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<tr>
<td>Total Student Credit Hours Revenue</td>
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<table>
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<tbody>
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<td>523,168</td>
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<td>NET SCH REVENUE AFTER UA TAX</td>
<td>$</td>
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<tr>
<td></td>
<td>310,217</td>
<td>339,222</td>
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<table>
<thead>
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</thead>
<tbody>
<tr>
<td></td>
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<td>(8,884)</td>
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<tr>
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<td>157,386</td>
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TOTAL CAPLA REVENUE $467,603 $496,609

Note - subject to change
### SCH Analysis - LAR

<table>
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<tr>
<th>Majors</th>
<th>Yr 1</th>
<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
<th>Yr 6</th>
<th>Yr 7</th>
<th>Yr 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Junior</td>
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<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
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</tr>
<tr>
<td>Senior</td>
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<table>
<thead>
<tr>
<th>Majors</th>
<th>Yr 1</th>
<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
<th>Yr 6</th>
<th>Yr 7</th>
<th>Yr 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
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<td>3</td>
<td>5</td>
<td>3</td>
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<td>8</td>
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</tr>
<tr>
<td>Sophomore</td>
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<td>12</td>
<td>9</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>9</td>
<td>12</td>
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<tr>
<td>Junior</td>
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<td>9</td>
<td>14</td>
<td>9</td>
<td>23</td>
<td>14</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Senior</td>
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<td>9</td>
<td>23</td>
<td></td>
<td></td>
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<tr>
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### SCH Analysis - Planning

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<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
<th>Yr 6</th>
<th>Yr 7</th>
<th>Yr 8</th>
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<tbody>
<tr>
<td>Sophomore</td>
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<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
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<td>22</td>
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</tr>
<tr>
<td>Junior</td>
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<td>21</td>
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<td>21</td>
<td>21</td>
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<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Senior</td>
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<td><strong>TOTAL</strong></td>
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<td>47</td>
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### SCH Analysis - outside of CAPLA

<table>
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<tr>
<th>Majors</th>
<th>Yr 1</th>
<th>Yr 2</th>
<th>Yr 3</th>
<th>Yr 4</th>
<th>Yr 5</th>
<th>Yr 6</th>
<th>Yr 7</th>
<th>Yr 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
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<tr>
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<tr>
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<td>20</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>25</td>
<td>25</td>
<td>47</td>
<td>47</td>
<td>68</td>
<td>68</td>
<td>88</td>
<td>88</td>
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</table>

### Retention

- Freshman to Sophomore: 88%
- Sophomore to Junior: 95%
- Junior to Senior: 95%
The focus of this studio Values and Resilience is the lens through which we explore challenges to sustainability, equity and well-being. This studio is unique in that it is both an academic course and an outreach program, where students work in teams with their community partners to address real-world problems. Through this process, students develop critical skills in design, analysis, and communication, while also gaining valuable experience in professional practice. This course is designed to challenge students to think creatively and collaboratively, while also preparing them for success in the field of landscape architecture.

Key Learning Outcomes:
1. Understand the principles of sustainable design and resilient planning.
2. Collaborate effectively with community partners to address complex issues.
3. Develop a range of skills in design, analysis, and communication.
4. Apply critical thinking and problem-solving to real-world scenarios.
5. Demonstrate proficiency in professional practice and communication.

Course Format:
This course is designed as a seminar-style course with hands-on projects and case studies. Students work in teams with their community partners to identify and address real-world challenges. The course includes lectures, workshops, and field trips to gain a deeper understanding of the issues at hand. Students will also engage in regular discussions and critiques with their peers and instructors.

Assessment:
Assessment in this course will be based on a combination of individual and team projects, presentations, and participation. Projects will include design proposals, analysis frameworks, and case studies. Students will also complete a final presentation to showcase their work.

Prerequisites:
Enrollment in this course requires permission from the instructor. Students should have a foundational understanding of landscape architecture and a desire to engage with real-world issues. This course is open to students from across the CAPLA College of Architecture, Planning, and Landscape Architecture at the University of Arizona.

Contact Information:
For more information about this course, please contact the instructor via email at [instructor@email.arizona.edu].
### CAPLA

**Bachelor of Landscape Architecture**

**Expense Allocation Modeling Workbook**

<table>
<thead>
<tr>
<th>Course Build/Refresh</th>
<th>2019-2020</th>
<th>2020-2021</th>
<th>2021-2022</th>
<th>2022-2023</th>
<th>2023-2024</th>
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<td>Course Refresh</td>
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**Total Cost**

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<td>$ -</td>
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<table>
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<th>Course/Section Load</th>
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<th>2020-2021</th>
<th>2021-2022</th>
<th>2022-2023</th>
<th>2023-2024</th>
<th>5-Year Total</th>
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<td>1</td>
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<td>Total Sections Offered</td>
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### Instructional Staffing

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<th>2020-2021</th>
<th>2021-2022</th>
<th>2022-2023</th>
<th>2023-2024</th>
<th>5-Year Total</th>
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<tbody>
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<td>Pop/Lecturer-led Sections</td>
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<td>20</td>
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<td>Adjunct-led Sections</td>
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**Total Sections Covered**

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<tbody>
<tr>
<td>-</td>
<td>$ 39,400</td>
<td>$ 94,600</td>
<td>$ 152,700</td>
<td>$ 206,300</td>
<td>$ 491,000</td>
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### Program Instruction Costs

| T/TE Faculty | $ -       | $ -       | $ -       | $ -       | $ -       | $ -         |
| Pop/Lecturer | $ -       | $ 39,400  | $ 94,600  | $ 126,100 | $ 157,700 | $ 417,800   |
| Adjunct      | $ -       | $ -       | $ -       | $ -       | $ -       | $ -         |
| Graduate Assistant | $ -   | $ -       | $ -       | $ 26,600  | $ 46,600  | $ 73,200    |

**Total Costs**

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<tr>
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### Facilitation

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<tbody>
<tr>
<td>Sections Required - Student</td>
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**Total Sections Required**

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**Total Facilitation Cost**

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### Grading

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**Total Sections Required**

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**Total Facilitation Cost**

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### Program Management

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</thead>
<tbody>
<tr>
<td>Coordination FTE Required</td>
<td>-</td>
<td>0.10</td>
<td>0.20</td>
<td>0.30</td>
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<tr>
<td>Business Support FTE Required</td>
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<td>0.25</td>
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<tr>
<td>IT Support FTE Required</td>
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**Advising Cost**

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**Coordination Cost**

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**Business Support Cost**

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<td>$ -</td>
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**IT Support Cost**

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**Total Program Mgmt Costs**

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<td>$ 51,900</td>
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### Total Expenses

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<tr>
<td>$ 73,700</td>
<td>$ 138,400</td>
<td>$ 206,600</td>
<td>$ 264,800</td>
<td>$ 683,500</td>
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<tr>
<td>Program name, sub-plan name (if applicable), degree, and institution</td>
<td>Proposed UA Program: Bachelor of Landscape Architecture</td>
<td>Peer 1: Bachelor of Landscape Architecture: University of Illinois – Urbana Champaign (4-year)</td>
<td>Peer 2: Bachelor of Landscape Architecture: Texas A&amp;M University (4-year)</td>
<td>Peer 3: Bachelor of Landscape Architecture: Penn State University (4.5-year)</td>
<td>Peer 4: Bachelor of Science in Landscape Architecture Arizona State University (4 year)</td>
</tr>
<tr>
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</tr>
<tr>
<td>Major Description - provide a description for the proposed program. Include the purpose, nature, and program highlights.</td>
<td>The Bachelor of Landscape Architecture (BLA) program prepares students for professional licensure in landscape architecture through a robust, responsive, and professionally-rooted curriculum. Classwork and design studios instill a comprehensive understanding of landscape architectural practice, creative problem-solving, and the knowledge, skills, and values necessary to become sustainability-driven professionals. The four-year program in Landscape Architecture requires 124 semester hours. The majority of these credit hours are in required landscape architecture courses, consisting of design studio, construction, plant materials and design, history, design communication, and professional internship. General education courses are also required, as well as courses in Landscape architecture is the profession providing landscape planning, design, and management services to enhance and protect natural and built environments. Landscape architects plan and design places for the health, safety, and welfare of citizens through systematic decision-making that integrates science, art, and technology. Landscape architectural project types include Penn State's professionally accredited Bachelor of Landscape Architecture (B.L.A.) program is one of the nation's first, founded in 1907. Historically our undergraduate program has been respected by professionals for the solid skills of our graduates; more recently, we have gained further respect for our educational innovations and excellence. The BSLA program offers students the opportunity to engage with the community in applied projects that focus on designing sustainable outdoor environments and improving the ecological and social health of the urban environment. Undergraduate landscape architecture projects can range from large-scale work encompassing urban design,</td>
<td></td>
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</table>
The Bachelor of Landscape Architecture (BLA) program at Texas A&M University is the oldest in the state and one of the oldest in the Southwest. It is four-year accredited by the Council of Landscape Architecture Registration Boards under the auspices of the American Society of Landscape Architects. Provisional accreditation was first granted for the BSLA program in 1971 and has maintained accredited status continuously since that time.

In the first year, students acquire basic knowledge about landscape architecture, natural sciences, social sciences, humanities, and mathematics. This first year is general and flexible to allow students from other colleges and universities to acquire this basic knowledge and transfer into the second year of the curriculum.

In the second year, students become deeply involved in studio experience and site engineering. Students learn a systematic approach to solve landscape architectural problems, emphasizing the basic principles of design, design process, and site planning skills. Methods of landscape survey and analysis further supply the student with a logical basis for making design decisions. The use of computers in the design process is introduced in this year as well.

The goal of the Penn State B.L.A. is to educate future leaders in the profession and/or the discipline of landscape architecture. The program provides students an education in the creativity, technical skills, and ethical considerations necessary for practice. One particular requirement of the program, intended to enhance students' breadth and perspective, is a semester of study abroad. The program also provides opportunities to pursue interests in a range of areas.

We recently refined our B.L.A., using the mantra “flexibility, opportunity, affordability.” The result is a 139-credit curriculum that easily can be completed in four and one-half years. Time to degree can be shortened to four years through participation in one of our optional summer abroad programs. Students alternatively may extend their time-to-degree to take advantage of opportunities such as our Sustainability Leadership minor in Pittsburgh, PA, landscape reclamation, open space preservation planning and landscape ecological design to projects at the more intimate scale of a neighborhood park or residential back yard. Emerging areas of focus include biotechnical design; urban agriculture; greenways, green roofs and living walls; and healing environments. Students complement their design learning with electives from a broad range of approved courses.

All students must pass a degree milestone at the end of the first year to continue in the major. For more information, students should visit https://design.asu.edu/resources/students/milestones.

This is an 8-semester program requiring sequential completion of studio coursework (or approved equivalent).

https://herbergerinstitute.asu.edu/node/40548
project types and scales including community and campus master plans; urban park systems, plazas and green streets; industrial restoration; habitat creation; neighborhood design; and more.

The program has a strong, committed, and energetic faculty who seamlessly integrate teaching, research, and outreach. Studio courses, classroom instruction, and real-world community outreach projects create a diverse learning environment that maximizes professional skill building. Faculty members prepare students for professional practice and interdisciplinary collaboration through design projects that address site and landscape planning issues and explore the ways in which designed landscapes can educate and inspire communities toward environmental health and cultural identity.

In the third and fourth years, we increase the complexity and scale of our students’ design opportunities. We connect them with real places and people and allow them to work collaboratively to create interesting, complex design solutions. Our students travel to places like Chicago, New York and Los Angeles and work on design solutions specific to these sites.

From:
https://landarch.illinois.edu/bachelor-program/

Target careers

Students graduate fully prepared for professional practice, finding internships and employment with governmental agencies, nonprofit organizations, and private Target careers not mentioned in online materials.

Graduates from the BLA program are prepared for employment with private practice firms in landscape architecture, engineering, architecture, or planning; and with Penn State Landscape Architecture graduates are well-prepared to join our distinguished professional alumni network with a clear path to licensure and making an immediate The bachelor’s degree program is designed to prepare students for landscape architecture professional practice and advanced study at the graduate level, and graduates have
sector firms locally, nationally, and internationally. Others continue on to pursue doctoral degrees.

federal, state, or local government agencies. Upon graduation and with additional two-year practical experience students are qualified to pursue licensure in the profession or post graduate education in landscape architecture or a related field. (https://catalog.tamu.edu/undergraduate/architecture/landscape-architecture-urban-planning/bla/)

impact on the world. The Bachelor of Landscape Architecture (B.L.A.) program is designed to prepare graduates for either advanced study or professional careers. A B.L.A. degree provides students with a background in creativity, technical skills, and ethical considerations necessary for professional practice. Careers or graduate study can lead to a diverse array of focus areas, including sustainability, urban planning, research, social or environmental justice, design, ecology, social health and well-being, technology, construction, or community outreach.

Careers
The world is constantly changing, and landscape architects are skilled designers poised to shape, drive, and responsibly steward these changes. Penn State landscape architects are artists, ecologists, engineers, scientists, sociologists, conservationists, and often, leaders. The profession enables you to connect with your passion. Engage with art, nature, and design. Build spaces, places, and experiences. Collaborate. Solve

found employment in nationally recognized firms working with notable landscape architects in large multinational firms or in public agencies. Graduates have also gone on to pursue graduate study at universities with distinguished graduate programs in landscape architecture and allied design fields.

The U.S. Bureau of Labor Statistics projects employment for landscape architects will grow 16 percent from 2010 to 2020, about as fast as the average for all occupations. The bureau also notes employers prefer hiring entry-level landscape architects with internship experience, to significantly reduce the amount of on-the-job training. The bachelor’s degree program has an internship requirement meant to address this preference and better prepare graduates for employment.

Students who complete this degree program may be prepared for the following careers. Advanced degrees or certifications may be required for academic or clinical positions.
problems. Design a better future. A B.L.A. will prepare you with leading-edge technical design principles and a deep foundation in technologies and design-thinking methods so that you can immediately enter professional practice with a wide range of opportunities.

MORE INFORMATION (https://stuckeman.psu.edu/jobs)

Career examples include but are not limited to: Architects, Except Landscape and Naval; Architectural Drafters; Architecture Teachers, Postsecondary; Electrical Drafters; Civil Drafters; Drafters, All Other; Architectural and Engineering Managers; Landscape Architects; Mechanical Drafters; Electronic Drafters

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<th>Total units required to complete degree</th>
<th>122</th>
<th>124</th>
<th>128</th>
<th>139</th>
<th>120</th>
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<tbody>
<tr>
<td>Upper-division units required to complete degree</td>
<td>46</td>
<td>37</td>
<td>43</td>
<td>36</td>
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<tr>
<td>Foundation courses</td>
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<tr>
<td>Second language</td>
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<tr>
<td>Second semester proficiency</td>
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<tr>
<td>Foreign Language (HS 3 years OR 3 semesters) (foreign language requirement is satisfied by completion of three years of the same foreign language in high school or a third semester college language course.)</td>
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<tr>
<td>A minimum of one year of foreign language is required for all baccalaureate degree programs at Texas A&amp;M. For many programs, this degree requirement can be satisfied by the satisfactory completion of two units of the same foreign language at</td>
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<tr>
<td>One 3 CU foreign language course recommended.</td>
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<tr>
<td>Not required.</td>
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<tr>
<td>Math</td>
<td>Moderate Math Strand:</td>
<td>- Mathematics (depending on placement) - 0 to 5 hours</td>
<td>- MATH 141 Finite Mathematics (3)</td>
<td>- Not required</td>
<td>- MAT 170: Precalculus (3)</td>
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<td>BLA foundation math: MATH 108 (4) Modeling with Algebraic and Trigonometric Functions or higher depending on placement:</td>
<td>- MATH 120R (4) Calculus Preparation or</td>
<td>- MATH 142 Business Calculus (3)</td>
<td></td>
<td>- Mathematics Placement Assessment score determines placement in mathematics course</td>
</tr>
<tr>
<td>Pre-major? (Yes/No. If yes, provide requirements.) Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>List any special requirements to declare or gain admission</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
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</table>
to this major (completion of specific coursework, minimum GPA, interview, application, etc.)

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<tr>
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<tr>
<td>Minimum # of units required in major (units counting towards major units and major GPA)</td>
<td>77</td>
<td>61</td>
<td>80</td>
<td>109</td>
<td>64</td>
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<tr>
<td>Minimum # of upper-division units required in the major (upper division units counting towards major GPA)</td>
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<td>38</td>
<td>43</td>
<td>41</td>
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<td>Minimum # of residency units</td>
<td>Students transferring from another accredited BLA program are required to</td>
<td>Unknown</td>
<td>A minimum of 36 semester hours of 300- and/or 400-level</td>
<td>24</td>
<td>Total hrs at ASU: 30 minimum</td>
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to be completed in the major

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<th>Hrs</th>
<th>Credit for Academic Recognition:</th>
<th>Total Community College Hrs:</th>
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<tbody>
<tr>
<td>All other transfer students are required to complete all 77 units of</td>
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<tr>
<td>the BLA core in addition to university requirements.</td>
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</table>

Required supporting coursework (courses that do not count towards major units and major GPA, but are required for the major). Courses listed must include None.

- UP 101 Introduction to City Planning (3)

Supporting Electives - 12 hours

- Communication (3)
- History (3)
- Technical (3)
- Environment (3)

- POLS 206 (3) American National Government
- POLS 207 (3) State and Local Government
- ENGL 104 Composition and Rhetoric (3)
- ENGL 210 Technical and Business Writing (3)
- MATH 141 Finite Mathematics (3)
- MATH 142 Business Calculus (3)
- RENR 205 (3) Fundamentals of Ecology

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Complete 2 courses: Elective (7)
- MAT 170 (3)
- GPH 111+112 (4)
subject code, units, and title. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department.

| Major requirements (list all required major coursework including major core, major) | - RENR 215 (1) Fundamentals of Ecology—Laboratory  
- Other (5)  
Select one of the following  
- URPN 201 The Evolving City (3)  
- URPN 330 Land Development I (3)  
URPN 370 Health Systems Planning (3)  
Electives (12)  
- General elective (9)  
- Computer elective (3)  
  URPN 320 or URPN 325 or approval of BLA Program Coordinator  
First-Year Seminar provide students with a first-year engagement experience.  
First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.  
Cultures Requirement  
6 credits are required and may satisfy other requirements  
- United States Cultures: 3 credits  
- International Cultures: 3 credits  
Writing Across the Curriculum  
- 3 credits required from the college of graduation and likely prescribed as part of major requirements.  
| BLA Core (77)  
ARC/LAR 101A/B (2/2) Built Environment Foundation Studio  
ARC/LAR 131 A/B (1/1) Thinking About Architecture  
(New) LAR 2** (4) Landscape Architecture Intro Studio  
LA 233 Foundation Design Studio (5)  
LA 250 Environmental Site Analysis (3)  
LA 280 Design Communications I (3)  
LAND 101 (1) Introduction to Landscape Architectural Practice  
LAND 111 (3) Landscape Architecture Communications I  
URPN 220 (3) Digital Communication I  
SOILS 101 Introductory Soil Science (3)  
Prescribed Courses: Require a grade of C or better  
LARCH 60 Cultural History of Designed Places (3)  
ALA 100: Introduction to Environmental Design (3) or ALA 102: Landscapes and Sustainability (3)  
ALA 121: Design Fundamentals I (3)  
DSC 100: ASU Design Experience (1)  
ALA 122: Design Fundamentals II (3) |
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<td>LAR 2**</td>
<td>Design Studio II</td>
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<td>LAR 3**</td>
<td>Design Studio III</td>
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<td>LAR 3**</td>
<td>Design Studio IV</td>
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<td>LAR 4**</td>
<td>Design Studio V</td>
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<tr>
<td>LAR 2**</td>
<td>Site Engineering</td>
<td>(3)</td>
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<td>LAR 2**</td>
<td>Landscape Construction</td>
<td>(3)</td>
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<tr>
<td>LAR 2**</td>
<td>History and Theory of Landscape Architecture</td>
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<td>LA 101</td>
<td>Introduction to Landscape Arch</td>
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<td>LA 234</td>
<td>Site Design Studio 5</td>
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<tr>
<td>LA 241</td>
<td>Landform Design &amp; Construction</td>
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<td>LA 281</td>
<td>Design Communications II</td>
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<td>LA 314</td>
<td>History of World Landscapes</td>
<td>(4)</td>
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<td>LA 335</td>
<td>Community &amp; Open Space Studio</td>
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<td>LA 342</td>
<td>Site Engineering</td>
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<td>LA 346</td>
<td>Professional Practice</td>
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<td>LA 336</td>
<td>Design Workshop Studio I</td>
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<td>LA 343</td>
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<td>LA 345</td>
<td>Professional Internship</td>
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<td>LA 437</td>
<td>Regional Design Studio</td>
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<tr>
<td>LA 452</td>
<td>Natural Precedent in Planting</td>
<td>(3)</td>
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<tr>
<td>LA 438</td>
<td>Design Workshop Studio II</td>
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<tr>
<td>ARCH 250</td>
<td>Survey of World Architecture History II</td>
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<td>LAND 112</td>
<td>Landscape Architectural Communications</td>
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<td>LAND 240</td>
<td>History of Landscape Architecture</td>
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<tr>
<td>LAND 211</td>
<td>Landscape Design I</td>
<td>(4)</td>
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<tr>
<td>LAND 231</td>
<td>Landscape Construction I</td>
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<tr>
<td>LAND 212</td>
<td>Landscape Design II</td>
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<td>LAND 232</td>
<td>Landscape Construction II</td>
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<td>HORT 306</td>
<td>Trees and Shrubs for Sustainable Built Environments</td>
<td>(3)</td>
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<tr>
<td>LAND 241</td>
<td>History and Development of Landscape Architecture in North America</td>
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<td>LAND 311</td>
<td>Landscape Design III</td>
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<td>HORT 308</td>
<td>Plants for Sustainable Landscapes</td>
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<td>LAND 301</td>
<td>Landscape Architecture Theory</td>
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<td>LAND 312</td>
<td>Landscape Design IV</td>
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<td>Landscape Construction III</td>
<td>(4)</td>
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<tr>
<td>URPN 202</td>
<td>Building Better Cities</td>
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<td>LARCH 115</td>
<td>Intro Spatial Composition</td>
<td>(3)</td>
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<td>LARCH 116</td>
<td>Spatial Design I</td>
<td>(3)</td>
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<tr>
<td>LARCH 125</td>
<td>Landscape Architecture Orientation Seminar</td>
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<td>LARCH 145</td>
<td>Ecology and Plants I</td>
<td>(3)</td>
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<tr>
<td>LARCH 155</td>
<td>Skills Lab I: Hand &amp; Digital Graphics</td>
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<tr>
<td>LARCH 156</td>
<td>Skills Lab II: Hand &amp; Digital Graphics</td>
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<td>LARCH 215</td>
<td>Design III: Site Design</td>
<td>(4)</td>
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<tr>
<td>LARCH 216</td>
<td>Design IV: Expanded Use, Scale, and Context</td>
<td>(4)</td>
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<td>LARCH 235</td>
<td>Design Implementation I: Grading</td>
<td>(3)</td>
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<td>LARCH 236</td>
<td>Design Implementation II: Materials</td>
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<td>LARCH 245</td>
<td>Ecology &amp; Plants II</td>
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<td>LARCH 246</td>
<td>Ridge &amp; Valley in the Field</td>
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<td>LARCH 255</td>
<td>Skills Lab III: Digital Graphics</td>
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<tr>
<td>LARCH 256</td>
<td>Skills Lab IV: GIS</td>
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<td>ALA 124</td>
<td>Design Fundamentals II Lecture</td>
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<td>LDE 261</td>
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<td>LAP 254</td>
<td>Plant Materials</td>
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<td>LDE 262</td>
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<td>LPH 310</td>
<td>History of Landscape Architecture</td>
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<td>LPH 311</td>
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<td>LDE 361</td>
<td>Landscape Architecture I</td>
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<td>LDE 363</td>
<td>Landscape Planting Design</td>
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<td>LTC 343</td>
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<td>LAP 352</td>
<td>Ecosystems and Sustainable Design</td>
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<td>LAA 345</td>
<td>Professional Practice Seminar</td>
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<td>LDE 362</td>
<td>Landscape Architecture II</td>
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<td>LTC 344</td>
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<td>(3)</td>
</tr>
<tr>
<td>LAP 332</td>
<td>GIS Applications in Environmental Design</td>
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<td>Course Code</td>
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<td>LAND 412</td>
<td>Landscape Design VI</td>
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<td>LAND 431</td>
<td>Professional Practice</td>
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<td>PHIL 314</td>
<td>Environmental Ethics</td>
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<tr>
<td>URPN 361</td>
<td>Urban Issues or Sustainable Communities</td>
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<tr>
<td>Semester away (6) - Select one of the following:</td>
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<tr>
<td>CARC 301</td>
<td>Field Studies in Design Innovation (study abroad)</td>
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<tr>
<td>LAND 494</td>
<td>Internship</td>
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- **LARCH 276 Human Dimensions of Design II: History & Theory (3)**
- **LARCH 315 Design V: Expanded Use, Scale, and Context (4)**
- **LARCH 335 Design Implementation III: Planting Methods (3)**
- **LARCH 336 Design Implementation IV: Stormwater (3)**
- **LARCH 365 Contemporary Trends in Landscape Architecture (3)**
- **LARCH 375 Human Dimensions of Design - Applied (3)**
- **LARCH 386 Professional Practice (3)**
- **LARCH 414 Design and Theory V: Advanced Landscape Architectural Design (5 per semester, maximum of 15) (5-15)**
- **LARCH 424 Design Theory Seminar (3)**
- **LARCH 499A Design Theory Seminar 1()**
- **LARCH 499B Design and Theory VI: Contemporary/International Landscape Architectural Design Issues (5)**
- **LARCH 499D Contemporary/International Special Topics (3)**
- **LAP 484: Internship OR LAP 485: International Field Studies 2**
- **LDE 461: Landscape Architecture III (5)**
- **LPH 411: Landscape Architecture Theory and Criticism (L) (3)**
- **LDE 462: Landscape Architecture IV (5)**
- **LTC 446: Landscape Construction III (3)**
- **Two Upper Division Design Professional Electives (6)**
| Internship, practicum, applied course requirements (Yes/No. If yes, provide description) | No. | Yes. LA 345 Professional Internship (5) Professionally supervised field experience in private firms and public agencies designed to introduce students to professional practice. Students work in a department-approved firm or agency of their choice either during a regular or summer session. May be repeated to a maximum of 24 hours. Prerequisite: Junior standing and consent of instructor. | Yes. LAND 484 Summer Internship (0). Practical experience in an office of design allied professionals; 10-week internship with a minimum of 400 hours; continuous employment; departmental pre-approval through the department internship coordinator required. Must be taken on a satisfactory/unsatisfactory basis. Prerequisites: Upper level classification and approval of internship coordinator; LAND 321 And In fulfillment of the Semester Away requirement, select one of the following: LAND 494 Fall Internship (6) An internship (15 week, 600 hours) with a landscape architecture or landscape architecture-related company that exposes the student to landscape architectural professional practice; monthly reports, final internship portfolio and internship supervisor assessment letter required; distance education course with non-resident status. | Yes. LAP 484: Internship (2) Structured practical experience following a contract or plan, supervised by faculty and practitioners. |
| **Senior thesis or senior project required** (Yes/No. If yes, provide description) | **Yes. Yes, completed as part of coursework in LAR 4** Design Studio VI. Students are expected to undertake an independent in-depth, site-specific, and self-directed landscape architecture research and design project that draws on skills, knowledge, and values acquired in the program. | **No.** | **Yes. Within LDE 462 Landscape Architecture IV, Students work under the instruction/direction of an instructor to develop individual or group projects in which the student(s) have responsibility in identifying a specific problem or issue. Some students may choose to pursue a senior thesis/creative project with 1:1 instruction. This option is typically reserved for honors students.** | **No.** | **No.** | **Yes.** |
| Additional requirements (provide description) | None. | - BLA students are expected to maintain a minimum 2.0 GPA (on a 4.0 scale). | - A grade of C or better is required in College of Architecture courses (CARC, COSC, ENDS, ARCH, URPN, LAND, VIST, ARTS) to satisfy Landscape Architecture degree requirements. | - In order to graduate, a student in the major must earn at least a C grade in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44). | - 3.00 GPA required in major |
| Minor (specify if optional or required) | Optional. | Optional. | Optional. | Optional. | Optional |

*Note: comparison of additional relevant programs may be requested.*
Dear Director and Professor Lauri Macmillan Johnson,

As Director of The Design School, I am pleased to lend my support on behalf of The Design School and our Landscape Architecture Program at Arizona State University (ASU) for your proposal to establish a Bachelors of Landscape Architecture (BLA) at the University of Arizona (U of A).

The Design School at the Herberger Institute for Design and the Arts supports more than 1700 students across Programs in Architecture, Industrial Design, Interior Design, Landscape Architecture and Visual Communication Design. The Design School’s Landscape Architecture Program currently offers a Bachelor of Science in Landscape Architecture (BSLA) and a Masters of Landscape Architecture (MLA). Both the ASU MLA and the U of A’s MLA have both supported the state and nation in preparing their graduates to enter the licensed profession of landscape architecture. A national need exists for academic institutions to increase the number of Landscape Architecture graduates produced each year. This fact indicates to me that more professionally accredited programs will support both the needs of the State of Arizona and the nation. Our experience at ASU has demonstrated a bachelor’s degree provides an important point of access to the professional opportunities that an accredited degree in landscape architecture can provide.

The ASU Landscape Architecture Program has a long-standing focus urban ecological design and planning and is aligned to the Arizona State University focus on sustainability. In conversation with Landscape Architecture Professor Kenneth Brooks and Landscape Architecture Associate Professor and Program Head Joseph Ewan, we all believe the ASU BSLA and the proposed U of A BLA can complement the diverse and growing needs of the nation and planet for more professional landscape architects prepared to analyze, plan, design, manage, and nurture the built and natural environment.

Sincerely,

Jason Schupbach
Director
The Design School
Herberger Institute for Design and the Arts
to
Arizona Board of Regents

re
support for proposed Bachelor of Landscape Architecture (BLA) degree

Dear Regents:
I write in full support of the proposed BLA degree from the UA College of Architecture, Planning, and Landscape Architecture. This degree would not only advance our College’s strategic plan, which emphasizes interdisciplinarity and collaboration, but would also advance the University’s Pillars Two (2.2A, 2.2D2) and Three (by driving cultural and economic impact through its graduates, who will be workforce-ready upon graduation). As the proposal envisions students engaged in community service who will thereby build partnerships with local industry and professionals, it is designed to have tangible community impact.

The reputation of its existing degree forecasts success. The School of Landscape Architecture and Planning (SoLA+P) has developed an outstanding reputation with the Landscape Architecture Accreditation Board (LAAB) through its long-standing Master of Landscape Architecture. There is every reason to expect similar exceptional level of quality in the proposed BLA, whose students will, with one additional year, be able to earn the Master’s.

Duplication should not be a concern. Although Arizona State University has a Bachelor of Science in Landscape Architecture (BSLA), it is different in nature and credential from this proposal. Our degree will have greater emphasis on language, writing, and design that is focused on arid climate and sustainable design, so any duplication would be superficial.

Most importantly for my School, the BLA will allow a cross-disciplinary and collaborative learning environment for our Bachelor of Architecture (B.Arch) degree. Working with Director Lauri Macmillan Johnson, we have identified several studios that would be co-convened to help prepare students for a workforce where cross-disciplinary cooperation is standard. We envision a co-taught first semester as well as advanced studios in which B.Arch and BLA students will learn about each other’s professions and develop collaborative projects based in the community or on applied research.

I heartily support the creation of the BLA degree as it will enhance our students’ scholarly experience, create opportunities for interdisciplinarity and collaboration, and strengthen our College, the University, and the community.

sincerely:

Robert Miller, AIA
Professor; Director of the School of Architecture
HeadsUP Executive Director
2019 AIA Arizona Past-President
millerR@u.arizona.edu
MEMORANDUM

Date: November 8, 2019
To: Review Committee
From: Matthew A. Jenks, Director, School of Plant Sciences

Subject: Support Letter for Bachelor of Landscape Architecture degree

This letter is in support of the School of Landscape Architecture and Planning’s proposal for a Bachelor of Landscape Architecture (BLA) degree. The proposed program is associated with a Master of Landscape Architecture degree, with courses that have been included in a recent proposal put forward by our School of Plant Sciences for a new Urban Horticulture sub-plan in our Bachelor of Science degree in Sustainable Plant Systems (SPS).

A new BLA degree will offer additional opportunities that will specifically benefit undergraduate students in our SPS degree to take advantage of lower division courses offered by the School of Landscape Architecture and Planning, including design studios. This option will appeal to students who seek a design background to complement their studies. Students in SPS may even seek the minor in Landscape Architectural Studies.

Creating opportunities for students from the SPS and BLA programs to interact with one another through shared coursework will foster increased understanding between these closely related disciplines, which will ready students for careers in a multidisciplinary workforce. SPS students in the Urban Horticulture sub-plan or minor in Landscape Architectural Studies would prepare themselves for collaboration with allied disciplines in both horticulture and design of the built environment.
November 29, 2019

New Academic Program
Landscape Architectural Accreditation Board (LAAB)
Review Committee
The University of Arizona, Tucson, AZ 85721

RE: New Academic Program: Bachelor of Landscape Architecture (BLA),
Undergraduate Major at University of Arizona within College of
Architecture, Planning & Landscape Architecture (CAPLA)

To the Program Review Committee,

As the Urban Landscape Manager in the Public Information and Conservation Office within City of Tucson’s public water utility, I have been able to apply the lessons learned from my undergraduate BLA from the University of Arizona, College of Agriculture. At the time, UArizona was one of two Landscape Architecture programs not in a design college, but due to its connection with the School of Renewable Natural Resources, was ahead of its time in emphasizing applications of community sustainability issues to landscape theory and design. This strength continues in the current Masters in Landscape Architecture program (MLA) within CAPLA. UArizona continues to be a leader in community and ecological sciences, both physical and social; these will be resources available to the BLA student.

It was a great loss to the profession and to this community when the undergraduate program was eliminated. The undergraduate program can offer that first exposure to landscape architecture, a professional program much needed in today’s world of ever changing climate, urban and ecological systems. Undergraduate Landscape Architects are the future leaders of tomorrow and today, understanding the unique connections between man and the surrounding environment, both local and global.

I support the re-institution and accreditation of an undergraduate BLA program in UArizona, CAPLA.

Sincerely,

Irene Ogata, Urban Landscape Manager, PLA, CPM, ASLA
Public Information & Conservation Office
November 11, 2019

Lauri Johnson  
Director of the School of Landscape Architecture and Planning  
University of Arizona  
ljohnson@email.arizona.edu

Dear Lauri,

I am excited to learn that CAPLA is proposing to offer a BLA program. As the Southern Section Chair (2018-2019) of the Arizona Chapter of the American Society of Landscape Architects, as well as a registered landscape architect and Principal of Wilder Landscape Architects, I applaud this step and feel that it fills a need in the profession.

Since the University of Arizona discontinued its bachelor’s program there have been limited options for undergraduate students in the southwest. Having this degree program in Tucson would provide an alternative to ASU. The ability to earn an MLA degree in one more year or pursue a masters in a related field (architecture, urban planning, or real estate development) at the same university adds to the appeal.

Providing more options for education in the field, community involvement of students, and opportunities for local practitioners to share their knowledge are all great outcomes of the proposed program, and this initiative has our support.

Best regards,

Jennifer Patton, RLA  
Principal, Wilder Landscape Architects  
Southern Section Chair (2018-2019) AZASLA
November 25, 2019

Lauri Johnson, Director
School of Planning and Landscape Architecture
University of Arizona

Re: Bachelor of Landscape Architecture (BLA)

To Whom It May Concern:

The training I received in the U of A’s undergraduate in Landscape Architecture (BLA) prepared me well for both an academic and a professional consulting career. I graduated from the U of A’s BLA program in 1985. For the past 16 years, I have held the Bombardier Chair in Sustainable Transportation at the University of British Columbia and before that I was a planning professor at Georgia Tech. For the past 25 years, I have been President of Urban Design 4 Health, Inc. There is no question that the U of A’s BLA program provided me with the required training to develop the analytical foundation required to advance within and outside of academia – and perhaps an odd ability to do both.

This was the training that led me to the core set of research questions at the nexus of urban design, behavior and activity patterns, and well-being. I had some fantastic professors at the U of A in the BLA program who challenged me and helped me understand the importance of site design, flow of space, and respecting the natural environment. What I did not know at the time was they were teaching me how to think. It was this training that led me later into academia and into the application of evidence to decision making and in the creation of scenario planning “decision support” tools.

Over the years, I have remained in contact with faculty at the U of A and with CAPLA. I was disappointed that the BLA program was shut down. I am excited to see it now under consideration for renewal. I believe that future BLA graduates from the U of A will be ready for the workforce when they graduate. Like myself, I am confident that BLA students will become licensed professionals. I understand that there is a strong market for the BLA program and this is supported with market data. Moreover, there are a lot of inquiries from prospective students. There is also a strong market for landscape architecture graduates entering the workforce. I myself have hired several students to work in my own firm and also recruited students into master’s programs in urban planning who trained as landscape architects at the undergraduate level. A BLA trains students to communicate graphically, verbally, and in written form.

The U of A’s MLA program and 6 FTE’s who oversee it offer considerable support for the relaunching of the BLA program. I see several reasons why CAPLA provides an excellent home for a BLA degree. Candidly, it is oddly missing. BLA students will once again be
able to advance to the MLA or enroll in other related degree programs such as Urban Planning or Real Estate Development. I also understand that the U of A’s BLA will be quite different from what is offered at ASU.

It is my understanding that the BLA program can be relaunched with little to no investment required in building infrastructure. Due in part to the success of the previous BLA program, there are a large number of outstanding local practitioners with unique skills that would enjoy teaching. Finally, the BLA fills a critical gap in CAPLA needed to advance its mission and form a more fully interdisciplinary College.

In closing, it is my hope that the U of A will once again be training landscape architecture at the undergraduate level. Landscape architecture offers a unique training and culture that helps to bridge the social science aspect of urban planning with the physical form and design focused technical training gained in architecture and perhaps in other related disciplines such as civil engineering. A complete vision for CAPLA is quite arguably one with a BLA program.

Sincerely,

Lawrence Frank, PhD, ASLA, AICP
Bombardier Chair Professor
Community and Regional Planning
Population and Public Health
Lauri Macmillan Johnson  
Professor and Director  
School of Landscape Architecture and Planning  
College of Architecture, Planning, and Landscape Architecture  
The University of Arizona  
1040 N. Olive Road, A303A  
Tucson, AZ 85719-0075

Re: Letter of Support for the Bachelor of Landscape Architecture Program at CAPLA

Dear Lauri,

As a University of Arizona Bachelor of Landscape Architecture graduate (Class of 1980), it is my immense pleasure to write a letter of support for the reestablishment of the BLA program. My BLA education at Arizona gave me a strong foundation of landscape architectural and problem solving skills that helped me obtain employment and pursue a professional license.

With serious regional issues of sustainable development, water conservation and climate resiliency, landscape architects are uniquely positioned to help communities in Arizona and the arid southwest address these issues. Continued growth and prosperity in the southwest requires more professionals to help solve our environmental and urban challenges. The profession (ASLA) sees a need for more graduates to supply the workforce for private firms and public agencies.

First professional degree BLA graduates are ready to successfully enter the job market and continue the path towards becoming licensed professionals. The College of Architecture, Planning, and Landscape Architecture (CAPLA) has an excellent Masters of Landscape Architecture program with faculty and resources that can successfully add and develop a BLA program. CAPLA programs provide great service to the community and adding a BLA program will increase the opportunity for service.

I have had the pleasure of working with CAPLA faculty and students on campus related projects and I fully support CAPLA’s effort to reestablish a Bachelors of Landscape Architecture program at Arizona.

Bear Down,

Mark A. Novak, PLA, ASLA  
Landscape Architect  
Planning, Design & Construction  
The University of Arizona  
220 W. Sixth Street, B216  
Tucson, AZ 85721-0300
November 13, 2019

Ms. Lauri Macmillan Johnson  
Director  
CAPLA  
The University of Arizona  
1040 N. Olive Road, A303A  
Tucson, Arizona 85719

RE: BLA Program

Lauri:

I am writing in support of the re-establishment of the Bachelor of Landscape Architecture (BLA) program within CAPLA at the University of Arizona. I am fortunate to be a graduate from The University of Arizona BLA program and have found tremendous advantages over colleagues with BSLA degrees. Some notable differences I have discovered within BLA programs are their emphasis upon writing, design and sustainable practices. This gives a tremendous advantage to students coming out of these programs. As a business owner, I too often see students and new employees with difficulty in writing skills; a solid design foundation; and an understanding of sustainable systems. These are essential skills for our craft, and we are currently in a great shortage of qualified Landscape Architecture graduates.

In my discussion with other practitioners, there is a good list of people, myself included, who would love to help the program further. Including part time teaching, attending studio critiques, or student mentoring. I have always found University of Arizona BLA students to stand out as leaders in our profession and communities. We are the first to step up and lead, mentor and engage. I myself, am the current Arizona ASLA President, former Parks and Recreation Board Chairman and Planning and Zoning Commissioner. Our current national ASLA president is a University of Arizona graduate.

I went to the University of Arizona knowing they were the leaders of design in the arid southwest. Currently, with the direction and strength of the Current MLA program, I see the same in the marketplace. The re-establishment of the BLA program will not only strengthen the school but provide more rounded leaders in the field of Landscape Architecture. Please do not hesitate to reach out to me with any questions about my support for the program.

Sincerely

Brett H. Anderson  
Partner
November 21, 2019

The University of Arizona
College of Architecture, Planning, and Landscape Architecture
School of Landscape Architecture and Planning
1040 N. Olive Road, A303A
Tucson, AZ. 85719-0075

Reference: New Academic Program - Undergraduate Major (BLA)

Attention: Laurie Macmillan Johnson
Professor and Director

Dear Laurie:

It is with excitement that I write this letter of support for the School of Landscape Architecture and Planning’s application for creation of a new Undergraduate Major in Landscape Architecture (BLA). As a graduate of the past BLA program’s last graduating class (’98), I cannot tell you how happy I am to hear that this application has the support of the School, College, and UofA Curricular and Financial Affairs. In all honesty; it’s about time!

Looking back on my time at the UofA, I can confidently say that the experience I gained as part of a dual undergraduate/graduate program in landscape architecture was the most important aspect of my education and entry into the professional workforce. As a licensed practitioner and owner of a growing design firm, I can tell you that entry into the job market of landscape architecture requires the technical knowledge only provided by an undergraduate degree. My experience in a dual program made me even more prepared, because working with the research-oriented perspective of my fellow graduate students helped me develop a respect for research-based design that has informed both my design aesthetic and career path from day one. Without this experience and perspective I doubt I would have had the confidence to start my own practice. Few programs offer a dual program today and I consider myself fortunate to have had this opportunity while at the UofA. As a past Vice President of Membership for ASLA (The American Society of Landscape Architects), I can tell you that the future of our profession relies on the symbiotic relationship of thoughtful problem-solving and research-based design solutions. One without the other leaves tremendous gaps in understanding and ability. Today’s markets and society at large rely on both more heavily than ever.

In addition to running my own practice, I have worked for several years at the University of California at Davis as a part-time lecturer in their undergraduate landscape architecture program. The ability to utilize local practitioners as real world instructors through an undergraduate program would be a huge benefit to both your student body and to local practitioners. The UofA has a rich heritage of providing students with local community service learning projects that help lead to funding sources and local professional and practitioner growth. Bringing this program back would guarantee this history continues. Finally, at my firm we prefer to hire undergraduate students. Their 4 or 5 year educational experience simply makes them more suited to entry level employment and hands on learning in the office environment. This approach varies based on region and practice, but I can confidently tell you the overwhelming majority of my owner-colleagues feel the same.

If there is anything else I can do to support this effort, please let me know.

Sincerely,

Keith P. Wilson, CRLA #4728
Principal, Wilson Design Studio
www.wdsla.com
November 21, 2019

Lauri Macmillan Johnson
Professor and Director
School of Landscape Architecture and Planning
College of Architecture, Planning, and Landscape Architecture
The University of Arizona
1040 N. Olive Road, A303A
Tucson, AZ 85719-0075
capla.arizona.edu
Office: (520) 621-8790
Cell: (520) 250-2500

Dear Director Macmillan Johnson:

It was a pleasure to talk with you at the recent ASLA National Conference in San Diego. As per our discussion, I was very happy to year that The University of Arizona is seriously considering reinstating the undergraduate program in Landscape Architecture. Our firm, as well as most firms on the East Coast, are experiencing great difficulty in finding qualified graduates from accredited programs in Landscape Architecture. Student numbers in East Coast university programs are down and my colleagues and I are concerned about being able to meet a growing demand for our services. The Great Recession of 2008 has created a deficit of qualified professionals. Several years ago, Simone Collins Landscape Architecture was fortunate to employ one of your graduates and her qualifications and skills were exceptional. While I understand that you head the graduate program in Landscape Architecture, not all students can afford the time or cost of pursuing a graduate degree. A student with a Bachelor’s in Landscape Architecture is totally employable and given my read of the market over the next several years, there will continue to be a great demand for quality students from institutions such as yours.

I wish you well in reestablishing the undergraduate program at the University of Arizona. You will be doing a great service to the profession and to all of the many types of clients who employ landscape architects. Given all of the challenges facing the natural and built world, the need has never been greater.
Sincerely,

Simone Collins  
Landscape Architecture

Peter M. Simone, RLA, FASLA  
President
Landscape architecture has a vital role to play in solving the defining issues of our time: climate change, species extinction, rapid urbanization, and inequity. The urgent challenge before us is to redesign our communities in the context of their bioregional landscapes enabling them to adapt to climate change and mitigate its root causes. As designers versed in both environmental and cultural systems, landscape architects are uniquely positioned to bring related professions together into new alliances to address complex social and ecological problems. Landscape architects bring different and often competing interests together to provide artistic physical form and integrated function to the ideals of equity, sustainability, resiliency and democracy.

Landscape Architecture Foundation, Declaration of Concern

To Whom It May Concern,

As a child in the 60’s and 70’s growing up around Tucson, I remember my grandmother renting an apartment behind her house to university students, for several years many of these students were studying landscape architecture. I recall them spending time showing me their work, I would admire how they hand drafted plans onto paper. Later my grandmother would take me to some of these built places and describe to me the nuances of the design. The students would show me books of Sonoran Desert flora and describe to me how adaptive the landscape was to the harsh environment. Years later as an undergraduate landscape architecture student at the University of Arizona, I was able to dive deeper into the importance of the landscape and more importantly our place in it.

After graduating with a Bachelor of Landscape Architecture degree in 1992 I found that I was well prepared for the transition into the “real world”. Coming from an agricultural and science based program allowed me to speak to issues of natural resource management and habitat preservation. Unlike some of my professional peers I believe I understood “why” designs worked taking a systems approach to problem solving. When I entered the workforce in Portland Oregon, I found my education from the University of Arizona offered a diverse understanding of environmental, cultural, and natural resources which was sought after by potential employers. As a partner today in a 21-person, award winning design firm I covet the BLA graduate that utilizes system thinking to problem solve.

With Tucson’s proximity to Mexico and its rich and complicated cultural history, it provides an ideal setting for a BLA program. The continued degradation of the fragile Sonoran eco-system between the US and Mexico will require multi-national solutions. During my time at the U of A I recognized there is a great demand for this program, not only from southern Arizona residents but also those that reside south of the border as we had several in our program. Having just returned from the American Society of Landscape Architecture Annual Meeting in San Diego, it has become abundantly clear that there is a shortage of undergraduate landscape architecture students graduating, specifically those of color or diverse ethnicity.

I would strongly support a BLA program at the University of Arizona, it is the right time and the right place for such a program. The U of A’s history with an BLA program offers a strong alumni base from which to draw support. Most importantly, the demand for students with diverse backgrounds coupled with a comprehensive understanding of climate change and all its implications would make an undergraduate BLA program in Tucson a success.

Sincerely,

Gill Williams, ASLA
Principal, GreenWorks
Ms. Lauri Macmillan Johnson, Professor and Director  
School of Landscape Architecture and Planning  
College of Architecture, Planning, and Landscape Architecture (CAPLA)  
The University of Arizona  
1040 N. Olive Road, A303A  
Tucson, AZ 85719-0075

Dear Lauri,

Thank you for contacting me and providing a draft copy of the Proposal for a Bachelor of Landscape Architecture (BLA) degree within CAPLA. I read the Proposal at length and I am pleased to write in its support.

While I know you are aware of my background, let me summarize: As with many landscape architects, I came to the profession indirectly. My first degree is in Biology (Botany). As I neared graduation, I was introduced to and then read about landscape architecture, and visited the University of Arizona’s program, where I felt that perhaps I’d found my calling. I was accepted into the program, and graduated with a BLA in 1981. Many of my classmates and I found employment immediately. Most of us remain in close contact to this day, and I can report that most continue to practice, principally in the private and public sectors, locally and across the nation, and one in Australia. Personally, I worked for small, Tucson-based firms including joining my wife (also a landscape architect) in a firm she started that remains in business to this day. I also worked for the University of Arizona in the Facilities Design and Construction department as a senior project manager for more than seven years, and taught a range of courses for many years as Adjunct Professor in the University’s BLA and Masters of Landscape Architecture (MLA) programs.

My support for the proposed BLA program begins with the basic premise that landscape architecture is a generalist profession: graduates and registered professionals can be found, for example, in a wide range of single- and multi-discipline design offices; as team members in city, county, regional, state and federal agencies and departments engaged in planning, policy-making, research, and project implementation; and of course in academia.

From my experience, the role of a BLA program in relation to these situations is four-fold: 1) providing a rigorous and demanding core curriculum including design studios, history and theory, research materials and techniques, site analysis and engineering, environmental assessment and impacts, and professional practice, 2) course requirements in areas fundamental to successful practice, including: communication (written, graphic and oral), process (approaches to and methods of problem identification solving), and interdisciplinary interactions (the value and essential nature of allied disciplines, and how and when to engage
them), 3) introduction, training and exposure to typical practice settings and projects, and 4) a selection of both required and strongly-encouraged-but-optional technical coursework such as Computer Assisted Design and Drafting (CADD), Geographic Information Systems (GIS), soil science, plant materials, construction materials and methods, geodesign, natural history, and geography. My education included courses in all these areas, and all proved measurably significant over the years of my professional life. From my review, the curriculum illustrated and described in the Proposal supports these goals well.

In addition to the degree, I believe strongly that professional registration is a fundamental milestone to practice. While registration varies by state, most states require professional experience in various capacities in addition to a BLA or MLA degree, and passing the multi-part LA Registration Exam (LARE) before considering an application for registration. Here, again, those of my BLA classmates who chose to pursue registration were successful. I believe the proposed BLA curriculum will prepare graduates for professional registration as well.

The demands and expectations of the profession, often stated as the Standard of Care, (as well as competition among practitioners for clients and project types) continue to increase, expanding the range of topics and technical challenges faced and pursued by practitioners. To address this and to keep the profession both current and relevant, research such as that required of MLA students is essential. That CAPLA already offers an accredited and highly regarded MLA degree, within a Research 1 University, means that BLA students wishing to—or perhaps encouraged to—explore particular areas in greater depth can do so in a straightforward manner.

Finally, I’m aware of the history of the LA program at the University over the decades, and can appreciate the goals of those who pursued the MLA at the expense of the BLA years ago. That said I believe the degrees can exist and be mutually supportive within CAPLA, and can serve the profession well as a result.

Wishing you success in this endeavor,

Eric Scharf
November 12, 2019

Ms. Lauri Macmillan Johnson, Professor and Director
School of Landscape Architecture and Planning
College of Architecture, Planning, and Landscape Architecture
The University of Arizona
1040 N. Olive Road, A303A
Tucson, AZ 85719-0075

Dear Ms. Macmillan Johnson:

This letter is to express my enthusiastic support for a return to offering a Bachelor of Landscape Architecture (BLA) degree from the College of Architecture, Planning, and Landscape Architecture (CAPLA) at the University of Arizona.

As a holder of a BLA and MLA from UArizona, as well as the owner of a local private practice landscape architecture firm in Tucson for over twenty years, I know the benefit a BLA would bring to the local and regional landscape architecture profession. BLA graduates are ready to successfully enter the job market, here or anywhere, as workforce ready professionals. The need for entry-level employees, both locally and regionally is acute, and graduates with a BLA can fill this demand.

A BLA graduate, in my opinion, has had more time to develop the full complement of knowledge, skills and abilities necessary to start a career in the field of landscape architecture. This includes more language, writing, design and critical problem solving, along with developing a strong emphasis on sustainable design strategies, something that we need to focus more attention on in the future.

The MLA program at CAPLA is excellent, and in fact, I have employed, both through internships and full-time employment, several students and graduates over the years. Even so, if there were BLA graduates, I would be very keen on seeking them out for possible employment.

I am admittedly biased with my BLA background as a primary professional degree, which I followed up later with an MLA as a “secondary” professional degree. The combination, I believe, gave me the education, background and ability to not only work in both private and public sectors, but start and run a successful private landscape architecture firm, as well as run for and win an elected seat on the Central Arizona Water Conservation District Board of Directors, which manages the Central Arizona Project – Arizona’s largest renewable water supply. I would like to see more opportunities like this available for the next generation of leaders in Arizona.

Thank you for this opportunity to provide my input on this important and promising proposal. If I can be of further assistance, please let me know.

Very Truly,

Karen M. Cesare, RLA, ASLA
President
November 12, 2019

Lauri Macmillan Johnson  
Professor and Director of the School of Landscape Architecture and Planning  
College of Architecture, Planning, and Landscape Architecture  
The University of Arizona  
1040 N. Olive Road, A303A  
Tucson, AZ 85719-0075

Ref: Letter of Support – University of Arizona Bachelor of Landscape Architecture Program

Dear Lauri,

As a 2001 graduate of the University of Arizona’s Master of Landscape Architecture (MLA) Program and local practitioner I am writing this in support of the proposal to offer a Bachelor of Landscape Architecture (BLA) degree at the University of Arizona. I have witnessed firsthand the continuous growth and success of the current MLA Program as graduates from this program have demonstrated a deeper understanding of this field as it relates to sustainability design strategies in arid and desert environments and are well qualified to enter the profession.

By offering a BLA degree, the College of Architecture, Planning, and Landscape Architecture (CAPLA) will support the industry’s growing demand for well qualified landscape architects. The BLA degree can provide undergraduates the opportunity to collaborate with the architecture, planning, and other departments across the university – preparing them for the real world interdisciplinary design process. All of this can take place in a first-rate facility which could be expanded as both the MLA and BLA programs would see continual growth in the coming years.

On a personal note, when I applied to U of A in 1995 for my undergraduate studies I was very interested in the BS of Landscape Architecture, which was in the College of Agriculture, but unfortunately they were no longer accepting students and ended the program. I then focused my studies on landscape horticulture and turfgrass management and received my BS in Agriculture in 1997. I returned in 1998 and entered the MLA program and have been practicing landscape architecture ever since. Given the opportunity, I would have entered the BSLA program as I was eager to enter into the workforce and I feel that this is also true for many undergraduates today.

Thank you for allowing me the opportunity to express my fullest support of the BLA program and I look forward to hearing about its success.

Sincerely,

[Signature]
Scott Martinez, PLA  
Director of Landscape Architecture
November 15, 2019

Ms. Lauri Macmillan Johnson, Professor and Director  
School of Landscape Architecture and Planning  
College of Architecture, Planning, and Landscape Architecture  
The University of Arizona  
1040 N. Olive Road, A303A  
Tucson, AZ 85719-0075

Subject: Proposed Bachelor of Landscape Architecture (BLA) Program

Dear Lauri:

The news that there is growing support for re-establishing a BLA program at the University of Arizona is wonderfully exciting. I wholeheartedly support this idea. As a UArizona graduate with a Bachelor of Science in Landscape Architecture (BSLA) degree, I have always felt my degree has been instrumental in my having an extremely rewarding professional career.

Without a doubt, the knowledge, skills and abilities I gained from earning my degree enabled me to achieve many things and serve in various capacities, including but not limited to the following:

- Being offered the choice between three full-time job opportunities upon graduation;
- Passing all portions of the national licensure exam (Landscape Architect Registration Examination / LARE) at first attempt, within 4 years of graduation;
- Gaining licensure in Arizona, California, and Texas, thereby earning what has been, for me, critically-important credentials;
- Experiencing a wide-range of various aspects of Landscape Architecture practice (e.g., custom residential and commercial design, planning and design of public works projects, overseeing the construction of large-scale river restoration efforts, developing native plant palettes for revegetation work, writing Environmental Impact Statements, conducting visual impact analyses, doing site engineering for rainwater harvesting, preparing regional conservation plans and resource management plans);
- Working collaboratively with biologists, archeologists, planners, engineers, architects, lawyers, and other professionals and subject-matter specialists- as a knowledgeable, contributing, credentialed professional peer or team leader;
- Working in the private, public, and non-profit sectors;
• Receiving local, state and national awards for project-related work and presenting work at those conferences;
• Volunteering in various capacities with CAPLA to support students in classroom and studio sessions, encouraging students and advocating for their pursuit of licensure.
• Being elected to serve the profession as the Arizona Chapter President (and other offices) for six years; and
• Being appointed by two Arizona Governors to serve terms as Landscape Architect member on the Arizona Board of Professional Registration for six years. Chairing that Board and serving as the Arizona delegate to the Council of Landscape Architectural Registration Boards (CLARB).
• Importantly, the gainful employment opportunities opened to me by my degree has enabled me to enjoy full-time work in the profession of my choice for nearly four decades, support myself and others over the years, save, and retire comfortably.

Lauri, I mention these things as a validation of the education I received while earning my undergraduate degree in Landscape Architecture, not because of any need for recognition. This education included not only the mechanics of Landscape Architecture practice, but a strong land ethic, professional integrity, ability to collaborate and solve problems as a team, and importantly, the value of sharing knowledge and giving back.

I thank you for all of your efforts in seeking approval for the proposed BLA program and wish you and others at CAPLA the very best in this endeavor. There is a critical need for graduates having the knowledge and skillset such a degree offers. Will you please let me know how I can support this effort?

Sincerely,

[Signature]

Lori Jones Woods, PLA
ASLA Emeritus
Amy Webb  
Project Manager, Landscape Designer  
14246 S. Via Horma Dr.  
Sahuarita, Arizona 85629  

14 November 2019  

Ms. Lauri Johnson  
Professor and Director, School of Landscape Architecture and Planning  
College of Architecture, Planning and Landscape Architecture  
The University of Arizona  
1040 N. Olive Road  
Tucson, AZ 85719  

Dear Lauri,  

In 2013, I was an undergraduate engineering student taking a general education course: History of American Landscapes. Through the course, I was introduced to landscape architecture and already feeling out of place in the College of Engineering, immediately knew that landscape architecture was what I needed to study. Unfortunately, the University of Arizona did not offer an undergraduate degree in Landscape Architecture leading me to pursue an alternate route to complete an education in landscape architecture. This involved completing my degree in Sustainable Built Environments at the University of Arizona’s College of Architecture, Planning and Landscape Architecture and then pursuing my Master of Landscape Architecture Degree. As my undergrad career was coming to an end, I was not intending on pursuing my master’s degree at the University of Arizona. I had been considering other schools in Oregon, Washington, and even considered Harvard’s design school. During my time at CAPLA, I had been introduced to the Landscape Architecture and Planning Department. The faculty and staff were passionate about their fields, dedicated to the school, and supportive of their students. While I knew that any school in the country would prepare me for the field, I was not positive that I would gain the same level of mentoring or guidance as I would at CAPLA so I chose to stay.

The MLA program has proven its success at CAPLA through its accreditation with the Landscape Architecture Accreditation Board as well as it’s statistics of graduates being employed within the industry after graduation. Personally, the program provided opportunities for me to find an internship at Norris Design which lead to my employment with the company after school. If there were a bachelor’s degree program, there would be opportunity for undergraduate students to participate in graduate courses, helping to keep curriculums efficient. I have firsthand experience of being an undergraduate student having the opportunity to participate in the same courses as the landscape architecture graduate students. This was beneficial for numerous reasons but include additional mentoring from the graduate students, an increased expectation in my performance, as well as having a springboard effect furthering my education and abilities. While this experience worked well for me, had I been able to obtain my undergraduate degree in landscape architecture, I would have sought an additional degree to support my landscape architecture knowledge from CAPLA in either Planning or Real Estate Development.

The bachelor’s program at the University of Arizona would be distinguished from that of Arizona State University in that it would not be a Bachelor of Science degree. This would allow for students to learn more language and written skills which helps to create a cohesive and well-rounded education. Landscape architects do not only require design and science backgrounds but must be able to effectively communicate with communities, public agencies, and have an ability to write formal, technical, and legal information. Additionally, the sustainable design strategies that UA and CAPLA prides itself on can be incorporated into the program furthering student’s education and understanding of the challenging environments that we work in. The CAPLA facilities provide investigation into real world design strategies. These include being able to learn how materials are put together in the Materials Lab, through learning in the Underwood Family Sonoran Landscape Laboratory, and the ability to learn and work collaboratively with the
adjacent Planning and Architecture studios. Granted, these skills and teaching strategies are all integrated into the master’s program but there is only so much you can learn and teach during a three-year master program. An undergraduate degree allows for students to be more engaged and focus on the value that the degree provides.

From the viewpoint of a landscape designer in our Tucson community and active member in the American Society of Landscape Architecture, I see the following: there appears to be an increase in not only landscape architecture firms, but planning, architecture, engineering, and non-profit organizations hiring landscape architecture graduates. Students that have obtained bachelor’s degrees are obtaining jobs and have the skills required to be hired into these entry level positions. In addition to their undergraduate degrees providing them with the knowledge needed to enter the workforce, they also are eligible to begin the road to licensure. Holding a bachelor’s degree in landscape architecture, allows for a person to begin taking licensure exams and after practicing under a licensed landscape architect for five years (in Arizona) they may seek application approval from the Arizona State Board of Technical Registration.

Although I have a master’s degree, several my coworkers earned their bachelor’s degree in landscape architecture at the University Arizona when the program had been offered. These gentlemen have had successful careers in the profession, each having a different route that they have taken. Being new to the field, I am grateful to have them as mentors and to be able to learn from their experiences both from when they were in school and now. I am often envious of the classes, projects, or experiences that they were able to have while in the undergraduate program. These additional opportunities simply were not able to be offered within the short amount of time and rigorous curriculum that the master’s program requires.

Working in the industry is fulfilling and continuously educational. I look forward to growing my career and knowledge in the field. I hope that one day, I will be able to share this knowledge whether as a professor or adjunct professor at CAPLA. I believe that this bachelor program will not just give me that opportunity one day but that it would provide the opportunity for more of Tucson’s great landscape architecture community to impart valuable knowledge with students.

Thank you for your time and consideration for the addition of a Bachelor of Landscape Architecture program at the University of Arizona.

Sincerely,

Amy Webb
Project Manager, Landscape Designer
awebb@norris-design.com
928.279.2345
Gina Chorover
Curriculum Vitae
(11/14/18)

CHRONOLOGY OF EDUCATION

Graduate Certificate in Heritage Conservation, University of Arizona, 2015
Master of Landscape Architecture (MLA), University of Arizona, 2005
Doctoral coursework (4 semesters), Organizational Behavior and Industrial Relations
University of California, Berkeley, 1986-1988
M.S. Business Administration, Organizational Behavior
University of Illinois, Urbana-Champaign, 1984
B.S. Business Administration
University of Illinois, Urbana-Champaign, 1982

PROFESSIONAL CERTIFICATIONS

American Institute of Certified Planners (AICP), certified January 2017

ADDITIONAL TRAINING

Master Watershed Steward Certificate
University of Arizona, Cooperative Extension, 9-month course, 2008

Community Mediation Program
“Facilitating Challenging Groups”, Our Family Services, 40-hour course, 2009

Arc GIS II, ESRI Training Group, 24-hour course, 2006

CHRONOLOGY OF EMPLOYMENT

2016-present
Program Chair, Coordinator, Heritage Conservation Program, College of
Architecture, Planning & Landscape Architecture, University of Arizona

Lecturer, School of Landscape Architecture and Planning, College of
Architecture, Planning & Landscape Architecture, University of Arizona

Program Chair, MS Architecture – Heritage Conservation, School of
Architecture, College of Architecture, Planning & Landscape Architecture,
University of Arizona

2015-2016
Adjunct Lecturer, School of Landscape Architecture and Planning

Program Coordinator, Drachman Institute, College of Architecture, Planning &
Landscape Architecture, University of Arizona
2013-2015  Coordinator  
Master of Real Estate Development, University of Arizona

2011-2013  Adjunct Lecturer  
School of Landscape Architecture and Planning, University of Arizona

2008-2013  Lead Planner and Project Manager  
Comprehensive Planning, City of Tucson

2008  Consultant  
Pinal County Water Augmentation Authority

2006-2007  GIS Program Manager and Planner  
Natural Resources, Parks, and Recreation Department, Pima County

2005-2006  Environmental Planner  
Development Department, Pathway Developments, Tucson

2004-2005  Research Assistant  
Department of Landscape Architecture, University of Arizona

2003-2007  Landscape Designer  
Self-employed

1997-2001  Research Associate  
Department of Women’s Studies, The Pennsylvania State University

1995-1997  Program Planner  
Continuing and Distance Education, The Pennsylvania State University

1991-1994  Health Educator and Program Coordinator  
California Department of Health Services

1989-1991  Program Coordinator  
Department of Health Services, Contra Costa County, California

**COURSES TAUGHT**

2018-2019  
LAR 350  Parks and Urban Public Spaces (online)  
PLG 544  Site Planning  
LAR 597j  Documentation of the Historic Built Environment (online)  
RED 521  Urban Form and Placemaking

2017-2018  
PLG 515  Design Studio I  
LAR 597j  Documentation of the Historic Built Environment (online)  
LAR 350  Parks and Urban Public Spaces (online)

2016-2017  
PLG 501a  Introduction to Planning, University of Arizona  
PLG 511  Design Studio I  
LAR 597j  Documentation and Interpretation of the Historic Built Environment (online)
2013  PLG 611  Planning Studio, University of Arizona
2011-2012  LAR 350  Parks and Urban Public Spaces, University of Arizona
1983-1984  BA 265  Organizational Behavior for Non-Majors, University of Illinois
1982-1983  BA 250  Introduction to Organizational Behavior, University of Illinois

REPORTS

2018  Fort Lowell Park, Historic American Landscapes Survey. Submitted to National Park Service. Chorover, Gina (editor) with student researchers from the University of Arizona course, LAR 497j/597j.

2017  Himmel Park, Historic American Landscapes Survey. Submitted to National Park Service. Chorover, Gina (editor) with student researchers, Jaimie Luria and Molly Adamowicz

Armory Park, Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (editor) with student researchers, Susan Bierer and Stephanie Badurski

Valley of the Moon, Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (editor) with student researchers, Jaimie Luria, Susan Bierer and Crystal Cheek

2016  Empire Ranch, Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina, Helen Erickson, and Robin L Pinto with Student Researchers

2015  City of Tucson Historic Preservation Plan (final draft). Chorover, Gina and Nicole Lavely

2014  Colossal Cave Mountain Park Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (Project Lead) with Student Researchers

Phoenix Homesteads Historic American Landscapes Survey. Submitted to the National Park Service. Allan, Aaron, Jim Coffman, Caryn Logan Heaps, and Helen Erickson (Editor) with Student Researchers

Prescott Armory Park Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (Project Lead) with Student Researchers

South Mountain Park Entry Complex Historic American Landscapes Survey. Submitted to the National Park Service. Allan, Aaron, Jim Coffman, Caryn Logan Heaps, and Gina Chorover (Editor) with Student Researchers

Kinishba Ruins Historic American Landscapes Survey. Submitted to the National Park Service. Barry Steinbecher, Starr Herr-Cardillo, Allison Dunn, and Gina Chorover (Editor)
El Tiradito Historic American Landscapes Survey. Submitted to the National Park Service. Steinbrecher, Barry. Gina Chorover (Editor)

Tucson Plant Materials Center Historic American Landscapes Survey. Submitted to the National Park Service. Levstik, Jennifer with Student Researchers. Gina Chorover (Editor)

Tumacacori Historic Park Historic American Landscapes Survey. Submitted to the National Park Service. Erickson, Helen with Student Researchers. Gina Chorover (Co-Editor)

2013
Arizona Inn Historic American Landscapes Survey. Submitted to the National Park Service. Chorover, Gina (Project Lead) and Helen Erickson

Faraway Ranch Historic American Landscapes Survey. Submitted to the National Park Service. Erickson, Helen (Project Lead). Gina Chorover (Co-Editor)

2012
Boyce Thompson Arboretum Historic American Landscapes Survey. Submitted to the National Park Service. Erickson, Helen, Gina Chorover (Project Co-Lead), Rebeca Field, and Sylvia Lee

2012
Pine Creek Historic District, National Register Amendment, Zion National Park. Submitted to the National Park Service. Jeffery, R. Brooks (Principal); Researchers: Gina Chorover, Izajah Gordon, Elizabeth Hermanns, Martha Penado, Dan Pierce, Mike Rageth, A.J. Vonarx, and Karie Westphal.

PUBLICATIONS


(*) Chorover, formerly Gargano

PROFESSIONAL PRESENTATIONS

2017
Embracing Cultural Resources in Sustainable Planning. Arizona Planning Association Annual Meeting, Scottsdale, October 26, 2017


2016

2015
Intervention through Training: Providing Tools for Historic Landscape Preservation, with Helen Erickson. Alliance for Historic Landscape Preservation, Savannah, Georgia

2014
Documenting Arizona’s Evolving Historic Landscapes, with Helen Erickson. SHADE Conference (Southwest Horticulture Annual Day of Education), Glendale, Arizona


2013
The Historic American Landscapes Survey. American Society of Landscape Architects, Arizona Chapter, Central Section, Phoenix, Arizona

2012
Boyce Thompson Southwestern Arboretum, with Helen Erickson. Arizona Historic Preservation Conference, Prescott, Arizona

2011
Reclaiming Public Space with Community Gardens, with S. Weaks and G. Zonge. World Town Planning conference (virtual)

2011
The Historic American Landscapes Survey. American Society of Landscape Architects, Arizona Chapter, Southern Section
Mobilizing Public Support through Community Dialogue. American Planning Association, Arizona Chapter Meeting, Phoenix, Arizona

Urban Planning and the Built Environment of Neighborhoods: Identifying a Sense of Place. Landscape Design Seminar, Tucson Art Center Design College

Living on the Edge: Minimizing the Impact of Development along Rincon Creek through Conservation Subdivision Development and Design. Water Sustainability Program, University of Arizona

### INVITED CLASSROOM PRESENTATIONS

- **2018**
  Careers in Heritage Conservation. SBE 195B: Careers in Sustainability. Instructor: Adriana Zuniga

- **2017**
  Historic and Cultural Landscapes. LAR 540: Contemporary Landscape Architecture. Instructor: Lauri Johnson

- **2015**
  Plan Tucson: Environmental Policy. PLG 256: Sustainable Cities and Societies. Instructor: Gary Pivo

- **2014**
  Careers in Heritage Conservation. SBE 195B: Careers in Sustainability. Instructor: Michael Esser
  Documentation of Historic Landscapes through HALS. LAR 540: Contemporary Landscape Architecture. Instructor: Lauri Johnson
  The Value of Open Space in Urban Settings. EVS 260: Environmental Studies Issues. Instructor: Dan Ferguson

- **2013-2014**
  Documentation and Interpretation of the Historic Built Environment. Architecture 597j. Instructor: R. Brooks Jeffery. Planned and instructed two 4-week sessions including field work and student reviews

- **2014**
  The Historic Landscapes Survey in Arizona. LAR 540: Contemporary Landscape Architecture. Instructor: Lauri Johnson

- **2011**
  History and Role of Parks in America. LAR 150B: American Design on the Land. Instructor: Wendy Lotze

### CLASSROOM REVIEWS

- **2017**
  Served as guest reviewer for student presentations. LAR 596C: Landscape Architecture Seminar III. Instructor: Margaret Livingston
GRANTS & AWARDS

2017  Governor’s Heritage Preservation Honor Award for Empire Ranch Historic American Landscapes Survey. Presented at the Arizona Historic Preservation Conference, June 2017, Oro Valley, Arizona

2016  Historic American Landscapes Survey, 2016 Challenge. First place for The Empire Ranch Historic American Landscapes Survey

2014  Tucson-Pima County Historical Commission Preservation Award for the Arizona Inn Landscape Documentation Project, with Helen Erickson and Jennifer Levsik

   “Landscapes of the New Deal”, National Park Service HALS Challenge, Honorable Mention

2013  “The Arizona Inn”, National Park Service HALS Challenge, 2nd place

2013  Innovative Supportive Housing Program Award for Blue Moon Garden, Arizona Department of Housing

2013  Creative Partnership Award, Blue Moon Garden, U.S. Housing and Urban Development, Regional Office, Phoenix

2012  Teamwork Award, Plan Tucson, Tucson-Pima Women’s Commission

2011  Blue Moon Community Gardens Grants (principal)
   Communities Putting Prevention to Work, Pima County, $60,000
   Tucson Water, $12,000
   Community Development Block Grant/COT, $350,000

2010  Groundwork Trust Exploratory Grant, National Park Service, $10,000

2005  Sigma Lambda Alpha, The Honor Society of Landscape Architecture

2004  Graduate Student Fellowship Award, Technology and Research Initiative Fund, Water Sustainability Program, University of Arizona, $18,000

2003  Design Excellence, Student Design Competition, School of Landscape Architecture, The University of Arizona

1983  Outstanding Teaching Award, Daily Illini, University of Illinois, Urbana

SERVICE


2017  Volunteer of the Year Award, with Helen Erickson, Arizona ASLA
2015-2016  Vail Main Street Program, Design Committee

2011-2015  Board of Directors, Community Gardens of Tucson
            Fund Development Chair, 2014
            Board Chair, 2012-2013

2010-current  Executive Committee and Historic American Landscapes Liaison,
              Arizona Chapter, American Society of Landscape Architects

2013  Organizing Committee, Climate Summit, CLIMAS, Institute for the
      Environment, University of Arizona

2011-2012  Juror, Landscape Architecture Design Excellence, University of Arizona

2011  Project Review Panel, Tucson Art Center Design College

2010-2012  Transportation Enhancement Task Force, Pima Association of
            Governments

2010-2011  Community Oversight Committee, Schools Sites Tomorrow, Tucson
            Unified School District

2007-2009  Board of Directors, Watershed Management Group, Tucson, Arizona

PROFESSIONAL MEMBERSHIPS

American Institute of Certified Planners (AICP)

American Society of Landscape Architects,
    Historic American Landscapes Survey Liaison
    Arizona State Chapter Executive Committee

American Planning Association

CONTACT INFORMATION

Email: gchorove@email.arizona.edu • Office: 520-626-7675 • Cell: 520-247-2789
CURRICULUM VITAE

Chronology of Education

**Master of Science in Landscape Architecture**, August 2011
The Pennsylvania State University, University Park PA
Community and Urban Design Option
Thesis: The Urban Edible Schoolyard: A case study evaluation in Pittsburgh, PA
Thesis Advisor: Professor Ken Tamminga

**Bachelor of Landscape Architecture** with honors, May 2008
Utah State University, Logan UT
Honor’s Thesis: The role of landscape architects in LEED certification

**Associate of Applied Science in Horticulture**, May 2008
Utah State University, Logan UT

Chronology of Employment

**Assistant Professor**, School of Landscape Architecture and Planning
University of Arizona, Tucson AZ, Aug 2015 - Present

**Instructor/Faculty Academic Adviser**, The H Campbell and Eleanor R. Stuckeman School of Architecture and Landscape Architecture
The Pennsylvania State University, University Park PA, Jul 2011 - Jul 2015

**Research Assistant**, The Department of Landscape Architecture
The Pennsylvania State University, University Park PA, Aug 2009 - Jul 2011

**Teaching Assistant**, The Department of Landscape Architecture
The Pennsylvania State University, University Park PA, Aug 2009 - May 2011

**Landscape Architectural Designer**
Architectural Nexus, Salt Lake City UT, May 2008 - July 2009

**Landscape Designer/Landscaper**
A&D Landscaping, Logan UT, April 2006 - April 2008

**Nursery Sales Representative**

Honors and Awards

- AZASLA Educator of the Year Award, 2018
- College of Arts and Architecture Excellence in Advising and Mentoring Award, 2014
- ASLA Student Award of Merit, 2011
- Pashek, Lonnert, and Buerkle Scholarship in Landscape Architecture, 2010
- ASLA Student Award of Merit, 2008
- College of Humanities Arts and Social Sciences Scholarship 2007 - 2008
- Mosier Scholarship 2005 - 2007
- Dean’s List, Five consecutive semesters, Fall 2005 - Fall 2007
“A” Pin Award, Achieved by obtaining a 4.0 GPA for two consecutive semesters with 15+ credit hours, 2007

Service/Outreach

**Local/State Outreach:**

**National/International Outreach:**
Cursos de Actualización en las Disciplinas (CADi) Workshop, Tecnológico de Monterrey, Campus Sonora Norte, Hermosillo, Mexico, 2017.

**Departmental Committees:**
MLA California Study Trip Coordinator, 2016-present
Sub-Committee Task Force on MLA Program Assessment, 2016-present
ASLA Student Honor/Merit Award presentation coordinator, 2016-present
Design-Build Faculty Search Committee, School of Architecture, 2016-2017
Urban Design Faculty Search Committee, School of Landscape Architecture and Planning, 2016

**College Committees:**
Innovations in Curriculum Task Force, University of Arizona, 2018-present
CAPLA-West Building Master Plan Stakeholder Committee, University of Arizona, 2018-present
Website Working Group, CAPLA, University of Arizona, 2018-present
College Curriculum Committee, CAPLA, University of Arizona, 2015-present
Research Working Group, CAPLA, University of Arizona, 2018
Dean Search Committee, CAPLA, University of Arizona, 2016-2017
Design Thinking Task Force, CAPLA, University of Arizona, 2015-2016
Connect2STEM CAPLA recruiting planning, 2017

**University Committees:**
Under Graduate Council, 2019-present
ENR2 Green Roof/Solar PV Planning, 2018-Present
SXSW Working Team, 2019-2020
Design Spirit Charette, University of Arizona Strategic Planning, 2018

**Other Committees:**
Region 2 Director, Council of Educators in Landscape Architecture, 2018-present
CELA Standing Committee on Operations and Management, 2018-present

Publications/Creative Activity

*Chapters in scholarly books and monographs;*
Refereed journal articles, published or accepted in final form


Other peer-reviewed publication


*Substantially based on work done as a graduate student

Conferences/Scholarly Presentations

Symposia


Conferences


**Awarded Grants and Contracts**

*State*

WEES Equipment Grant, 2018, 70% Effort; **PI**; Greg Barron-Gafford (Co-PI), Margaret Livingston (Co-PI); University of Arizona Water, Environmental & Energy Solutions, $7,500.

Accelerate for Success Grant, 2017-present, 20% Effort; **Co-PI**; Greg Barron-Gafford (PI), Andrea Gerlak (Co-PI); University of Arizona RDI, $100,000.

Rio Rico Park System Concept Designs Contract, 2019, 100% Effort; **PI**; Santa Cruz County, $9,349

Rio Rico Park System Master Plan Contract, 2018, 100% Effort; **PI**; Santa Cruz County, $9,349

Oracle Park Design Assistance Contract, 2016-2017, 100% Effort; **PI**; Pinal County, $7,000.
Kirk Dimond, LEED AP+

Address
1040 N Olive Road, A303J
P.O. Box 210075
Tucson AZ 85721-0075

Phone
O 520.626.8613

Email
kirkd@email.arizona.edu

Private Foundation
Landscape Performance Education Grant, 2016, 100% Effort; PI; Landscape Architecture Foundation; $2,500 (competitive).

Extent of Teaching
Instructor:
LAR 511 | Studio II
LAR 555 | Site Construction LAR 554 | Site Engineering LAR 610 | Studio III
LAR 612 | Studio V
LArch 121S | Landscape Architecture Orientation Seminar (Penn State)

Graduate Teaching Assistant (Penn State):
LArch 332 | Design Implementation II: Planting Design.
LArch 341 | Plant, People and Places: Plants in landscape architectural design.
LArch 231 | Introduction to Design Implementation.
LArch 211 | Design and Theory I: Introduction to principles of landscape architectural design.

Teaching Awards and Teaching Grants
National and International
Educator of the Year, 2018, American Society of Landscape Architecture, Arizona Chapter

Grants for teaching innovations
Landscape Performance Education Grant, 2016, Landscape Architecture Foundation
JENNIFER PATTON, PLA, PRINCIPAL

Jennifer founded Wilder Landscape Architects in 2016 with the mission to create vibrant (rich with plants and pollinators, and natural cycles) landscapes that are environmental wins and that people love. Committed to applied research and continuing education, Jennifer routinely revisits built projects, learning what worked and should be repeated, and what did not work and needs to be done differently.

With thirteen years of professional experience in Arizona, Jennifer is an experienced team leader with a comprehensive understanding of City, County, and University policies and guidelines. Working closely with the client and project team throughout the design and construction process, Jennifer provides creative, cost-sensitive solutions that are designed for project longevity. Clients appreciate Jennifer’s reliability, responsiveness, and dedication to every project she undertakes. Her technical experience includes preparation of salvage, planting and hardscape plans, water harvesting plans, LEED documentation, and construction administration.

PROJECT EXPERIENCE

Bisbee Clinic Renovations
CHIRICAHUA COMMUNITY HEALTH CENTERS, INC. (CCHCI)
With BWS Architects; Under construction

The proposed landscape for the Clinic integrates planting areas within the parking lot, and incorporates seating areas at the building entry, beautifying the arrival experience for patients and staff. Plant species native to the area emphasize local character as well as support local pollinators, birds, and butterflies. Species considerations include cold and heat tolerance, water use, exposure, and ease of maintenance. The result will be a sustainable landscape that is adapted to the area and will require minimal inputs to thrive. Deliverables: Landscape and Irrigation Plans.

Raul & Patricia Castro Center for Border Studies and Outreach
THE UNIVERSITY OF ARIZONA
With BWS Architects; In Design Feasibility Stage

This historic bungalow within the Crawford Hill Historic District on the Mexico/US border will provide a place for research on border issues and neighborhood-University interaction. The Castro House landscape is designed as a space for community gathering and socializing, a retreat for academia, and an extension of the resources provided inside the building. In the late Raul Castro’s words, the Castro House can be a place to facilitate “neighbors knowing each other and working together as neighbors...”. Deliverables: Landscape Plans and Cost Assumptions for Feasibility Study.
Old Main Rehabilitation
UNIVERSITY OF ARIZONA
With Poster Frost Mirto; 2014
Project experience while employed with Wheat Design Group

Old Main is the University of Arizona’s original building and an iconic symbol for the campus. Rehabilitated as the public hub of the University, housing the executive offices, admissions, and public meeting spaces, the building has recaptured its former stature. The landscape reflects the campus’s role since inception as a ‘living laboratory’ – numerous plant species are represented, including several heritage trees. Sonoran desert plantings ground the building in its locale. Passive water harvesting supplements irrigation. Contribution: Project Manager; Salvage/Demo, Planting, Hardscape, and Irrigation Plans (Irrigation sub-consultant Carl Kominsky).

Garden of Hope
TUCSON JEWISH COMMUNITY CENTER
With SBBL Architecture + Planning and Public Artist Barbara Grygutis; In Design

The Garden is a healing retreat as well as a venue for small events and receptions. The garden incorporates seating areas, sculpture, and a diversity of Sonoran desert native plants that provide color and texture as well as attract birds and butterflies. Deliverables: Planting and Irrigation Plans.

Bungalow Block (Broadway Blvd., Warren to Cherry)
RIO NUEVO
With Poster Frost Mirto; In Design

Interested in spurring economic opportunity and preserving historic structures in light of the Broadway Boulevard widening, Rio Nuevo has proposed the relocation and re-allocation of seven bungalows. Working with Projects for Public Spaces and Poster Frost Mirto, Wilder will be developing landscape plans for this proposed community arts-district destination. Scope: Native Plant Preservation Plans, Planting, Hardscape, and Water Harvesting Plans.

Wagons West Recreation and Open Space Plan
TUCSON, AZ
With Mike Marks, MJM Consulting; 2017

Wilder helped the residents at Wagons West resort park transform three acres of previously graded and barren land into a recreation and natural area. Wilder provided grading, hardscape, and planting plans. Recreation amenities include tournament-sized pickle ball courts, bocce ball courts, ramada, and putting green. A loop path accommodates walkers and bicyclists. The residents have planted over 100 native trees, and hundreds of native shrubs. Passive water harvesting will provide long-term irrigation.
Margaret Livingston  
Curriculum Vitae

□ Personal Data
Position
Professor, School of Landscape Architecture and Planning, College of Architecture and Landscape Architecture (CALA), University of Arizona

Office Address
School of Landscape Architecture and Planning
College of Architecture and Landscape Architecture
University of Arizona
P.O. Box 210075
Tucson, Arizona, 85721-0075
(520) 621-5359
mlivings@u.arizona.edu

□ Chronology of Education
   Dissertation: Factors influencing germination and establishment of Arizona cottontop, bush muhly, and plains lovegrass.
   Dissertation Director: Bruce Roundy
   Major field: Renewable Natural Resource Studies with emphases in Landscape Studies and Range Management.

   Thesis: Effects of three landscapes on building microclimates, and energy and water use.
   Thesis Director: Greg McPherson
   Major field: Landscape Architecture

1985 M.S., Plant Sciences, University of Arizona, Tucson, Arizona.
   Thesis: Root development of stem cuttings selected plant species as influenced by boron, calcium and 1H-Indole-butanoic Acid (IBA).
   Thesis Director: Paul Bartels
   Major field: Plant Physiology

   Advisor: LeMoyne Hogan
   Major field: Horticulture
Fields of Interest
Use of native plants in urban, exurban and natural areas, analysis of arid land plant communities, habitat restoration and revegetation, habitat development for urban wildlife, and master plan development for multi-use, natural and semi-natural areas.

Chronology of Employment
Chronology of Employment • Academic
2010-present Professor, School of Landscape Architecture and Planning, College of Architecture and Landscape Architecture (CALA), University of Arizona, Tucson, Arizona.
2004-2010 Associate Professor, School of Landscape Architecture and Planning, College of Architecture and Landscape Architecture (CALA), University of Arizona, Tucson, Arizona.
1998-2004 Assistant Professor, School of Landscape Architecture, College of Architecture, Planning, and Landscape Architecture (CAPLA), University of Arizona, Tucson, Arizona.
1992-1998 Adjunct Lecturer, School of Landscape Architecture, CAPLA, University of Arizona, Tucson, Arizona.
1993-1994 Adjunct Lecturer, School of Renewable Natural Resources, College of Agriculture, University of Arizona, Tucson, Arizona.
1990-1992 Graduate Research Assistant, School of Renewable Natural Resources, College of Agriculture, University of Arizona, Tucson, Arizona.
1985-1990 Research Specialist, School of Plant Sciences, College of Agriculture, University of Arizona, Tucson, Arizona.
1987-1990 Graduate Research and Teaching Assistant, Landscape Architecture Program, School of Renewable Natural Resources, College of Agriculture, University of Arizona, Tucson, Arizona.
1982-1985 Graduate Research and Teaching Assistant, Department of Plant Sciences, College of Agriculture, University of Arizona, Tucson, Arizona.

Chronology of Employment • Professional Experience
1992-present Consultant in conservation-based design and assessment of natural and revegetated plant communities (local, state, national and international sites).
1979 Nursery Manager, Greer Gardens, Eugene, Oregon.
1978 Horticulturist, Ludescher Gartnerei, Klaus, Austria.

Honors and Awards
2018 Excellence in Teaching Award, Senior Level, Council for Educators in Landscape Architecture.
2017 Darryl B. Dobras Award for Excellence, CAPLA, University of Arizona, Tucson, Arizona.
2015 Faculty Advisor, AzASLA Student Collaborative Community Service Award.
Catch and Release. Students: Gina Trautner, Rachel Glass and Xiaoyuan “Sharon” Du.

2014 Darryl B. Dobras Award for Excellence, CAPLA, University of Arizona, Tucson, Arizona.

2014 Faculty Advisor, AzASLA Student Individual Honor Award, Integrating Biophilic Principles & Therapeutic Design Elements at Tucson Medical Center. Student: Deryn Davidson.

2014 Faculty Advisor, AzASLA Student Collaborative Community Service Award, Tumamoc Hill Sykes House Welcome Center and Gardens. Students: Katia Gedrath-Smith, Brianna Lehman and Daniel Morgan.

2013 AzASLA Educator of the Year Award.

2013 Faculty Advisor, AzASLA Student Collaborative-Community Service Award, Mount Lemmon Children’s Forest. Students: Kelly Van Den Berg, Becky Blacher, Autumn Ela, Deryn Davidson, Katia Gedrath-Smith.

2013 Faculty Advisor, AzASLA Student Collaborative-Community Service Award, Silvercroft Community Park. Students: Kelly Van Den Berg, Jason Satterly, Deryn Davidson, Desneige Hallbert, Kexin Zhao.

2012 DesignIntelligence 25 Most Admired Educators for 2012, U.S.

2009 Faculty Advisor, National ASLA Student Individual Honor Award, Communication Category, Tucson’s Urban Wildlife Walk. Student: Kimberly Creagan.

2008 Outstanding Teaching Award, CALA, Awards of Distinction, University of Arizona, Tucson, Arizona.

2007 Outstanding Teaching Award, CALA, Awards of Distinction, University of Arizona, Tucson, Arizona.

2006 Outstanding Teaching Award, CALA, Awards of Distinction, University of Arizona.

2004 Darryl B. Dobras Award for Excellence, CAPLA, University of Arizona, Tucson, Arizona.

2004 Recognition, Herring Hall Renovation Effort, College of Agriculture, University of Arizona, Tucson, Arizona.

2002 Faculty Award for Outstanding Contributions, CAPLA, University of Arizona, Tucson, Arizona.

2000 Team Award, University Awards for Excellence, University of Arizona, Tucson, Arizona.

1999 Outstanding Teaching Award, CAPLA, School of Landscape Architecture, University of Arizona, Tucson, Arizona.

1996 Outstanding Board of Directors Member, Tucson Botanical Gardens, Tucson, Arizona.

1994 Nominee for Outstanding Faculty Member, School of Renewable Natural Resources, University of Arizona, Tucson, Arizona.

1991 Outstanding Graduate Student Presentation, Society for Range Management Annual Meeting, Washington, D.C.
1990  Graduate Student Award of Honor, American Society of Landscape Architects (ASLA), School of Landscape Architecture, University of Arizona Chapter, Tucson, Arizona.

1985  Outstanding Graduate Student Award, Gamma Sigma Delta, College of Agriculture, University of Arizona, Tucson, Arizona.

**Elected member of honor societies**
Sigma Lambda Alpha
Alpha Zeta
Gamma Sigma Delta
Phi Kappa Phi

**Professional Memberships**
Council for Educators in Landscape Architecture
American Society for Landscape Architects

**Publications/Creative Activity**

**Publications/Creative Activity • Chapters in scholarly books**

**Publications/Creative Activity • Refereed journal articles**
Americas. 237-250.
Mielcarek, L. and M. Livingston. 2001. From the ground up: developing and implementing a master plan. Public Garden 16:8-11. 90%

Publications/Creative Activity ▪ Refereed Book Reviews
Livingston, M. 2006. The American Society of Landscape Architects Annual Meeting and Expo,
2005. Landscape Journal 25: 262-263. 100%

Publications/Creative Activity ▪ Refereed conference proceedings

Publications/Creative Activity ▪ Editor
Ortho’s All about Creating Natural Landscapes. 2003. Meredith Books. Des Moines, Iowa. Technical Editor. 100%


**Manuscript reviewer for:**
- Landscape and Urban Planning
- Landscape Journal

**Publications/Creative Activity • Refereed Reports**


Livingston, M. and C. Jarchow. 2010. Draft document of outstanding remarkable values (ORVS) for six wild rivers at Gates of the Arctic National Park and Preserve. 37 pp. 30%


Livingston, M., J. Jones, W. Lotze, and J. Patton. 2007. Creating trails along secondary washes in Tucson. Arizona Department of Game and Fish. 139 pp. 60%

Livingston, M., H. Flugstad, and H. Uzzelle. 2007. Plants benefiting urban wildlife on Campus. Arizona Department of Game and Fish. 110 pp. 60%

Livingston, M. and K. Furenlid. 2006. Assessing Neighborhood Tree Species for Avian Habitats in Tucson, Arizona. Arizona Department of Game and Fish. 36 pp. 70%


Phoenix, AZ. 27 pp.  10%
McGann, D., R. Payson, and M. Livingston. 1996. Watercourse and riparian habitat protection and mitigation requirements: Mitigation standards and implementation guidelines. Pima County Department of Transportation and Flood Control District, AZ. 20 pp. 10%
Shaw, W. W., L.K. Harris, and M. Livingston. 1995. Pima County Habitat Inventory - Phase II. Arizona Department of Game and Fish, Phoenix, AZ. 93 pp. 30%
McGann, D., R. Payson, and M. Livingston. 1995. Town of Oro Valley riparian habitat classification and mapping project. Town of Oro Valley, AZ. 17 pp. 20%
McGann, D., W. W. Shaw, and M. Livingston. 1994. Cienega Creek Natural Preserve Management Plan. Pima County Department of Transportation and Flood Control District, AZ. 51 pp. 20%

Publications/Creative Activity ▪ Popular journals

Publications/Creative Activity ▪ Professional work related to habitat assessment
1990-present Principal investigator (unless noted) for identification and evaluation of critical riparian habitat, endangered species and other native plant communities.
Examples of work:
2010-2014 ENG2, UA campus plant list. Collaboration with McGann and Associates, Tucson, AZ.
1999  City of Scottsdale Greenbelt Project, Scottsdale, Arizona. Collaboration with Harris Environmental Group, Tucson, AZ.
1996  Red Rock Trail, Sedona Forest Ranger District, U.S. Forest Service, Sedona, AZ.
1996  Sonoita Creek State Park Management Plan, Phoenix, AZ. Collaboration with McGann and Associates, Tucson, AZ.
1996  Tortolita Mountain Park Master Plan, Oro Valley, AZ. Collaboration with McGann and Associates, Tucson, AZ.
1995  Pima County Habitat Inventory - Phase II, Tucson, AZ. Collaboration with William Shaw (University of Arizona) and Harris Environmental Group, Tucson, AZ.
1995  Town of Oro Valley riparian habitat classification and mapping project, Oro Valley, AZ. Collaboration with McGann and Associates, Tucson, AZ.
1994  Cienega Creek Natural Preserve Management Plan, Tucson, AZ. Collaboration with McGann and Associates, Tucson, AZ.

Publications/Creative Activity  •  Professional work related to planting designs
1990-present  Principal designer (unless noted) for over 100 residential (0.25-2 acres) and public sites, with emphasis in conservation-based designs. Examples of public work:
2000  Australian Garden, Tucson Botanical Gardens, AZ.
1998  Tohono O'odham Trail, Tucson Botanical Gardens, AZ.
1998  Nuestro Jardin, Tucson Botanical Gardens, AZ.

Photographs by Margaret Livingston.
1996 Butterfly Habitat Garden, Tucson Botanical Gardens, AZ.
1995 Wildflower Garden, Tucson Botanical Gardens, AZ.
1994 Sabino Canyon Visitors Center Wildlife Garden, Tucson, AZ.
1994 Safford Elementary School Songbird Garden, Tucson Unified School District, Tucson, AZ.

□ Media

Media • Exhibitions
2009 Exhibition, Tucson Botanical Gardens, featured ceramist, “Flora + Fauna + Function,” Tucson, AZ. 100%
2002 Finalist, Center for Middle Eastern Studies, University of Arizona, 12th Annual

1997 Exhibition, featured designer, Sky Harbor Airport Arts Program: Outdoor Expressions, Phoenix, AZ. 100%

Media • Articles and Interviews
2006 Article, Arizona Daily Star, “Local trees are dying of thirst,” Tucson, AZ. Author:
Tony Davis.


2001 Acknowledgement, City of Tucson Public Library webpage: www.lib.ci.tucson.az.us/bkmkspub/homeconsumer/gardening.htm, course plant list (LAR 520 website).


Scholarly Presentations

Scholarly Presentations • Invited

2018 Panelist, Urban Environments: Surviving Peak Drought and Warming Workshop, March 29. Tucson, AZ.

2016 Water management and conservation in arid urban environments UA-GCC Reunion Panel Discussion. Tucson, AZ.

2013 What about those microbasins? And more… ASLA Southern Arizona Chapter Meeting. Tucson, AZ.

2012 The New Green Landscape Program: Cutting edge - green technology and design Southern AZ USGBC and Tucson Association of Realtors. Tucson, AZ.


2012 Guest reviewer, Petra University, Amman, Jordan.

2011 Water conservation in the desert. CALA Homecoming 2011.

2010 Use of Xeriscape principles in the Landscape Architecture Program at the University of Arizona. Lecturer, 10th Joint Arab Expo for Graduation Projects,
Jordan University of Science and Technology, College of Architecture and Design, Amman, Jordan.


2010 Conserving water in landscapes: understanding Xeriscape principles. Instructor, 2-hour workshop, Greater Amman Municipality, Jordan.

2009 Developing coursework related to water conservation in urban landscapes. Lecturer, Jordan University of Science and Technology. Amman, Jordan.

2007 Maintaining biodiversity: green spaces in urban areas. Lecturer, Monteverde Institute Study Abroad Program (part of 1-week studio instruction), Monteverde, Costa Rica.

2007 Incorporating native plants in urban spaces: how can we do better? Lecturer, Arizona Native Plant Society Tucson Chapter Meeting.

2007 Incorporating native plants in urban spaces: how are we doing? Lecturer, American Society of Landscape Architecture Tucson Chapter Meeting.

2006 Natural versus created landscapes: compromises we make. Lecturer, Desert Horticulture Conference, Tucson, AZ.


2002 Application of Sonoran Desert plants in created landscapes. Instructor, Arid Landscape Workshops II and III (2-day workshops), Center for the Studies of the Built Environment, Amman, Jordan.

2002 Planting design in arid climates. Instructor, Arid Landscape Workshops II and III (2-day workshops), Center for the Studies of the Built Environment, Amman, Jordan.

2001 Preserving and creating habitats in urban environments. Lecturer, Southwestern Horticultural Educational Conference, Phoenix, AZ.


2001 Creating low-water-use landscapes in arid environments. Instructor, Arid Landscape Workshop I (2-day workshop), Center for the Studies of the Built Environment, Amman, Jordan.

2001 Habitat in urban environments. Lecturer, Design with the Desert Conference: Ecological Perspectives of Living in a Desert Environment, Phoenix, AZ.

2000 Small plants for small places. Lecturer, Landscape Architecture Conference,
Phoenix, AZ.

2000  Designing gardens for butterflies and songbirds. Lecturer, Desert Horticulture Conference, Tucson, AZ.

1999  Flora and fauna of Arizona. Lecturer, Tucson Botanical Gardens Lecture Series, Tucson, AZ.


1998  Landscape plants for shade. Lecturer, Tucson Botanical Gardens Lecture Series, Tucson, AZ.

1997-99  Grass taxonomy. Instructor, Tucson Botanical Garden Workshops, Tucson, AZ.

Scholarly Presentations • Submitted with refereed abstracts


with vegetation in three multi-cultural cities. 36\textsuperscript{th} Annual Conference of the Environmental Design Research Assoc. Vancouver, Canada.


Smeltzer, J. and M. Livingston. 2003. Prioritizing fragmented patches of cottonwood-willow forests for preservation efforts within watercourses in urban and exurban areas of Tucson, Arizona, USA. International Association for Landscape Ecology, U.S. Regional Association, 18\textsuperscript{th} Annual Symposium, Banff, Alberta, CA.


Accepted, not presented.


Grants and Contracts

2018-2019 Tumamoc Hill Boathouse Landscape Plan. 100% effort. $12,792.
2016-2017 Town of Marana El Rio Riparian Restoration Project. Phase II. 100%
2015-2016  Town of Marana El Rio Riparian Restoration Project. 100% effort. $6508.
2011-2012  Inter-Fab Inc. References for pond planting designs and plant references for the U.S. climate zones. 100% effort. $16,900.
2011-2012  Eller courtyard redesign: reflecting conservation design practices. 100% effort. $6,157. Implemented.
2011-2012  Reducing the potable water footprint of Flandrau Science Center: Setting a high-profile example for the campus community. 10% Co-P.I. with G. Woodward (P.I), B. Plant (co-P.I.), and J. Riley (Co-P.I.). Provided in-kind faculty and GRA support in landscape architecture for re-design of Flandrau Planetarium grounds to accommodate water harvesting cisterns and new plantings and seating areas. $26,800.
2010-2012  Assessment of irrigation treatments: Is less water used when landscape irrigation is with hand watering or automated systems? 60% Co-P.I. with S. Smith. Rain Bird. $66,014.
2010  Design and conservation enhancement plan for Painted Desert Inn and Park South Entrance. 100% effort. P.I, National Park Service. $17,000.
2010  Outstanding Remarkable Values (ORVs) for six wild rivers at Gates of the Arctic National Park and Preserve. 100% effort, P.I., National Park Service. $20,000.
2009-2011  Master plan for Resaca de la Palma. 100% effort, P.I., National Park Service. $36,500.
2009-2011  Conservation plan for the Petrified National Forest Housing Complex. 100% effort. National Park Service. $20,000.
2008-2011  Design guidelines for public access into and along Airport Wash. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. $9,400.
2008-2010  Master plan for Chamizal National Memorial. 100% effort, P.I., National Park Service. $35,000.
2008-2009  Green roof investigations in the Southwest. 20% effort, one of four co-P.I., University of Arizona Biosphere2. $50,000.
2008-2009  City of Butte, Montana recreational master plan. 100% effort, P.I., City of Butte, Montana. $7,600.
2008  Planting prototypes for extraction operations in Marana, Arizona. 100% effort, P.I., Arizona Rock Products Association. $6,200.
2007-2008  City of Tucson urban wildlife plazas. 100% effort, P.I., City of Tucson. $5,000.
2007-2008  City of Tucson landscape patterns. 100%, effort, P.I., City of Tucson. $4,000.
2007  Mesquite Power Plant interpretive trails for wildlife viewing. 90% effort, co-P.I. with Martin Karpiscak. Mesquite Power Plant. $4,000.
2007-2008  Whitewater Draw master plan. 100% effort, P.I., Arizona Department of Game and Fish. $20,000.
2005-2006  Rainwater harvesting – a neglected, significant source of water for arid lands. 25% effort, one of five co-P.I. Multiple funding sources. $98,800.
2005-2006  Sidd Al-Ahmar master plan, Petra Region, Jordan. 90% effort, co-P.I. with Robert Frietas. $18,000.
2005-2006  Water conserving demonstration garden, Aqaba, Jordan. 90% effort, co-P.I. with Robert Frietas. $18,000.
2005-2006  Organ Pipe Visitor Center interpretive islands. 100% effort, P.I. National Park Service. $2,000. Implemented.
2004-2007  Creating trails along secondary washes in Tucson. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. $24,238.
2004-2007  Plants benefiting urban wildlife on campus, 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. $16,369.
2003-2005  Design guidelines for public access into Saguaro National Park East from the Rincon Valley, Tucson, Arizona. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. $16,914.
2003  University of Arizona International Foreign Travel Grant. 100% effort, P.I., International Association for Landscape Ecology, 6th Annual World Congress, Darwin, Australia. University of Arizona. $1,000.
2002-2004  Designing created spaces for avian species: assessing existing parks and prescribing design guidelines for future parks in Tucson, Arizona. 100% effort, P.I., Arizona Department of Game and Fish Heritage Fund. $13,841.
2002  Stone Avenue Historic Temple planting plan, Tucson, Arizona. 100% effort, P.I., $150. Funding for implementation of design, $15,000, Small Grants Program, City of Tucson, AZ. Implemented.
2001-2003  Establishing a monitoring program for visitor use and associated impacts in Las Cienegas Natural Conservation Area. 20% effort, collaboration with R. Gimblett, (P.I.), School of Renewable Natural Resources. Bureau of Land Management. $129,793.
2001-2003  Pima pineapple cactus monitoring study. 100% effort, P.I., Robson Communities. $5,324.
2001  Ambos Nogales revegetation project. 20% effort, collaboration with Diane Austin (P.I.), Bureau of Applied Research in Anthropology. National Science Foundation. $45,000.
100% effort, P.I., University of Arizona Small Grants Program, Office of Vice President for Research. $4,966.

2000 North District Central Park restoration study, Tucson, AZ. 100% effort, P.I., City of Tucson Parks and Recreation. $2,186.

2000 City of Globe Parks and Recreation master plan, Globe, AZ. 50% effort, co-P.I. with Lauri Johnson. City of Globe. $5,000.

1999 Association for Women Faculty Travel Grant. 100% effort, P.I., $500.

1999 Hollinger outdoor schoolyard habitat master plan, Tucson, AZ. 100% effort, P.I., $350. City of Tucson funding for implementation pending.

1999 McClaran residence planting plan, Tucson, AZ. 100% effort, P.I., $100.

1999 Tombstone Presbyterian Church master plan, Tombstone, AZ. 50% effort, Co-P.I. with Mark Frederickson. City of Tombstone. $2,000.

1998 Christ Presbyterian Church memorial garden, Tucson, AZ. 100% effort, P.I., Private funding. $500.


1992-1996 Wildlife habitat inventory study: Phases I and II. 25% effort, collaboration with W. W. Shaw (P.I.), School of Renewable Natural Resources. Arizona Department of Game and Fish Heritage Fund. $93,848.

Work submitted, not funded

Agnese Nelms Haury Program in Environment and Social Justice Seed Charitable Grant Proposal; Democratizing Sustainability Funding: Enhancing Community Capacity to Address Climate Change and Build Resiliency. $88,748. Submitted fall 2016, and resubmitted in spring 2017.

Work submitted, not funded

Assessment of Vegetation Suitability in Tucson Microbasins. EPA Urban Waters Small Grants. Livingston and Chorover. Co-P.I. $68,910. Submitted fall 2015, not funded; scored 80.4/100, projects 91 and above were funded.

Pro-Bono Service Learning/Outreach Projects

2017 Tucson Heritage Park (Grant Road Coalition): a collaboration with neighborhoods adjacent the Grant Road expansion that focuses on open space development between Santa Rita Ave. and Park Ave. Landscape designs will include trails, seating, buffer plantings, and other elements that will serve the surrounding neighborhoods as well as visitors to Tucson.

2016 Bugmania Courtyard Plan: a collaboration with the UA Herbarium that focused on development of courtyard designs and associated elements inspired by a particular insect. Work was displayed at the Insect Festival in the fall (Bugmania).

2016 Arizona History Museum (AHM) Entry Landscape Design: this project revisited the south entrance to this historical structure and provided a landscape design that
highlights the noted architectural style of structure while more clearly addressing current and future needs of the AHM.

2015 Valley of the Moon Landscape Plan: plan for water harvesting and conservation demonstration, including gathering spaces and shade structures, ADA pathways, and arid plants demonstration garden.

2014 City of Tucson (COT) Main Library Urban Plaza and Landscape Plan: plan for demonstration/entry design for east entry open space at this COT library, including gathering spaces and shade structures, pathways, and arid plants demonstration garden.

2014 Rillito Bend Neighborhood Streetscape Design: a design focused on a multi-modal corridor that focuses on creation of a green corridors, native plant materials, microbasins, and other water harvesting techniques.

2013 City of Tucson (COT) Himmel Park Branch Library Landscape Plan: plan for demonstration/entry design for east entry open space at this COT library, including gathering spaces and shade structures, pathways, and arid plants demonstration garden.

2013 Sky Islands High School Outdoor Learning Laboratory: plan for outdoor learning classroom focusing on sustainable practices, including garden plots, water harvesting, tortoise habitat, aquaculture, and arid plantings.

2012 Tucson House Open Space Design: plan focusing of gathering spaces, planting designs, and water harvesting systems for the north side of the Tucson House, City of Tucson. Tucson, AZ.

2011 Omani Falaj Exhibition: a design for the Omani Sultan Qaboos Cultural Center, a member of the Middle East Institute, that highlights Oman’s falaj water infrastructure and management system. Implemented at Biosphere 2, Tucson, AZ.

2011 Toole Ave. Warehouse Arts District Corridor Master Plan: design focusing on a multi-modal corridor that draws various users to the Warehouse Arts District along Toole Ave. Tucson, AZ.

2011 City of Tucson Housing Complex Development Master Plan: development focusing on a lower income housing complex that focused on redevelopment of the space, including design of open space uses, parking re-design, stormwater control, and guidelines for landscape designs. Tucson, AZ.

2010 Tucson House Community Garden Master Plan: plan for community gardens, including gathering spaces and shade structures, exercise trails, parking, and cacti and succulent demonstration garden. Tucson, AZ. Implemented.

2009 Cooper Outdoor Learning Center: planting plans for focus areas indicated on site master plan (developed in another studio course, in collaboration with Professors Lauri Johnson and Nadir Chalfoun), Tucson, AZ.


2009 Drachman Institute residence: landscape plan and implementation for a low-income residential unit, Tucson, AZ. Implemented.

2009 Downtown Tucson urban habitat: landscape design and web-based interpretive material for habitat assessment, design, and interpretation in downtown areas, Tucson, AZ.

2009 City of Tucson Origins Heritage Park master plan: plan focusing on reclaiming a
landfill for an urban multi-use park, Tucson, AZ.

2008  
City of Tucson Granada Park: landscape design focusing on water harvesting strategies demonstrated in a public park, Tucson, AZ. Implemented.

2008  
Drachman Institute residence: landscape plan and implementation for a low-income residential unit, Tucson, AZ. Implemented.

2007  
National Phenology Network (NPN) Garden: landscape design for open space for neighbors and visitors of the University of Arizona, with a focus on NPN mission and goals, Tucson, AZ.

2007  
Drachman Institute residence: landscape plan and implementation for a low-income residential unit, Tucson, AZ. Implemented.

2006  
Tucson Nature Conservancy master plan: focus on water harvesting and conservation techniques for public display, Tucson, AZ. Implemented.

2006  
Lawrence Middle School Outdoor laboratory: design of outdoor learning space focusing on cultural and environmental significance of the region, Tucson, AZ.

2006  
Tumamoc Hill Desert Laboratory inventory and planting plan: assessment of significant existing vegetation and proposed planting plans for Tumamoc Hill, Tucson, AZ.

2005  
University of Arizona Math Building landscape plan: entry space emphasizing planting plan and seating areas for campus, Tucson, AZ.

2005  
University of Arizona Chemistry Building: entry design for historic Chemistry building, including plantings, patios, and seating, Tucson, AZ.

2004  
Desert Survivors Nursery Demonstration Garden: student designs focus on entryways into the nursery, with concepts relating to water conservation, native plantings, and connections to adjacent communities, Tucson, AZ.

2004  
Cachuma Lake Nature Center Interpretive Garden: student designs focusing on development of a landscape plan for the Nature Center that highlights native plants and communities, and neighboring watersheds, Santa Barbara, California. Implemented.

2004  
Habitat for Humanity Residence: student design emphasizing sustainable design practices for low-income housing, Tucson, AZ. Implemented.

2004  
Nature Conservancy landscape plan: student design focused on new low-water-use planting design for the eastern section of the site, including a performance/class platform, seating, and covered patios, Tucson, AZ. Implemented.

2004  
Drachman Institute residence: landscape plan for a low-income residential unit, Tucson, AZ. Implemented.

2003  
Herring Hall landscape plan: focuses on Campus Arboretum and Herbarium, University of Arizona Campus, Tucson, AZ. Implemented.

2003  
Biosciences East Building, landscape plan for School of Natural Resources, University of Arizona Campus, Tucson, AZ. Implemented.

2003  
Oro Valley Demonstration Garden, Tucson, AZ.

2003  
El Capitan Courts, landscape plan, Tucson, AZ.

2002  
Family and Consumer Sciences Building, landscape plan, University of Arizona Campus, Tucson, AZ. Implemented.
2002  Habitat for Humanity residence: landscape plan, Tucson, AZ.
2001  Habitat for Humanity residence, landscape plan, Tucson, AZ.
2001  El Rio Health Center, landscape plan, Tucson, AZ.
2000  Shantz Building patio garden, University of Arizona Campus, Tucson, AZ. Implemented.
1999  North Central District Park, conceptual master plan, City of Tucson Parks and Recreation Department, Tucson, AZ. Final plan funded.
1999  Shantz Building, shade garden, University of Arizona Campus, Tucson, AZ. Implemented.
1999  Ronald McDonald House, landscape plan, Tucson, AZ. Implemented.
1998  Architecture Building, entry garden, University of Arizona Campus, Tucson, AZ. Implemented.
1998  Maricopa Agricultural Center, landscape plan, University of Arizona, Maricopa, AZ. Implemented.
1998  Rincon Vista Recreational Field Facility, planting plan, University of Arizona, Tucson, AZ. Implemented.
1998  Watson and Willow Lakes, master plan, City Planning Department, Prescott, AZ.
1998  Stork's Nest Agency: planting plan, Tucson, AZ.
1998  Tucson Urban Welcome Center: background study and master plan, City of Tucson Arts Council, Tucson, AZ.
1998  Joesler Residence, planting plan, CAPLA, Tucson, AZ. Implemented.
1998  Avra Valley Water District Office, landscape plan, Avra Valley, AZ. Implemented.

□  Principal Courses Taught
Design Studio III
Landscape Ecology
Planting Design
Plant Materials
Seminar(s): Thesis and Master’s Report Development
Seminar: Strategies for Water Conservation in Urban and Exurban Areas

□  Ph.D., M.L.A, and M.Arch. Dissertations and Thesis and Master’s Report Committees (starting in 2016, MLA students are all advised in the Master’s Report and Thesis development seminar, 596C)

Dissertations
2017  Smith, Garrett. Title TBA. Arid Lands Studies. Member.
2017  Keith, Ladd Title TBA. Arid Lands Studies. Member.
2006  McCaffrey, Rachel. Assessing patterns of abundance and the influence of habitat features
and scale on birds in an urban environment. Member.

**Theses and Master’s Reports: major advisor**

2015

Alammar, Mashal. The multimodal transit corridor, Eastern Province, Saudi Arabia.
Gamboa, Malerie. Coronado Airport: a project in flight.
Hyson, Kendra. Second city – leveling the playing field: a revitalization plan for Colon, Panamá.
Lotzgesell, Janelle. Food justice in the lower ninth ward: cultivating resilience with our school at Blair grocery.
Thorley, Sam. El Borde – a design for Alto Hospicio, Chile.

2014

Gedrath-Smith, Katia. The 1936 Olympic Village: A look from the past into the future.
Gong, Yuan (Candice). Guipan Lake Wetlands Park: designing for recreation and preservation.
Herman, Brandon. The Tacoma Flats: a study of post-industrial urban waterfront rejuvenation.
Scaife, Allison. Reimagining Reid Park: Redesign and Rejuvenate.
Tarbox, Jeff. Enhancing neighborhoods through green street design: the Mountain First restoration project.
Ziolkowski, Cory. A fair way to share the outdoors: exploring how public golf courses can reach their full potential.

2013

Davidson, Deryn. Making room for nature: addressing the emotional and physical restorative needs of patients, family and staff at Tucson medical Center for Children.
Melnick, James. Dog park design.
Rayyan, Kawthar. The Hashemite University campus landscape master plan.
VanDenBerg, Kelly. Metamorphosis: A master planned community renovation, from struggling golf course to vibrant desert community.
Wang, Xi. Arroyo Chico riparian design: integrating stormwater management with greenway enhancement.
Zhao, Kexin. Revitalization of alleys – creating safe, social and green networks in central Tucson.

2012

Blacher, Becky. Expanding the front yard: green infrastructure in the urban desert.
Ela, Autumn. Designing for the greatest good: ensuring multi-seasonal recreational sits are relevant to the urban desert Southwest.
Poe, Rudy. Food forest gardens for the Southwest: a residential and small farm approach.
Okour, Yasmien. Retrofitting highway arterials into greenways: redesigning Petra St., Irbid, Jordan.
Voris, Maria. Buckelow Farm’s Wetland: crating habitat and recreation for agricultural runoff.

2011

Jarchow, Chris. Assessment of and guidelines for the development and renovation of urban and exurban Chiricahua leopard for (*Rana chiricahuensis*) habitat in Arizona.
Lennon, Lisa. Pocket pollination: landscape design guidelines for native bees in urban
Mazza, Mike. Resaca de la Palma master plan: linking history, ecology and community in Brownsville, TX.

**2010**

Bareis, Eirin. Strategies for linkages, access and urban wildlife opportunities for southern Tucson’s underserved community along Airport Wash greenway.
Bossler, Matthew. Guidelines for the design of mitigated riparian habitat and other uses in detention basins of Pima County, AZ.
Hawn, Jessica. Tree of Life Rejuvenation Center: a sustainable development focusing on quality of life.

**2009**

Abbott, Shelly. The role of stakeholders in public land planning. Reflecting ideas in action.
Babb, Zach. Iron Horse heritage greenway system.
Creagan, Kim. Urban habitat: a model for habitat assessment, design, and interpretation in downtown areas.
Dinsmore, Kate. Enhancing recreational opportunities in Butte, Montana.
Jacobsen, Brent. Sustainable roofs: developing a green roof implementation model for Tucson, AZ.
Mast, Natalie. Refuse to refuge: reclaiming a landfill in Tucson’s urban core.

**2008**

Kopke, Jay. The arid green roof design process.
Meadows, Eric. Whitewater draw wildlife areas; a wildlife viewing experience.
Rose, Chris. Urban streetscape patterns in arid environments: streetscape patterns and principles in Tucson, AZ.

**2007**

Flugstad, Heidi. Assessment of potential habitat characteristics favorable for urban adapted lizards in Tucson, Arizona.
Hobson, Levi. Fire in the hole: expanding the role of golf courses in wildlife management.
Uzzelle, Hampton. Public interpretation of urban bird habitat design guidelines on a self-guided tour of the University of Arizona Campus in Tucson, Arizona.

**2006**

Jones, Jennifer. Strategies for increasing access and circulation along secondary watercourses in Tucson, AZ.
Kaplan Suzanne. Retrofitting existing drainageways into the urban fabric for the uses as recreational amenities.
Patton, Jennifer. Integrating pedestrian needs and bird habitat in trail design along secondary environments.
watercourses in Tucson, Arizona.
Volienick, Irene. Sam Shu Farm, Marana, Arizona: Master plan for a recreational farm.

2005
Chorover, Gina. Living on the edge: minimizing the impact of urbanization along Rincon creek through conservation development and design.
Penati, Elizabeth. Recreational access on ranching lands: problems and solutions in Arizona as articulated by those who live and work in the West
Rosen, Josh. Interpretative garden at Cachuma Lake Nature Center, Santa Barbara, California.
Vitkay, Karen. Water conserving garden, Aqaba, Jordan: recommendations for the landscape design practice in the Middle East.

2004
Cooper, Harry. Site appropriate design: Sustainable trail design for a degraded site in Pima County, Arizona.
Robaina, April. Effective elements of interpretive home landscaping exhibits for arid environments: Case study for Tucson, Arizona.
Smeltzer, Jenny. Prioritizing fragmented patches of cottonwood-willow forests for preservation efforts within watercourses in urban and exurban areas of Tucson, Arizona.

2003
Bass, Beverly. Assessing ecological design principles as they relate to sustainability in neighborhoods of Tucson, Arizona.
Darnell, Beth. Assess the potential play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, Arizona.
Gogal, Lisa. Understanding rotational zoo exhibits and recommendations for the creation of a rotational exhibit at the Oregon Zoo.
Mehlem, Josh. Use of a vegetation suitability index for assessing bird habitat in urban neighborhood park of Tucson, Arizona.
Ribes, Lisa. A comprehensive bicycle parking plan for the University of Arizona Campus: developing methods for assessing parking requirements.
Rudy, Michelle. Wildlife corridor design and planning for western Santa Cruz County, Arizona.
Showalter, Darlene. Post-installation evaluation of the plant materials used in traffic calming applications on residential streets in Tucson, Arizona.

2002
Duncan, Alison. Urban remnants and their susceptibility to invasion by non-native plant species.
Gormally, Josh. Changes in riparian vegetation following release of reclaimed effluent water into the Santa Cruz River.
Kirk, Patricia. Evaluating therapeutic landscape design elements of urban plazas in the southwestern United States.
Sager, Brian. Is the constitution of a greenway trail network associated with cycling commuter use?
Stickler, Stacey. The Tucson Museum of Art courtyard: a guide to effective participatory design
methods for adolescents.
Taylor, M. A design for transit-oriented development in San Diego, California.

2001
Goodwin, Troy. Preserving native plants through regulations: a case study of the City of
Tucson’s NPPO (Native plant preservation ordinance).
Haselhorst, Corey. A skatepark: from the ground up.
Martinez, Scott. Evaluation of roadside revegetation along Arizona Forest Highway 39 (Mt.

2000
Ridgway, Stephanie. Visitor behavior in zoo exhibits with underwater viewing: an evaluation of
six exhibits in the western United States. Thesis.
Report.

1999
Mielcarek, Laura. Factors associated with the development and implementation of master plans
for botanical gardens.
Thawley, Mark. Techniques for improving established golf course: restoration, renovation, and
redesign: An improvement plant for the Meadow Club, Fairfax, California.

Theses and Master’s Reports: served as committee member

2015
Aros, Daniel. The Iron Triangle: Willets Point redevelopment.
Laughlin, Katherine. Ghost town revitalization: Gilman, Colorado.
Roh, Sunyoung. Newtown Creek revitalization.
Trautner, Gina. Reinventing the schoolyard: a master plan for Rogers Commons.
Yang, Yang. Nashville waterfront – urban design and landscape design.

2014
Bassey, Monique. Gowanus Canal: Rethinking the Urban Fabric through Corridors of
Coexistence.
Costello, Karen. Masterplan proposal for the former Kai Tak Airport in East Kowloon, Hong
Kong.
De La Torre, Mark. Imagine greater Denver: an urban revitalization through vehicular and
pedestrian reconfiguration.
Figueroa, Jesus Alan. Projecto Azul Marino: A Community’s Waterfront in an Ecological
Framework.
Hosseinzadeh, Misagh. 6th Street revitalization in Tucson, AZ.
Lehman, Bri. Presidio del Tubac master plan.
Morgan, Daniel. Lost tracks: creating culinary connections and community in Tucson.
Shemanski, Nigel. Coca-Cola Ballpark Village: Activating major seasonal public facilities
through reinvisioning the surrounding context for multi-seasonal use.
Singh, Sukhmeet. Santa Cruz mixed use village and research park: a demonstration of
sustainable agicultural methods and water harvesting techniques for aird environments.
Sobecki, Christian. Bridging the battleground: master plan for Monmouth Battlefield State Park,
Monmouth County, New Jersey.
Yongkun, Ye. Using stormwater management and green infrastructure to enhance neighborhood livability.

2013
Booth, Amy. Linking children and nature through design: integrating nature education for children of the Texas panhandle into Palo Duro Canyon.
Halbert, Desneige. Pilgrim Hot Springs.
Lu, Li. Sustainable landscape development of urban waterfront – a waterfront park design in Wuhan Economic development zone, Wuhan City, China.
Pedersen, Christian. Sensory garden experience.
Radcliffe-Meyers, Lori. “A Landscape of Memories: a master plan design for the Crawford Town Hall.
Rasmussen, Libby. Maximizing minimal green space: re-thinking land use on Coast Guard bases.
Quach, Kevin. Envisioning Oakland: the ballpark district.
Wang, Yuxin. Yangchun Lake sub-urban center master plan.
Ware, Charles. Design-Build in the Education of Landscape Architecture.

2012
Idriss, Lana. A design guide for incorporating ecology into southwestern schoolyards.
Satterly, Jason. Revitalization through design: bringing life back to downtown Cheyenne, Wyoming.
Streitz, Lee. An industrial adapted reuse project: reimagining the beer garden.

2011
Perry, Yennifer. Rails to trails greenway: awakening cultural heritage.

2010
Keifer, Christopher. Coastal protection as urban landscape.

2009
Kennedy, Melisa. Master plan for redevelopment in southern Avra Valley.

2008
Kennedy, Allison. As spoken by landscape architecture: an urban infill design language.
Marhefka, David. Tucson Electric power place; a public-private open space model in Tucson, Arizona.
Rojas, Patricia. Awakening the water snake.

2007
Frazier, Beth. Sustainable communities: implementations strategies and guidelines for design and planning.
Hazlett, Jennifer. Utilizing wind as a determining factor for design guidelines pertaining to the lower Sonoran Desert life zone.
Henegar, Aaron. Reclamation recreation: finding place for public golf on forgotten landscape.

2006
Bio, Roberto. Design strategies for the Rillito River, Tucson, Arizona: exploring the urban
design opportunities for improving the river corridor.
Moeller, Colby. Sustainable design for health care facilities: A Case Study of the LEED certified Rincon Community Hospital at Civano.
Steinmeyer, Samirah. Reinventing the brownfield: integrating identity in sustainability in design.
Zarko, Gwen. Preserving the past, changing the present, and ensuring the future: Sentinel Peak.

2005
Burns, Scot. Grounds for Play: Rethinking, reinventing, reinvigorating the kid’s playground with multiple intelligence; Tucson, Arizona.
Mahoney, M. The expanding field: exploring the interface between art and ecology in landscape architecture.

2003
Davis, Darby. Expressions of urban design: the park as a theater.
Kumazawa, Naoto. A study of urbanization practices on the health of ephemeral headwater streams in eastern Pima County, Arizona.
Lynch, Erin. Feng Shui as a site design tool: assessing conditions of human comfort in urban places.
Schaeffer, R. Identifying success in schoolyard design through post-construction evaluation of public elementary schoolyard environments in Tucson, Arizona.

2002
Camacho, M. Sacramento River Park master plan.
Clifford, S. Butte Creek Trails project: a master plan.
Nelson, K. Determining factors that lead to the success of community gardens.

2001
Takessian, J. Literacy and multicultural representation on the context of a school master plan: A master plan for Lawrence Intermediate School, Tucson, Arizona.

2000
Castrillo, M. Evaluating the effect of context in the use of two downtown Tucson urban plazas using qualitative and quantitative approaches.
Peters, J. Gila Bend: a small town revitalization study.
Pinto, R. Analysis of the cultural landscape of Fort Bowie National historic site.
Walker, S. An analysis and design for extending the Rillito River Park system from Dodge Blvd. to Swan Rd.

1998
Dietz, R. Guidelines for the design and development of golf courses adjacent to riparian habitat in semi-arid desert landscapes. M
Mendoza, J.G. Riparian areas, ecological protections, and recreational uses along the Magdalena River.

1997
Gerstenberger, N. Historic plant materials of Tucson.

Undergraduate Capstone Reports for students in Bachelor’s for the Study of the Built Environment: advisor
2016 Harris, Houston
2015 Rioux, Andre
2015  Jackson, Chloe
2015  Cunningham, Beau

☐  Service/Outreach

Service/Outreach • National/International
2008-2012  Vice President, Phi Kappa Phi, University of Arizona Chapter.
2004  Judge, student presentations, US-International Association of Landscape Ecology national conference (IALE), Las Vegas, Nevada.

Service/Outreach • Local/State
2008-present  President, Sycamore Canyon Conservation Foundation Board, Tucson.
2013-2016  Member, Arizona Community Forest Council.
2010  Member, Desert Horticulture Conference Committee.
2010  Moderator, Desert Horticulture Conference.
2010  Secretary, Executive Committee, Board of Directors, Tucson Botanical Gardens.
2009  Chair, Horticulture Committee, Board of Directors, Tucson Botanical Gardens.
2008  Reviewer, Selection of firms for On-Call Landscape Architectural Services, City of Tucson Department of Procurement.
2004-2006  President, Executive Committee, Board of Directors, Tucson Botanical Gardens.
2000-present  Member, City of Tucson Plant List Advisory Committee.
1996-2011  Member, Executive Committee, Board of Directors, Tucson Botanical Gardens.
2001  Invited Judge, Tohono Chul Park Landscape Design Competition, Tucson.
2001  Participant, Reception for the International Council on Monuments and Sites, CAPLA, University of Arizona, Tucson.
2000-2002 Chair, Master Plan Committee, Tucson Botanical Gardens.
2000-1998 Vice President, Executive Committee, Board of Directors, Tucson Botanical Gardens.
1998 Panel Participant, Development of the Marana Native Plant Ordinance, Marana.
1997-2001 Chair, Facilities Committee, Tucson Botanical Gardens.
1994-present Member, Board of Directors, Tucson Botanical Gardens.

Service/Outreach • University
2017-present Member, the UA Center for Climate Adaptation Science and Solutions (CCASS).
2016-2017 Member, CAPLA Dean Search Committee.
2016 Member, Director Miller 5-year Review Committee.
2015 Co-chair, Director Johnson 5-year Review Committee.
2015 Faculty advisor, UA Community Garden Club.
2013-2014 Dean Cervelli 5-year Review Committee.
2012-present Surface Water Group.
2010-2013 Chair, Committee on Conciliation.
2010-2013 Member, Grievance Clearinghouse Committee.
2010 Advisor, Invention to Venture, The McGuire Entrepreneurship Program and the Office of Technology Transfer.
2009-present Member, Faculty Advisory Committee, Institute for the Environment.
2009-present Member, Committee on Conciliation.
2003 Member, Community Water Harvesting Consortium.
2003 Member, Old Main Steering Committee.
2002 Member, Krutch Garden Advisory Committee.
2000-present Member, Campus Arboretum Committee.
2000-2005 Faculty Marshall and Hooder, University Commencement.
1998-present Member, Association of Women Faculty.
1999-2005 Faculty Advisor, Expanding Your Horizons Conference.
1999-2004 Member, Plant Database Committee.

Service/Outreach • College
2019 Constitution and Bylaws Committee.
2018-2019 Member, SPOAC Advisory Council.
2018 Co-Chair, SPOAC Doctoral Programs Task Force.
2018 Co-Chair, SPOAC Teaching Working Group.
2018 Member, Faculty Promotion Review Committee (2 faculty).
2017 Member, Faculty Tenure Review Committee (1 faculty).
2015 Chair, Faculty Search Committee, Urban Design position, Landscape
Architecture.

### 2014-present
- Member and Co-Chair, Post-Stoltz, Post-Blazquez, and Post-Frederickson Faculty Search Committee, Landscape Architecture.

#### 2014
- Moderator, Panel Discussion on CAPLA Culture and Change.

#### 2013-2015
- Chair, CAPLA Faculty Assembly.

#### 2013-2014
- Urban Design Faculty Search Committee, Architecture.

### 2010-present
- Member, Faculty Status Committee.

#### 2010
- Chair, Post Tenure Review Committee.

#### 2010-2011
- Member, Dean’s Audit Review Committee.

#### 2011-2012
- Chair, Graduate Student Expo.

#### 2010
- Faculty Senate representative (when Director Johnson is absent).

#### 2009-2010
- Chair, Graduate Curriculum Task Force.

#### 2010
- Organizer, Graduate Student Expo.

#### 2007-2009
- Chair, CALA Faculty Assembly.

#### 2007
- Juror, Archon Prize.

#### 2006
- Member, CALA By-laws Committee.

#### 2000-2002
- Member, CAPLA Building Committee.

#### 1998
- Member, Joesler House Advisory Committee.

### Service/Outreach • Department

#### 2012-present
- Faculty Advisor, Third Floor Studio Outreach Committee.

#### 2009-present
- Chair, Graduate Student Expo.

#### 2013-2016
- Member and Co-Chair, Landscape Architecture Faculty Search Committee.

#### 2008, 2006
- Member, Prospective Student Review Committee.

#### 2004, 2003
- Faculty Coordinator, School Fall Retreat.

#### 2003
- Member, Administrative Assistant Search Committee.

#### 2001-2002
- Member, Director Search Committee.

#### 2001
- Speaker, Brown Bag luncheon, ASLA-University of Arizona section.

#### 2001
- Faculty Coordinator, Brown Bag luncheon, ASLA-University of Arizona section, speaker, Janet Rademacher.

#### 2000-2002
- Faculty Coordinator, Student Internship Program.

#### 2000
- Faculty Coordinator, Visiting lecturer, Eduardo Sampre.

#### 1999
- Faculty Coordinator, ASLA Student Awards ceremony.

#### 1999
- Member, Faculty Search Committee.

#### 1999
- Faculty Advisor, Phoenix Shadow Day (organized visits to landscape architecture firms and projects).

#### 1999
- Faculty Advisor, Career Day for Landscape Architecture.

#### 1999
- Faculty Advisor, US Forest Service Internship, Sedona, Arizona.

#### 1998
- Member, Director Search Committee.
Curriculum Vita

Lauri Macmillan Johnson
Professor
School of Landscape Architecture
College of Architecture and Landscape Architecture
P.O. Box 210075
The University of Arizona
Tucson, Arizona 85721-075
(520) 621-8790
ljohnson@u.arizona.edu
February 2010

EDUCATION

MLA Department of Landscape Architecture, College of Fine and Applied Arts, University of Illinois at Urbana-Champaign, 1977, masters project: Institute for Child Behavior and Development playground evolution, advisor: Albert J. Rutledge, major field: landscape architecture

BSLA Department of Landscape Architecture, Cook College, Rutgers University, New Brunswick, New Jersey, 1975, advisor: Jeffery Hall, major field: landscape architecture

ACADEMIC EXPERIENCE

1998-present Associate Professor/ Professor (awarded 2007), School of Landscape Architecture, College of Architecture and Landscape Architecture (CALA) formerly the College of Architecture, Planning, and Landscape Architecture (CAPLA), The University of Arizona, Tucson, Arizona (also 1998-present, affiliated faculty Preservation Studies-an Interdisciplinary Graduate Certificate Program, CALA, The University of Arizona)

1991-1998 Associate Professor, School of Renewable Natural Resources (SRNR), The University of Arizona, Tucson, Arizona (Landscape Architecture was moved to the College of Architecture, Planning, and Landscape Architecture in 1998.)

1989-1991 Associate Professor, School of Natural Resources, College of Agriculture and Forestry, West Virginia University, Morgantown, West Virginia

1982-1989 Assistant Professor, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado

1981-1982 Adjunct Lecturer, Delaware Community College, Media, Pennsylvania

1975-1977 Graduate Teaching Assistant, Department of Landscape Architecture, College of Fine and Applied Arts, University of Illinois at Urbana-Champaign

1982-1985 Teaching Assistant, Department of Landscape Architecture, Cook College, Rutgers University, New Brunswick, New Jersey
ADMINISTRATIVE EXPERIENCE

2009-present  Director of Graduate Studies, School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona

1998-2009  Acting Director, School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona (during Director’s absence)

2000  Interim Associate Director, School of Landscape Architecture, College of Architecture, Planning, and Landscape Architecture, The University of Arizona, Tucson, Arizona

1987  Acting Chairperson, Program of Landscape Architecture and Urban Design, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado

1983-1984  Assistant to the Dean, College of Design and Planning, University of Colorado at Denver, Denver Colorado

PROFESSIONAL EXPERIENCE

1973-present  Landscape Design and Planning Consultant
Selected landscape architectural projects include:
Manzanita Elementary School Playground and Native Tree Garden Site Plan, Tucson, Arizona
Troutdale Village Open Space Master Plan, Evergreen, Colorado
Expert Witness, playground injury litigations, City Attorney’s Office, Denver, Colorado
Castle Pines Open Space Master Plan, Castle Pines, Colorado
Little Lambs Nursery Playground Site Plan, Aurora, Colorado
Niwot Elementary School Outdoor Classroom Design Development, Niwot, Colorado
Harrison Elementary School Playground Design Development, Canyon City, Colorado
Treeview Montessori Daycare Outdoor Classroom Site Plan, Evergreen, Colorado
Kittredge Park Master Plan, Kittredge, Colorado
Numerous residential Site Plans including: Feldman, Tucson, Arizona; Spalding, Evergreen, Colorado; Bliss, Evergreen, Colorado; Roger, Littleton, Colorado; Jackson, Denver, Colorado; Vardaman, Denver Colorado; Temin, Philadelphia, Pennsylvania; James, Philadelphia, Pennsylvania
Edison Township, City-wide Park and Playground Master Plans, Edison, New Jersey
East Brunswick Township, City-wide Park and Playground Master Plans, East Brunswick, New Jersey
Selected landscape architectural projects include:
Riverbend Master Plan, East Baton Rouge, Louisiana
667 Acre Tract Master Plan, Boca Raton, Florida

Selected landscape architectural projects include:
*Staten Island Development Center Environmental Factors* Report, Staten Island, New York
Pump House Plaza, at the World Trade Center Towers Site Plan, New York, New York
City of Compton, City-wide Park Master Plans, Compton, California
Charlotte Douglas International Airport Design Development, Charlotte, North Carolina
Eastern Market Historic Structure and Streetscape Revitalization Master Plan, Washington, D.C.
Andrews Air Force Base Master Plan, Landover, Maryland
Several New York City Park Design Development Plans: Springfield Park, Metro North Park, St. Nickolas Park
*Highland Scenic Highway Extension Visual Quality Analysis* Report, Elkins, West Virginia
Capitol Gallery Roof Garden Site Plan, Washington D.C.
*City of Gary Streetscape and Urban Revitalization Master Plan* Report, Gary, Indiana
Somerset Homes Open Space Master Plan, Baltimore, Maryland
Baltimore Transit Authority, Sudbrook Right of Way Design Development, Baltimore, Maryland

1979  Project Designer, Andropogen, Philadelphia, Pennsylvania
Selected landscape architectural projects include:
Morris Arboretum Master Plan, Philadelphia, Pennsylvania
The University of Pennsylvania Campus Master Plan and Focal Rose Arbor Design Development, Philadelphia, Pennsylvania

Selected design projects include graphic design for several master plan reports

1977-1978  Project Manager and Graphic Designer, Schnadelbach, Braun Partnership
Philadelphia, Pennsylvania
Selected landscape architectural projects include:
Bell Operations Housing Community Master Plan, Isfahan, Iran
*Atlantic City Master Plan* Report, Atlantic City, New Jersey

1977  Project Manager and Designer, National Plantscape, Interior Designers
Philadelphia, Pennsylvania
Selected landscape plans include:
Resorts International Interior Courtyard Planting Plan, Atlantic City, New Jersey
New Market Courtyard Planting Plan, Philadelphia, Pennsylvania
Center Square Interior Courtyard Planting Plan, Philadelphia, Pennsylvania

1975  Designer, Synterra Ltd., Philadelphia, Pennsylvania
Selected landscape architectural projects include:
Mt. Pisgah State Park Master Plan, Bradford County, Pennsylvania
Boys Park Design Development, Newark, New Jersey
Disston Recreation Center Design Development, Philadelphia, Pennsylvania

PROFESSIONAL MEMBERSHIPS

American Society of Landscape Architects
Council of Educators in Landscape Architecture
Society for Ecological Restoration

HONORS AND AWARDS

2007  Award for Faculty Excellence, Darryl B. Dobras, College of Architecture, Planning, and Landscape Architecture, The University of Arizona

2001  Congressional Award for Outstanding Community Service, Office of Ed Pastor, United States Congressman

2001  Award for Faculty Excellence, Darryl B. Dobras, College of Architecture, Planning, and Landscape Architecture, The University of Arizona

2000  Award for Outstanding Faculty Contributions, College of Architecture, Planning, and Landscape Architecture, The University of Arizona, Tucson, Arizona

1995  Recognition for Outstanding Teaching, Office of Academic Programs, The University of Arizona

1992  Sigma Lambda Alpha, the National Honor Society of Landscape Architecture

1988  Tau Sigma Delta Honor Society in Architecture and Allied Arts

1988  Merit Award, Faculty Art Show, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado

1987  Service Award, Colorado Chapter of the American Society of Landscape Architects

1987  Award for Excellence in Teaching, University of Colorado at Denver, Denver, Colorado

1971  Middlesex County, New Jersey, Regional Arts Council Award for Excellence in Sculpture (selected for traveling exhibit)
SERVICE – DEPARTMENTAL COMMITTEES

The University of Arizona

2009-present Director of Graduate Studies: student advising, graduate orientation, student recruitment, awards coordination, faculty reviews.
2008, 2010 Member, Graduate Student Applicant Review
1991-present Member, Curriculum Development (1991-1994 development of the five year BLA undergraduate curriculum, (1994-present development of the three year MLA curriculum)
1993, 2003 Member, “Save the Landscape Architecture School/Program” (ad-hoc committee of faculty, students, and professionals working together to keep landscape architecture from elimination at The University of Arizona)
2002 Chair, Promotion and Tenure Review
1998, 2001-2002 Member, Director Search Committees
1998, 2002 Member, School Accreditation Reports
2000-2001 Chair, Faculty Search Committee
2000 Faculty Coordinator, for visiting scholar
2000 Co-Chair, Faculty Search Committee
1994, 1996, 2000 Chair, and Co-Chair, American Society of Landscape Architecture Student Awards Program
1994 Member, Self Evaluation Report (program evaluation)
1992-1993 Member, Development of the Ph.D. Program in Landscape Architecture
1991-1993 Member, School Faculty Search Committee
1992 Member, School Awards Committee

University of Colorado at Denver

1982-1989 Member, Faculty Search Committees
1982-1988 Member, Faculty Review Committees
1986-1987 Chair, Director Search Committee
1985 Coordinator, Continuing Education Program (development of several short courses in conjunction with the Colorado Chapter of the American Society of Landscape Architects)
1985 Member, Professional Advisory Board
1985 Chair, American Society of Landscape Architects Student Awards Committee

SERVICE – COLLEGE COMMITTEES

The University of Arizona

2009-Present Member, Dean’s and Director’s Council
2000-Present Member, Bylaw Review and Revision Task Force
2009-present Chair, Faculty Status Task Force
2009-present Member Curriculum Task Force—Graduate
2006-present Member, CALA, Special Events Committee
2003-present Member, CALA, Lecture Series Committee
2000-present Member, Chair (2002), CALA, Faculty Status Committee
2007-2008 Member Dean Search Committee
2005 Juror, Archon Prize
2004  Elected Faculty Representative, CALA, Key Personnel Salary Adjustment Committee
1998-2003  Member, CAPLA, Curriculum Committee (course review and approval)
2002  Outreach Reprehensive, CAPLA, for presentation of community design projects to Arizona state legislators
2000  Chair, CAPLA, Grade Appeal Committee
1998  Member, CAPLA, Associate Dean Search
1995-1998  Member, SRNR, Peer Evaluation of Teaching
1996-1997  Co-Chair, SRNR, Lecture Series Committee
1995-1997  Member, SRNR, Computer Resources Committee
1992-1996  Chair, SRNR, Lecture Series Committee
1992-1996  Member, SRNR, Recruitment and Retention Committee
1994-1995  Chair, SRNR, Outreach Display Committee
1995  Participant, SRNR, Arizona Cooperative Extension’s Moving to Higher Ground, Assessment of Educational Programs
1993-1995  Member, SRNR, Core Curriculum Committee
1992-1994  Member, SRNR, Awards Committee

West Virginia University

1989-1991  Member, College of Agriculture and Forestry, Academic Standards Committee

University of Colorado at Denver

1986-1987  Member, Associate Dean Search Committee
1985  Member, Dean Search Committee
1985  Member, Lecture Series Committee
1983-1984  Member, Honorary Degree Committee for Hideo Sasaki

SERVICE – UNIVERSITY COMMITTEES

The University of Arizona

2009-present  Provost Task Force - Creating an Online Reporting System to Use in Annual Reviews of Faculty; severing also on two related sub-committees
2008-present  Faculty Senate
2002  Member, Healthy Cities/Communities Consortium (ad-hoc research discussion group for interdisciplinary approaches to the creation of healthy communities)
1998-2002  Representative, CAPLA, Enhanced Review Board
1995-1997  Member, Campus Library Council
1993-1996  Member, Planning and Design Review Advisory Committee (PADRAC)
1993-1996  Member, Committee on Academic Freedom and Tenure (three year term)

West Virginia University

1989-1991  Member, Campus Historic Preservation Committee
1989-1991  Member, Academic Standards Committee
### University of Colorado at Denver (selected)

<table>
<thead>
<tr>
<th>Year</th>
<th>Role and Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987-1988</td>
<td>Member, Academic Affairs Committee</td>
</tr>
<tr>
<td>1986-1987</td>
<td>Member, Curriculum Committee (course review and approval)</td>
</tr>
<tr>
<td>1986-1987</td>
<td>Member, Student Assistance Committee</td>
</tr>
<tr>
<td>1986-1987</td>
<td>Member, Student Retention Committee</td>
</tr>
</tbody>
</table>

### SERVICE – NATIONAL AND LOCAL OFFICES/TASK FORCES/COMMITTEES

<table>
<thead>
<tr>
<th>Year</th>
<th>Role and Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-present</td>
<td>Advisor, Sigma Lambda Alpha, Iota Chapter, the National Honor Society of Landscape Architecture</td>
</tr>
<tr>
<td>2002-2005</td>
<td>Regional Director (Region Two), Council of Educators in Landscape Architecture</td>
</tr>
<tr>
<td>2004</td>
<td>Judge, Southern Arizona Home Builders Association, Home Show, Tucson, Arizona</td>
</tr>
<tr>
<td>2004</td>
<td>Session Chair, <em>Landscape Architecture</em>, Hawaii International Conference on Arts and Humanities, University of Hawaii, West Oahu, East West Council for Education, Asia-pacific Research Institute of Peking University, Honolulu, Hawaii, January 8-11</td>
</tr>
<tr>
<td>2003</td>
<td>Session Moderator, Council of Educators in Landscape Architecture Annual Conference, <em>Imprints/Footprints</em>, Clemson University, Charleston, South Carolina, September 24-27</td>
</tr>
<tr>
<td>2002</td>
<td>External Review, Promotion and Tenure, College of Architecture and Environmental Design, School of Planning and Landscape Architecture, Arizona State University</td>
</tr>
<tr>
<td>1998-2000</td>
<td>Founding Member, Citizens for Excellence in Education, In the Greater Community of Elgin, Patagonia, and Sonoita, Arizona</td>
</tr>
<tr>
<td>1998</td>
<td>Chair and Juror, Texas Chapter of the American Society of Landscape Architects Annual Awards Program for Design, Planning, Research, and Envisioned Landscapes</td>
</tr>
<tr>
<td>1998</td>
<td>Co-Chair, conference organization, <em>Identification and Analysis of Cultural Landscapes: Different Voices, Different Visions</em> jointly organized between The University of Arizona and the National Park Service, Tumacacori National Monument, Arizona, (Speaker Organization, Cultural Landscape Training, Session Moderator), September 14-18</td>
</tr>
<tr>
<td>1997-1998</td>
<td>Southern Section Chair, Arizona Chapter of the American Society of Landscape Architects</td>
</tr>
<tr>
<td>1995-1997</td>
<td>Elected School Board Member, Sonoita Elementary School District #25, Arizona Landscape Architects</td>
</tr>
</tbody>
</table>
1993  External Review, Promotion and Tenure, School of Architecture and Planning, University of Colorado at Denver, Denver, Colorado

1992  Juror, Southern Arizona Water Resources Association Annual Xeriscape Awards

1988-1989  Regional Director (Region Three), Council of Educators in Landscape Architecture

1988-1989  Co-Chair, Council of Educators in Landscape Architecture, preliminary conference organization, 1990 *Tourism, Recreation, and Resort Design*, University of Colorado at Denver, Denver, Colorado, October 4-7


1986  Juror, Colorado Chapter of the American Society of Landscape Architects, Annual Design Awards Program

1986  Session Moderator, Council of Educators in Landscape Architecture Annual Conference, *Vegetation*, the University of Georgia, Athens, Georgia, September 10-12

1984-1986  Chair, Design Review Board, Jefferson County, Colorado

1985  Member, Landscape Architect IV Examining Board, responsible for evaluating candidates for City Landscape Architect, Denver, Colorado

1985  Member, Evergreen Lake Master Plan Committee, Evergreen, Colorado

1981  Member, Mayor’s Advisory Council, Task Force Member for City Beautification, Philadelphia, Pennsylvania

**DESIGN COMPETITIONS**

2003  Winning entry, accepted and constructed, “Garden of Abandonment” Le Conservatoire de Chaumont-sur-loire, France, International Festival of Gardens (des Parcs et Jardins), festival theme *Weeds* (Mauvaise Herbe), (with Hili Sonia Mann). 60%

1987  Design entry, Woman's Rights National Historic Park, Seneca Falls, New York, United States Department of the Interior, National Park Service and the National Endowment for the Arts (with Gail Whitney Karn, and Diane Wilk Shirvani). Entry selected for national traveling exhibit. 40%

**PUBLICATIONS – INTERVIEWS, CREATIVE WORK FEATURED** (selected)

Book: *Creating Outdoor Classrooms...* featured at the 2009 American Society of Landscape Architects (ASLA) Annual Meeting and Expo, [ASLA/ Urban Land Institute (ULI) Bookstore], *Beyond Sustainability: Regenerating places and people*, September 18-21, 2009, Lakeside Center at McCormick Place.

Artfully Green


Wikipedia: Ak-Chin Indian Community


Barton, Benjamin. 2006. Tort reform, innovation, and playground design. 57 Florida Law Review 265


Wright, Elizabeth. 2003. United States Department of Health and Human Services, Office of Planning and Education. Interview on playground design for safety.


**PUBLICATIONS – REFEREED BOOKS**


http://www.gf.state.az.us/i_e/ee/resources/books/schoolyard_habitat.pdf [May, 2006].

**PUBLICATIONS – REFEREED BOOK CHAPTERS**


**PUBLICATIONS – EDITORSHIPS**

1994-present Manuscript reviewer for:
Annual Association of Collegiate School of Architecture
Environmental Design Research Association
Council of Educators in Landscape Architecture
*Landscape Journal*
Thomson Publishing
Prentice Hall


PUBLICATIONS – REFEREED JOURNAL ARTICLES


PUBLICATIONS – REFEREED PROCEEDINGS – SCHOLARLY PRESENTATIONS


Darnell, Beth, Margaret Livingston, and Lauri Macmillan Johnson. 2003. Assessing the play value of vegetation in the outdoor environments of NAEYC-accredited preschool programs in Tucson, AZ. *Proceedings Council of Educators in Landscape Architecture Annual Conference, Imprints/Footprints*, Clemson University, Charleston, South Carolina, September 24-27, abstract:171, proceedings:176-162. 20%


Exploring Livability and Quality of Life, Portland, Oregon, October 2-6:172-177. Translated in Japanese and published in Landscape Design 14 (December):102-103. 70%

Johnson, Lauri Macmillan. 1988. Exploring a design concept for a dynamic urban landscape. Proceedings Council of Educators in Landscape Architecture Annual Conference, Sustainable Landscapes, California State Polytechnic University, Pomona, California, June 22-25. 100%


PUBLICATIONS – REFEREED ABSTRACTS – SCHOLARLY PRESENTATIONS


Johnson, Lauri Macmillan and Steven M. Johnson. 1990. Giving tourists the true place. *Abstracts Council of Educators in Landscape Architecture Annual Conference, Tourism, Recreation, and Resort Design*, University of Colorado at Denver, October 4-7:91. 75%


**PUBLICATIONS – REFEREED EXHIBIT CATALOGUES**


**PUBLICATIONS – REFEREED OTHER**


PUBLICATIONS – REFEREED REPORTS

In progress (see Grants)

Johnson, Lauri Macmillan, Matthew Bossler and Theresa Gredig. 2010. Tumacacori National Historical Park, Arizona, Park-wide Cultural Landscape Inventory and National Register nominations, Tumacacori National Historical Park, Tumacacori, Arizona. 50%.

Johnson, Lauri Macmillan, Julia Roberts and Michael Massa. 2010. San Antonio Missions Cultural Landscape Inventories for, San Antonio National Park, San Antonio, Texas. 50%.

Johnson, Lauri Macmillan, Daniel Bradshaw. 2010. Fort Davis National Historic Site, Conceptual Master Plan for Interpretative Spaces and Signage, Fort Davis National Historic site, Fort Davis, Texas. 40%.

Completed (see Grants)

Johnson, Lauri Macmillan, R Brooks Jeffery, and Wendy Lotze. 2008. Bryce Canyon National Park; Old NPS Housing and Bryce Canyon Lodge Cultural Landscape Report, Bryce Canyon National Park, Utah. 50%
http://www.nps.gov/history/history/online_books/brca/clr/index.htm


PUBLICATIONS – WORK IN PROGRESS


Johnson, Lauri Macmillan. Art in landscape interpretation. Landscape Journal. Accepted with revisions. 100%
MEDIA – EXHIBITS

2009 Council of Educators in Landscape Architecture: Teaching + Learning Landscape, Tucson, Arizona, January 14-17, 2009, exhibit of student work.

2008 National Parking Day (September 19), six MLA graduate student exhibits, Tucson, Arizona

2008 Go Green Exhibit, CALA Centrum, The University of Arizona (with Tom Powers lead)

2006 Designs for the Capitol Mall Exhibit, the University of Arizona Pride Night: to meet Arizona State Representatives

1988 Student/Faculty Art Show, School of Architecture and Planning, University of Colorado at Denver.


1985 Photo show entitled Inhabitants I: a Photographic Exhibit of Vernacular Design in Colorado, City Spirit Book Store and Art Gallery, October-December, (with Steven M. Johnson).

MEDIA – SHOWS, VIDEOTAPES – INVITED

2007 Arizona Illustrated, KUAT, Arizona Public Television, design for Valley of the Moon, Tucson, Arizona, fall.

2000 Arizona Illustrated, KUAT, Arizona Public Television, design for the Ochoa Elementary School, Tucson, Arizona, fall.

2000 Interview by Jeff Harrison, The University of Arizona News Services, community outreach projects, for distribution to the following stations KCEE - Tucson, KAVV - Benson, KIKO - Miami/Globe, KLPZ - Parker, KVWN - Show Low, KATO - Stafford, Thatcher, and KAHM - Prescott, Flagstaff (with Margaret Livingston).

1996 Interview by Margo Adler on playground design for All Things Considered, National Public Radio, July 8.


SCHOLARLY PRESENTATIONS – INVITED


**REFEREED PROCEEDINGS – ABSTRACTS – SCHOLARLY PRESENTATIONS**

(Accepted, Not Published or Presented)


Johnson, Lauri Macmillan, Charles Albanese, Thomas Peterson, Michael Mathieu, Ronald Stoltz. 2007. The Arizona State Plaza outcomes from an interdisciplinary service learning project. *Connected International Conference on Design Education*, University of South Wales,
Sydney, Australia, July 9-12 2007 (accepted paper but insufficient funds for conference attendance).  75%


**GRANTS AND SERVICE CONTRACTS – FEDERAL**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Funding Agency</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>United States Department of the Interior, National Park Service, Colorado Plateau Cooperative Ecosystem Studies Unit, Cooperative Agreement, San Antonio Missions Cultural Landscape Inventory. Principal Investigator, $45,000. 100%.</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$45,000</td>
<td>100%</td>
</tr>
<tr>
<td>2008-2010</td>
<td>United States Department of the Interior, National Park Service, Colorado Plateau Cooperative Ecosystem Studies Unit, Cooperative Agreement, Tumacacori National Historical Park, Arizona, Park-wide Cultural Landscape Inventory and National Register nominations. Principal Investigator, $60,900. 100%.</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$60,900</td>
<td>100%</td>
</tr>
<tr>
<td>2008-2010</td>
<td>United States Department of the Interior, National Park Service, Desert Southwest Cooperative Ecosystem Studies Unit, Cooperative Agreement, Fort Davis National Historic Site, Conceptual Master Plan for Interpretative Spaces and Signage. Principal Investigator, $24,700. 100%</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$24,700</td>
<td>100%</td>
</tr>
<tr>
<td>2008</td>
<td>United States Department of the Interior, National Park Service, Casa Grande Ruins National Monument, Schematic Design for New Multi-Purpose Room at Existing visitor Center. Co-Principal Investigator with R. Brooks Jeffery, $20,000. 50%</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$20,000</td>
<td>50%</td>
</tr>
<tr>
<td>2005-2008</td>
<td>United States Department of the Interior, National Park Service, Bryce Canyon National Park, Utah, Cultural Landscape Report. Co-Principal Investigator, with R. Brooks Jeffery, $100,000. 50%.</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$100,000</td>
<td>50%</td>
</tr>
<tr>
<td>2003</td>
<td>United States Department of the Interior, National Park Service, Chamizal National Memorial, El Paso, Texas, Cultural Master Plan. Co-Principal Investigator, with Ronald Stoltz, $5,000. 50%</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$5,000</td>
<td>50%</td>
</tr>
<tr>
<td>1999-2000</td>
<td>United States Department of the Interior, National Park Service, Fort Bowie National Historic Site, Cultural Landscape Inventory. Principal Investigator, $8,000. 100%</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$8,000</td>
<td>100%</td>
</tr>
<tr>
<td>1996-1998</td>
<td>United States Department of the Interior, National Park Service, Faraway Ranch, Chiricahua National Monument, Arizona; Organ Pipe Cactus National Monument, Arizona; Casa Grande Ruins National Monument, Arizona; Aztec Ruins National Monument, New Mexico, Cultural</td>
<td>United States Department of the Interior, National Park Service</td>
<td>$10,000</td>
<td>100%</td>
</tr>
</tbody>
</table>
Landscape Inventories. Co-Principal Investigator, with Ervin H. Zube, $21,500. 75%


GRANTS AND SERVICE CONTRACTS – STATE, COUNTY, CITY

2004 International Affairs, The University of Arizona, Foreign Travel Grant to present paper at Open Space: People Space Conference held by the Edinburgh College of Art, Edinburgh, Scotland. Principal Investigator, $700. 100%

2003 International Affairs, The University of Arizona, Foreign Travel Grant for design installation at the International des Parcs et Jardins (International Festival of Gardens), Le Conservatoire de Chaumont-sur-loire, France. Principal Investigator, $700. 100%

1997-2000 Arizona Game and Fish Department, Schoolyard Habitat Design Handbook and Workshops. Principal Investigator, $9,793. 100%

1993-1997 Arizona Agricultural Experimentation Station, The University of Arizona, Cooperative State Research Grant, Contemporary Projects in Landscape Architecture. Principal Investigator, $20,764. 100%

1987-1988 Larimer County Mutual Affordable Housing Association, The Brook Knolls Cooperative Community Master Plan, Loveland, Colorado. Principal Investigator, $10,270. 100%

1987 United States Department of the Interior, Bureau of Land Management (BLM), County of Clear Creek, Colorado Master Plan for Release of BLM Lands. Principal Investigator, $7,500. 100%

GRANTS AND SERVICE CONTRACTS – INDUSTRY

2003 Le Conservatoire de Chaumont-sur-loire, France, International des Parcs et Jardins (International Festival of Gardens), materials, labor, for construction. Co-Principal Investigator with Hili Sonia Mann, 15,000E ($18,000). 50%

GRANTS – PROFESSIONAL DEVELOPMENT

1997 College of Agriculture, The University of Arizona, faculty training: Historic Landscape Preservation Workshop, Alliance for Historic Landscape Preservation, National Center for Preservation Technology and Training, Utah Division of State History, Salt Lake City, Utah, June 26 and 27. $1,200. 100%

**GRANTS AND SEVERE CONTRACTS, GIFTS FOR SERVICE LEARNING**

The following funds were used in conjunction with courses, MLA theses and MLA Reports, independent studies, internships, or for student wages for community design projects.

1999-2000  Richard Rainwater Foundation, Forth Worth, Texas; Crescent Real Estate Equities Company, Fort Worth, Texas; and Canyon Ranch, Tucson, Arizona; Ochoa Elementary School Outdoor Classroom Master Plan, Tucson, Arizona. Principal Investigator, $2,500. [This effort led to a HUD grant award for construction. $380,000. The project represents one of only 14 federal grants, allocated for community projects, from the office of Vice]
President Al Gore. This is the first HUD grant, for community design, awarded in the state of Arizona.] 100%

1999-2000 Miles Exploratory School Outdoor Learning/Healing Garden Master Plan for all Children (some with special needs including autism), Tucson, Arizona. Principal Investigator, $1,000. 100%

1999-2000 Patagonia Union High School, Patagonia Middle School Campus Master Plan and Interpretative Trail for Outdoor Learning, Patagonia, Arizona. Principal Investigator, $700. [This effort led to a grant for construction through Arizona Heritage Funds and the Disney Corporation. $250,000.] 100%

1997 Lawrence Intermediate School Ethno-botanical Garden Design for Multi-cultural Learning, Tucson, Arizona. Principal Investigator, $1,000. 100%

1997 Ft Lowel Elementary School Wildlife Garden and Globe Science Station Design Development, Tucson, Arizona. Principal Investigator, $500. 100%

1996 Elgin Elementary School Outdoor Classroom Master Plan, Sonoita, Arizona. Principal Investigator, $500. 100%

1995-1996 Cerbat Elementary School Outdoor Classroom Site Plan, Kingman, Arizona. Principal Investigator, $900. 100%

1995-1996 City of Globe Round Mountain Park Trail Design Development, Globe Arizona. Principal Investigator, $6,200. 100%

1995 Rodgers Elementary School Outdoor Classroom Design Concepts, Tucson, Arizona. Principal Investigator, $500. 100%

1995 Orange Grove Middle School Outdoor Classroom Design Concepts, Tucson, Arizona. Principal Investigator, $500. 100%

1994 Town of Kearny, ASARCO Copper Mine, and the Copper Basin Railroad, Kearny Town Revitalization Study, Kearny, Arizona. Principal Investigator, $1,100. 100% 1993 Santa Cruz County, La Concha Pocket Park Master Plan, Nogales, Arizona. Principal Investigador, $900. 100%

1993 Karsten Turf Grass Research Center Master Plan, Tucson, Arizona. Co-Principal Investigator, with Mark Frederickson, $3,000. 50%

1992 Falling Waters School District Site Inventory and Analysis, Tucson, Arizona. Principal Investigator, $1,000. 100%

1987 City of Woodland Park Master Plan, Woodland, Colorado. Principal Investigator, $1,500. 100%

1987 Cherry Hills Elementary School Playground Site Plan, Englewood, Colorado. Principal Investigator, $500. 100%

PRO-BONO SERVICE LEARNING

2009 San Xavier Path Mission Gateway, San Xavier District Tohono O’odham Nation Planning Design Vision Drawings prepared by MLA Candidate, Eirin Bareis. These drawings were used by the District in a grant application that was awarded: by the State Transpiration Board of the Arizona Department of Transportation (award for graduate assistance from Dean Cervelli: $500.00).
<table>
<thead>
<tr>
<th>Year</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Cooper Center for Environmental Learning, Tucson Unified School District and The University of Arizona’s College of Education, Department of Teaching, Learning, and Socio-cultural Studies, Tucson, Arizona: <em>Campus master plan</em>, with professor Chalfoun.</td>
</tr>
<tr>
<td>2009</td>
<td>Reid Park Zoo, Tucson Parks and Recreation, Tucson Arizona: <em>Master plan</em> with consideration for expansion and redevelopment of the existing elephant exhibit.</td>
</tr>
<tr>
<td>2007</td>
<td>Valley of the Moon Master Plan, Tucson, Arizona.</td>
</tr>
<tr>
<td>2007</td>
<td>School of Art Site Plan, The University of Arizona (collaboration with Graphic Arts Department)</td>
</tr>
<tr>
<td>2006</td>
<td>Capitol Mall Plaza, Phoenix, Arizona (collaboration with Dean Charles Albanese, Dean Thomas Peterson, Michael Mathieu, and Ronald Stoltz).</td>
</tr>
<tr>
<td>2006</td>
<td>Saint Augustine Catholic High School Campus Master Plan, Tucson Arizona.</td>
</tr>
<tr>
<td>2006</td>
<td>Reid Park Zoo, Special Events Garden, Tucson Parks and Recreation, Tucson Arizona.</td>
</tr>
<tr>
<td>2005</td>
<td>The Tucson Theatre District Revitalization Concepts, with a focus on the Rialto Theatre, Tucson, Arizona.</td>
</tr>
<tr>
<td>1993</td>
<td>Tucson Center for the Blind and Visually Impaired Training Course Master Plan, Tucson, Arizona.</td>
</tr>
<tr>
<td>1990</td>
<td>Terra Alta Elementary School Outdoor Classroom Design Concepts, Terra Alta, West Virginia.</td>
</tr>
<tr>
<td>1985</td>
<td>The Denver Planning Office, City and County of Denver, Open Space Master Plan, Denver, Colorado.</td>
</tr>
</tbody>
</table>
1984 Town of Nederland, Town Image Study, Nederland, Colorado.
1983 Gilpin Extended Day Center Playground Site Plan, Denver, Colorado.

TEACHING GRANTS

1977-2002 Office of Undergraduate Education, The University of Arizona, teaching assistantships, class expenses, INDV 102 American Design on the Land. Principal Investigator, $23,500. 100%

1999-2000 Faculty-Student Curriculum Development Grant, The University of Arizona, Internet site development, INDV 102 American Design on the Land. Principal Investigator, $5,000. [Resulted in the following on-line source that includes course syllabus, assignments, lecture notes, and related Web-links (password protected): www.architecture.arizona.edu/landscape/courses/indv102/default.htm [December 11, 2002]. 100%]

1998 Office of Undergraduate Education, The University of Arizona, Course development, INDV 102 American Design on the Land. Principal Investigator, $7,500. 100%

1998 Faculty Center for Instructional Innovation, The University of Arizona, “Joining the Worlds of Teaching, Learning, and Technology,” training and equipment. Participant, $2,500. 100%

1988-1989 Teaching Enhancement Grant, University of Colorado at Denver. Principal Investigator, $480. 100%

DESIGN COMPETITIONS (Within the context of teaching)

2009 Finalist and semifinalist recognition in Recycle This Site, Competition, Asheville, North Carolina, sponsored by the Land of Sky Regional Council, with Nader Chalfoun. [http://www.recyclethissite.org/] (February, 2010).

2008 International Student Design Competition, Buckhead Neighborhood Park Sponsored by Park Pride, 8th Annual Parks and Green Space Conference, City of Atlanta, [http://spdc.msu.edu/LinkClick.aspx?fileticket=JR%2Fcrrgz1sw%3D&tabid=93] (February 2010);

Aspen Design Challenge, Designing Water’s Future, 2008-2009; sponsored by AIGA, the professional association for design, New York, [http://www.aspendesignchallenge.org/content.cfm/08-09] (February 2010);

Land/art proposals for Harwood Art Center in conjunction with the Rio Grande Bosque, City of Albuquerque Public Art Program, [http://harwoodartcenter.org/ss/] (February, 2010);

Cleveland Design competition sponsored by the Cleveland Urban Design Collaborative, Project 2008 interPLAY, [http://www.clevelandcompetition.com/weblog.html] (February, 2010);

2007 Third Place, “Daily migrations,” Mixed use development with riparian forest habitat interface, in Integrating Habitats design competition, Metro and City of Portland, studio advisor to Roby Babcock, Kate Dinsmore, Brent Jacobsen, Melisa Kennedy. Student work displayed [http://www.metro-


2004  Design entry International design competition, *Garden for Lovers*, Trauttmansdorff Castle, Meran/Italy, studio advisor to Angie Watson, and Nathan King.


1991  Merit Award Governor Symington's Environmental License Plate Design Competition, studio advisor to Cynthia Lunine.

**COURSES TAUGHT**

_School of Landscape Architecture, The University of Arizona, Tucson, Arizona (undergraduate and graduate courses)_

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name, Units, Percent Effort</th>
<th>Semester</th>
<th>Years Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 101</td>
<td>Introduction to Landscape Architecture (2) 100%</td>
<td>Fall</td>
<td>1992, 1993</td>
</tr>
<tr>
<td>INDV 102</td>
<td>American Design on the Land (3) 100%</td>
<td>Fall</td>
<td>1998-2002</td>
</tr>
<tr>
<td>RNR 105</td>
<td>Survey of Landscape Architecture (2) 100%</td>
<td>Fall</td>
<td>1995, 1997</td>
</tr>
<tr>
<td>LAR 201</td>
<td>Intermediate Design III (4) 100%</td>
<td>Fall</td>
<td>1992</td>
</tr>
<tr>
<td>LAR 202</td>
<td>Intermediate Design IV (4) 100%</td>
<td>Spring</td>
<td>1994, 1995</td>
</tr>
<tr>
<td>LAR 212</td>
<td>Landscape Graphic Communication (3) 100%</td>
<td>Spring</td>
<td>1992</td>
</tr>
<tr>
<td>LAR 301</td>
<td>Site Planning and Design Studio (4) 100%</td>
<td>Fall</td>
<td>1991</td>
</tr>
<tr>
<td>LAR 302</td>
<td>Urban Landscape Design (4) 100%</td>
<td>Spring</td>
<td>1993, 1996</td>
</tr>
<tr>
<td>LAR 401</td>
<td>Urban Design (4) 100%</td>
<td>Fall</td>
<td>1991</td>
</tr>
<tr>
<td>LAR 522B</td>
<td>Advanced Landscape Design (4) 100%</td>
<td>Spring</td>
<td>1992</td>
</tr>
<tr>
<td>LAR 438/538</td>
<td>Planting Design (3) 100%</td>
<td>Spring</td>
<td>1997</td>
</tr>
<tr>
<td>ARC 597</td>
<td>Special Projects in Architecture (1)</td>
<td>Fall</td>
<td>2000</td>
</tr>
<tr>
<td>Course No.</td>
<td>Course Name, Units, Percent Effort</td>
<td>Semester</td>
<td>Years Taught</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>LAR 499/599</td>
<td>Ind. Study used for LAR 511 (forthcoming) (4) 100%</td>
<td>Spring</td>
<td>1995, 1996</td>
</tr>
<tr>
<td>LAR 599</td>
<td>Ind. Study (1-3) 100%</td>
<td>Fall</td>
<td>1997-2005</td>
</tr>
<tr>
<td>LAR 620/610</td>
<td>Design Studio III (4) 100%</td>
<td>Fall</td>
<td>2003-2009</td>
</tr>
<tr>
<td>LAR 699</td>
<td>Landscape as Art Seminar (1) 100%</td>
<td>Spring</td>
<td>1992</td>
</tr>
<tr>
<td>LAR 699</td>
<td>Children’s Environments Seminar (1) 100%</td>
<td>Spring</td>
<td>1996</td>
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<td>LAR 699</td>
<td>Landscape as Art Seminar (1) 100%</td>
<td>Spring</td>
<td>2001, 2002</td>
</tr>
<tr>
<td>LAR 699</td>
<td>Advanced Graphic Seminar (1) 100%</td>
<td>Spring</td>
<td>2001</td>
</tr>
<tr>
<td>LAR 694</td>
<td>Practicum (4) 100%</td>
<td>Fall</td>
<td>1997-2001</td>
</tr>
<tr>
<td>LAR 694</td>
<td>Practicum (4) 100%</td>
<td>Fall</td>
<td>1997-2001</td>
</tr>
</tbody>
</table>

**Program of Landscape Architecture, School of Natural Resources, West Virginia University, Morgantown, West Virginia (undergraduate courses)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name, Units, Percent Effort</th>
<th>Semester</th>
<th>Years Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 020</td>
<td>Landscape Architectural Drawing (3) 100%</td>
<td>Fall</td>
<td>1989, 1990</td>
</tr>
<tr>
<td>LAR 112</td>
<td>Landscape Architectural History (3) 100%</td>
<td>Spring</td>
<td>1990, 1991</td>
</tr>
<tr>
<td>LAR 150</td>
<td>Landscape Architectural Design I (6) 50%</td>
<td>Fall</td>
<td>1989, 1990</td>
</tr>
<tr>
<td>LAR 151</td>
<td>Landscape Architectural Design II (6) 100%</td>
<td>Spring</td>
<td>1990</td>
</tr>
<tr>
<td>LAR 251</td>
<td>Advanced Landscape Architectural Design II (6) 100%</td>
<td>Spring</td>
<td>1990</td>
</tr>
</tbody>
</table>

**Program of Landscape Architecture and Urban Design, College of Architecture and Planning, University of Colorado at Denver, Denver, Colorado (Graduate courses)**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name, Units, Percent Effort</th>
<th>Semester</th>
<th>Years Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA 500</td>
<td>Landscape Architecture I (6) 100%</td>
<td>Fall</td>
<td>1982-1988</td>
</tr>
<tr>
<td>LA 501</td>
<td>Landscape Architecture II (6) 100%</td>
<td>Spring</td>
<td>1982-1986</td>
</tr>
<tr>
<td>LA 510</td>
<td>Graphic Communication I (3) 100%</td>
<td>Fall</td>
<td>1983-1988</td>
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<tr>
<td>LA 511</td>
<td>Graphic Communication II(3) 100%</td>
<td>Spring</td>
<td>1988</td>
</tr>
<tr>
<td>LA 509</td>
<td>Design Drawing (elective) (3) 100%</td>
<td>Summer</td>
<td>1983-1987</td>
</tr>
<tr>
<td>LA 609</td>
<td>Design Drawing (elective) (3) 100%</td>
<td>Winter</td>
<td>1983-1988</td>
</tr>
<tr>
<td>LA 5521</td>
<td>Landscape Architecture History (3) 100%</td>
<td>Spring</td>
<td>1988-1989</td>
</tr>
<tr>
<td>LA 581</td>
<td>Rocky Mountain Plant Design (3) 100%</td>
<td>Spring</td>
<td>1985-1987-1989</td>
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<tr>
<td>LA 601</td>
<td>Landscape Architecture IV (6) 100%</td>
<td>Spring</td>
<td>1987</td>
</tr>
<tr>
<td>LA 630</td>
<td>Landscape Architecture for Allied Designers (3) 100%</td>
<td>Spring</td>
<td>1983</td>
</tr>
<tr>
<td>LA 763</td>
<td>Professional Practice (3) 100%</td>
<td>Spring</td>
<td>1986</td>
</tr>
<tr>
<td>LA 760</td>
<td>Advanced Landscape Architecture Construction (3) 100%</td>
<td>Fall</td>
<td>1982</td>
</tr>
</tbody>
</table>
GRADUATE STUDENTS – MLA, CHAIR OF COMMITTEE

School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona

In Progress

Bolyard, Laura. 2010. Master’s report.
Bradshaw, Daniel. 2010. The Fort Davis master plan: engaging generation Y. Master’s report.
Kenworthy, Carla. 2010. Master plan of the Northern Arizona Veterans Hospital: enhancing the site through circulation and therapeutic landscapes.
Ruedinger, Maria. 2010. Between earth and sky: In search of celebration through death. Master’s Report

Completed

Hoogerwerf, Katy. 2007. Retrofitting Clark: revealing Filipino cultures and environments through the landscape. Master’s report.
Ciriacks, Peter. 2003. The power of place: indigenous continua and accordant environmental design in arid lands of the greater Southwest. Master’s report.
Hatton, Stephanie M. 2003. The creation of a master plan for Alga Norte Community Park. Master’s report
Huffman, Debra. 1997. Fear in the landscape: characteristics of the designed environment as they relate to perceived and actual safety of women from assault and rape. Thesis.
Program of Landscape Architecture and Urban Design, College of Architecture and Planning,
University of Colorado at Denver, Denver, Colorado


GRADUATE STUDENTS – SERVICE ON COMMITTEE

School of Landscape Architecture, College of Architecture and Landscape Architecture, The University of Arizona, Tucson, Arizona (Other departments as noted)


Hawn, Jessica. 20010. Tree of life Rejuvenation Center: a master plan for a sustainable ecovillage.

Abad, Shelly. 2009. The Role of stakeholders in public land planning; reflecting ideas in actions.

Cregan, Kimberly. 2009. Urban habitat a model for habitat assessment, design and interpretation in downtown areas. In conjunction with this report Tucson’s Urban Wildlife Walk. [http://www.tucsonurbanwildlife.com/PAGES/Home_main.html] (February 2010) received the Student National Honor ASLA Award in the Communication Category


Rhody, Jeff. 2008. The Broadway Corridor; rethinking the urban corridor. Master’s report.


Gormally, Joshua, Flora. 2002. Changes in riparian vegetation following release of reclaimed effluent water into the Santa Cruz River; as a corollary, the effects of channelization of vegetation in the Santa Cruz River. Thesis.


Rasmussen, Brian. 1997. The role of environmental education in river-based greenway projects. Master’s report


Travis Mueller

4938 E 4th St, Tucson, AZ 85711
512.417.5879 | muellert@email.arizona.edu

EXPERIENCE

University of Arizona, Tucson, AZ – Adjunct Lecturer
01/2016 - present

- LAR 530 | Introduction to Digital Media
- LAR 510/PLG 515 | Design Studio I
- LAR 611 | Design Studio IV

Tait Moring & Associates, Austin, TX – Project Manager/Project Designer
01/2014-05/2015

- Foremost design associate
- Managed design production at all phases from concept to construction documentation
- Established all current design graphic standards
- Assisted in project cost estimating & proposals
- Assisted in construction administration

dwg. Urban Landscape Architecture, Austin, TX – Project Designer
10/2013-01/2014

- Assisted in the production of CD & DD design document packages for 3 major projects

Ten Eyck Landscape Architects, Austin, TX – Project Designer
01/2013-10/2013

- Assisted in the production of CD & DD design document packages for more than 6 major projects
- Involved in production of site drawings including but not limited to layouts, elevations, sections, and details for all design document packages above with a handful of opportunities to design and work on custom details for project site elements
- Worked with vendors & manufacturers to complete custom details for project site elements
- Assisted in the creation and management of CAD standards and communications standards files

Bernard Trainor & Associates, Monterey, CA – Landscape Designer
08/2012-12/2012

- Built extensive digital site models for on-going site analysis and site design studies and landscape design representation
- Assisted in the production of design document packages from SD through CD stages
Olin, Philadelphia, PA – Summer Internship Program  
S06/2011-08/2011

- Assisted in production of design document package for 100%CD phase of a major park in West Hollywood
- Created Photoshop renderings for client meetings and presentations for a new federal agency headquarters in Washington, DC

University of Arizona, Tucson, AZ – Teaching Assistant  
09/2010-05/2012

- Classes: Site Engineering (Fall 2010 & 2011), Site Construction (Spring 2011 & 2012), Design Studio II (Spring 2012)
- Taught AutoCAD to MLA students
- Red lined submitted drawings for Site Engineering and Site Construction courses
- Aided in design study and critique in Design Studio II

EDUCATION

University of Arizona, Tucson, AZ – Masters in Landscape Architecture (MLA) | 05/2012
University of Texas, Austin, TX – BA in Music | 05/2006

AWARDS

ASLA Arizona Chapter, AZ – Honor Award, Campbell Bridge Park, General Design Category | 2012
INTERN AT OLIN – Selected as one of the three students for their 2012 intern program | 2012
DAN HOFFMAN, AIA
Phone: (602) 421-7721
Email: hoffman@studioma.com; studioma1@email.arizona.edu
Address: 4451 East Pima Street #3, Tucson, AZ 85712

PROFESSIONAL REGISTRATION
Michigan Architecture License - 1301039917
Arizona Architecture License - 51027
Utah Architecture License - 78298670301

EDUCATION
Bachelor of Architecture, Cooper Union, 1976
Urban Studies, New York University, 1969-1971

INTERNSHIP
Edward Larrabee Barnes and Associates, 1983-1986

PRACTICE
Founding Principal, Studio Ma, Inc., 2003-2017, currently Emeritus
Architectural Advisor, Detroit Symphony Orchestra Renovation and Addition: 1998-2002
Cranbrook Campus Architect, 1996-2002
Director, Cranbrook Architecture Office, 1994-2000

FULL TIME TEACHING POSITIONS
2017-Present: UNIVERSITY OF ARIZONA - Professor of Practice: Capstone preparation and studio (coordinator),
theory seminar, first year design studio (coordinator).
2010–2015: UNIVERSITY OF UTAH - Professor of Practice: graduate and undergraduate design studio, introductory
sustainability lecture course.
1999–2010: ARIZONA STATE UNIVERSITY - Professor: graduate design studio, undergraduate design studio,
building integration lecture course, introductory sustainability lecture course, thesis supervision, promotion and tenure
committee, executive committee, curriculum committee, accreditation (authored APR), lecture series, admissions.
1998-1999: UNIVERSITY OF MICHIGAN - Professor of Practice: graduate design studio, construction seminar.
1986-1998: CRANBROOK ACADEMY OF ART - Head of the Department of Architecture: graduate design studio,
theory seminar, thesis supervision, recruitment, admissions, outreach, department budget management, curriculum
management, lecture series.
1983: UNIVERSITY OF TORONTO - Assistant Professor: fourth year design studio in Florence.
1979-1983: CARLETON UNIVERSITY - Assistant Professor: first year design studio, Renaissance and Baroque
lecture course, fourth year design studio in Rome, thesis supervision.
1976-1979: UNIVERSITY OF DETROIT - Assistant Professor: first year design studio, design fundamentals seminar.

VISITING TEACHING POSITIONS
1998: UNIVERSITY OF ILLINOIS - CIRCLE CAMPUS, Graduate studio
1998: CORNELL UNIVERSITY – Undergraduate studio
1997: YALE UNIVERSITY (Saarinen Chair) – Graduate studio
1996: HELSINKI TECHNICAL UNIVERSITY – Graduate studio
1990-1992: UNIVERSITY OF WATERLOO – Undergraduate studio
1988: UNIVERSITY OF TEXAS AT ARLINGTON – Undergraduate studio
RESEARCH AT ARIZONA STATE UNIVERSITY (1999 – 2010)

My work in Arizona is divided between projects undertaken as a professor at Arizona State University and as a practicing architect at Studio Ma, Inc. A number of the projects undertaken by Studio Ma have involved a funded research component at the University.

2009: TEXTILE REINFORCED CONCRETE RESEARCH STUDIO - Fabrication and testing of an emerging material technology in collaboration with Studio Ma for the Salt River Sustainable Research Center Project. Research from this project was used to develop a façade for the Salt River Project Sustainability Center.

2008: PEDESTRIAN COMFORT IN ARID REGIONS - Research conducted in partnership with professors and doctoral students in the MS Program in the Built Environment for the Downtown Phoenix Urban Form Project.

2007: DOWNTOWN PHOENIX PUBLIC MARKET - A study funded by the United States Department of Agriculture for a public market in Downtown Phoenix. Project included the design of a free-standing Market Shed and Market Store commercial retrofit.

2007: EVANS CHURCHILL DISTRICT PLANNING STUDY - A new zoning code and open space plan for a district in downtown Phoenix, in collaboration with the Downtown Urban Form Project.

2006: WHISPERING HOPE RANCH - A project funded by the Arizona Community Foundation to master plan and program for a 45-acre camp facility for children with special medical needs in the ponderosa pine forest of Central Arizona. (See Studio Ma below.)

2005: NAVAJO ROUNDWOOD PROJECT - A project funded by the Arizona Community Foundation, the National Endowment for the Arts and Indigenous Community Enterprises, a Navajo led non-profit, involving the use of small-diameter timber culls from the Arizona Ponderosa Pine Forest to construct low-cost, culturally sensitive dwellings for the Navajo Nation. The project included the planning of a prototype, multi-generational community development using a variety of Hogan-based typologies. Three prototype Hogans were constructed for the project.

2002: COOL CONNECTORS - A studio funded by a grant from the AIA College of Fellows exploring bio-climatic design strategies to improve the quality of pedestrian environments in the Phoenix Metropolitan Area.


Established in 2003 by myself, Christopher Alt and Christiana Moss, Studio Ma is a collaborative design practice located in Downtown Phoenix. The firm currently has ten employees and has undertaken a wide range of planning and architecture projects. I have had substantial involvement in the following projects:

2017: RENOVATION OF ARIZONA STATE UNIVERSITY MEMORIAL UNION, PHASE II – Planning, design and interior design of 35,000sf of lounge and multi-use spaces on the lower and main level of the Memorial Union.

2015: SUMMIT POWDER MOUNTAIN - Planning and Design Guidelines for a 10,000-acre, year-round community in the Wasatch Mountains of Utah.

2015: LAKESIDE HOUSING at PRINCETON UNIVERSITY – Planning and design for 735 bed graduate community on the Princeton University Campus. Project includes multiple building typologies and a wrapped 500 car parking deck. LEED Silver rating for ND+C, LEED Gold rating for ND.

2013: ASU MANZANITA HALL RENOVATION – Full renovation of a 195,000sf landmark 14 story mid-century modern dormitory on the ASU campus. LEED Silver.

2013: ASU SUN DEVIL FITNESS COMPLEX - A 100,000sf addition and renovation of the Student Recreation center on the ASU Tempe Campus consisting of 5 gyms, 2 small gyms, a multipurpose gym, wellness center and cardio-fitness center. LEED Platinum.

2011: NORTHERN ARIZONA STATE UNIVERSITY NATIVE AMERICAN CULTURAL CENTER - A 12,000sf cultural center serving the Native American Community at the center of the Northern Arizona University campus. Studio Ma teamed with Dr. Ted Jojola of New Mexico State University to engage the community in an Indigenous Community Planning Process to program and design the facility in a manner consistent with Native American values. Net Zero Ready, LEED Gold.
2008: SALT RIVER PROJECT SUSTAINABILITY CENTER - A LEED Platinum, net zero energy, net-zero water consumption, consumer education center for a major Arizona utility (completed through schematic design).

2008: RENOVATION OF ARIZONA STATE UNIVERSITY MEMORIAL UNION - Extensive renovation to 95,000sf of meeting rooms, ballrooms, stairways, and other public spaces. The project was the first renovation to achieve LEED Gold in Arizona.

2008: ASU MEMORIAL PLAZA - A complete renovation of the main campus plaza including new shade structures, hardscape, and plantings.

2007: NEW YORK CONDOMINIUM RENOVATION - Complete renovation of a 1,600sf condominium in an historic Manhattan high rise.

2007: DOWNTOWN PHOENIX URBAN FORM PROJECT - Local Architect and Sustainability Consultant for a new form based plan and zoning code for Downtown Phoenix. Studio Ma conducted basic research on impact of form based planning on mitigating Urban Heat Island and optimizing Thermal Comfort for pedestrians. The plan and code were adopted by the City in 2010.

2006: PRD 845 - A 12-unit urban infill project in Downtown Phoenix. The project was published in Architectural Record and was awarded the International Athena Prize for Architecture.

2005, CRANBROOK INSTITUTE OF SCIENCE WEST ENTRANCE AND PARKING DECK - An 11,000sf, group entrance and multipurpose addition to Cranbrook Institute of Science. Project includes a 200- car parking deck and entry plaza.

2005: ASU CAMPUS BOOKSTORE RENOVATION AND PLAZA - Renovations to the main campus bookstore including a new shade structure and plaza.

2005: WHISPERING HOPE RANCH - A 45-acre ranch for children with special medical needs in Arizona’s ponderosa pine forest. Facilities include twelve cabins, a lodge, medical center, animal interaction area and interpretive trail.

2003: MORSE HILL RESIDENCE - A 2,500sf private residence located in Duchess County, NY. Project combines traditional and modern forms to conform to historic covenants.

2003: PAPAGO SALADO COMPETITION - The winning entry in a National Endowment for the Arts sponsored competition for an urban trail network connecting the cities of Phoenix, Scottsdale and Phoenix.

WORK AT CRANBROOK (1989-2002)

Cranbrook Campus Architect, President's Architectural Review Committee

Duties included, programming, campus planning, architect selection and overseeing a staff of project managers, presentations to Board of Trustees... Major capital projects undertaken during this period included the Addition to the Institute of Science by Steven Holl, Cranbrook Schools Natatorium by Williams and Tsien, Brookside School by Peter Rose and the Studio Addition to Cranbrook Academy of Art by Rafael Moneo. Planning studies, renovation, restoration and landscape projects completed during this period include:

2002: CRANBROOK GIRLS’ MIDDLE SCHOOL - Pre-design study for a new middle school adjacent to the Cranbrook-Kingswood campus.


1998: NATATORIUM COMPLEX SITE PLAN and LANDSCAPE DESIGN - Design of plazas, lawn areas, walkways and roadways surrounding the Natatorium designed by Williams-Tsien Architects (with Peter Osler, Landscape Architect)

1998: KINGSWOOD SCHOOL GREEN LOBBY RESTORATION - Restoration of historic Pewabic tile in the historic Green Lobby designed by Eliel Saarinen.
1998: PROGRAMMING AND PROJECT MANAGEMENT FOR THE CRANBROOK ACADEMY OF ART STUDIO ADDITION AND MUSEUM EXPANSION - A master plan for new art studios, collection storage and gallery addition. Project management responsibilities included programming and selection of design team.

1997: CRANBROOK SCHOOL COURTYARD RESTORATION - Renovation of the brick paving for the courtyards of Cranbrook School designed by Eliel Saarinen. Project involved innovative use of hydronic heating to minimize the effects of freeze thaw (with Peter Osler, Landscape Architect).

Director, Cranbrook Architecture Office (CAO)
CAO was a division of the Cranbrook Educational Community founded in 1994 to provide design-build services for a wide variety of campus projects. At its peak, the office had thirty employees, many of whom were students and graduates of the Academy. In addition to managing the office, I served as the principal-in-charge of each project, collaborating on design with individuals noted below.

1998: EXHIBITS FOR CRANBROOK INSTITUTE OF SCIENCE - Design of seven thousand square feet of interpretive exhibits for the addition to the Institute designed by Steven Holl (with Marcus Schaeffer).

1998: CONNECTIONS THEATER - Design and construction of an enclosed orientation theater for the Cranbrook Institute of Science featuring a video presentation designed by Scott Makela, co-chair of the Cranbrook Academy of Art's department of graphic design (with Douglas Pancoast and Alfred Zollinger).

1997: RIPPLE WALL - Design and fabrication of a thirty-foot long polyurethane cast of a fossilized seabed used as a concrete formwork in the foundation wall for Cranbrook Institute of Science (with Susan Molesky).

1996: CLASSROOM FURNITURE FOR THE BROOKSIDE ELEMENTARY SCHOOL - Design of molded plywood furnishings including chairs, tables and a classroom play structures (with Jason Vollen).

1996: BROOKSIDE SCHOOL TRELLIS - Design and fabrication of a celebratory entry structure for the Brookside Elementary School (with Jason Vollen).

1995: BROOKSIDE SCHOOL READING PAVILION - A structure on an island in the Rouge River adjacent to the Brookside Elementary School. The project includes a twenty five-foot long wood and steel bridge (with Jason Vollen).

1997: CAMPUS MAILBOX ENCLOSURE - Design, fabrication and installation of a wooden shelter to serve as the community mailbox (with Jason Vollen and Sandra Wheeler).

1996: CAMPUS LIGHTING - Design and fabrication of four types of site lighting fixtures (with Alfred Zollinger).

1995: CAMPUS SIGNS - Design and fabrication of three types of campus roadway directional signs (with Alfred Zollinger).

1996: CRANBROOK ENTRANCE - A new entry to the Cranbrook campus. Design elements include a two-hundred-foot Corten steel retaining wall, guard booth, a stainless steel and copper mesh canopy. (with Alfred Zollinger and Gregory Yang).


Projects Fabricated by CAO from Designs by Architects Working at Cranbrook

1996: ORNAMENTAL METAL FABRICATION FOR THE ADDITION TO THE CRANBROOK INSTITUTE OF SCIENCE, Steven Holl, Architect - Reception desk, lobby seating, cladding for entry doors and a brass-clad entry canopy (with Alfred Zollinger).


1994: ARRIVAL PLAZA, Juhani Pallasmaa, Architect - Construction documents, construction supervision and fabrication of custom details for a plaza at the center of the Cranbrook Campus (with Theodore Gallante).

1992: BRIDGE LANTERNS, Baird-Sampson Architects - Four galvanized steel and copper lanterns for a vehicular bridge (with Alfred Zollinger).

EXHIBITS AND INSTALLATIONS

2011 "Whispering Hope Ranch" Group Show in Honor of Edward Larrabee Barnes at Haystack College for the Arts
2011 "Svein Tsonsanger and Friends," An Exhibition of Architectural Drawings at the Danish Architectural Center
2010 "Work of Studio Ma," University of Tennessee
2008 "Dan Hoffman - Cranbrook Drawings," University of Colorado at Denver
2006 "Portals and Loops" - Eye Lounge Gallery, Phoenix
1998 "Block Installation," Technical University of Eindhoven
1998 "Block Installation," SUNY Buffalo
1997 "Work of the Cranbrook Architecture Office," Yale University
1994 "Natural Histories," Princeton University
1994 "The Gamlebeyn Project," Gallerie ROM, Norway (with Ronit Eisenbach)
1992 "Building Measure," University of Waterloo
1988 "Natural Histories," Cranbrook Academy of Art Museum

AUTHORED ARTICLES, INTRODUCTIONS AND CHAPTERS IN BOOKS


Authored Articles cont’d…/

Authored Articles cont’d…/

"The Best that the World has to Offer," Stalking Detroit, Daskalakis, Young, Waldheim edit., (Actar, 2001), 42-56.


**AUTHORED BOOKS**


**ARTICLES and CHAPTERS ON MY WORK**


**STUDIO MA PUBLISHED WORK**


“Scottsdale’s Museum of the West,” *Metropolis*, (September 2016: 54-56.


“Shade Canopies Benefit Arizona Campus,” Fabric Architecture, (July 2010).


AWARDS AND RECOGNITION

2018 Arizona AIA Educator of the Year Award
2017 Architect’s Magazine, Architect’s 50, (Studio Ma ranked number 11 in a national survey of architecture firms)
2017 Western Mountain Region Honor Award – Lakeside Graduate Housing, Princeton University
2016 Arizona AIA Firm of the Year
2015 Arizona AIA Honor Award – Scottsdale’s Museum of the West
2015 Arizona AIA Honor Award – ASU Manzanita Hall Renovation
2015 Arizona AIA Merit Award – ASU Student Recreation Center
2011 Arizona AIA Honor Award – Whispering Hope Ranch
2010 Arizona AIA Honor Award – Yuma Heritage Library
2010 Arizona AIA Merit Award – George Condominiums
2009 Chicago Athenaeum American Architecture Award – PRD 845
2009 Arizona AIA Construction Excellence Award – ASU Memorial Union
2008 Arizona AIA Merit Award – PRD 845

INVITED LECTURES

Aarhus University, AIA Iowa State Convention, AIA Iowa State Convention, AIA Arizona State Convention, AIA Iowa State Convention, Arhus University-Denmark, Arizona State University, California College of the Arts, Barcelona Colegio de Arquitectos, Carleton University, Cooper Union, Cornell University, Delft Technical University, Eindhoven Technical University, Helsinki Technical University, Iowa State University, KTH School of Architecture- Stockholm, Lawrence Technical University, Louisiana State University, McGill University, Miami of Ohio University, Mississippi State University, McGill University, Ohio State University Penn State University, Savanna College of Art, Temple University, UCLA, Union of international Architects Congress XIX, University of Arkansas, University of Cincinnati, University of Colorado at Denver, University of Detroit, University of Illinois at Champagne-Urbana, University of Illinois-Circle Campus, University of Manitoba, University of Maryland, University of Michigan, University of Pennsylvania, University of Texas at Arlington, University of Tennessee, University of Toronto, University of Waterloo, University of Virginia, Virginia Tech, Rensselaer Polytechnic Institute, SUNY Buffalo, Yale University, Washington University, University of Washington-Pullman, Woodbury University-Los Angeles, Woodbury University-San Diego

REFERENCES:

Diogo Burnay, Director, School of Architecture, Dalhousie University
diogo.burnay@dal.ca
902 494 4128

Ron McCoy, Princeton University Architect, FAIA (Former Director, School of Architecture, Arizona State University)
rmccoy@princeton.edu
609 258 3356

Stephen Vogel, Former Dean, University of Detroit, Mercy
vogelsp@udmercy.edu
313 271 7616
Shujuan Li  
School of Landscape Architecture and Planning  
College of Architecture, Planning and Landscape Architecture  
The University of Arizona  
1004 N Olive Road, Tucson, AZ 85719  
shujuanli@email.arizona.edu, 520-621-3662

EDUCATION

Ph.D. in Geography (May, 2009)  
Department of Geography, Texas A&M University  
Dissertation: Self-organizing Criticality among Chinese Cities

Master of Science in Ecology (June, 2003)  
Department of Ecology, Peking University, China  
Thesis: Study on Expansion Modes, Driving Mechanism and Dynamic Modeling of Built-up Land-use in Nanchang, China

Bachelor of Science in Geography (June, 2000)  
Department of Geography, Beijing Normal University, China

PROFESSIONAL EMPLOYMENT

The University of Arizona  
Associate Professor, School of Landscape Architecture and Planning, The University of Arizona, 2017-present

Utah State University  
Associate Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, 2016-2017  
Assistant Professor, Department of Landscape Architecture and Environmental Planning, Utah State University, 2009-2016  
Faculty Associate, Ecology Center, Utah State University, 2011-2017  
Faculty Researcher, iUTAH (innovative Urban Transitions & Aridregion Hydro-sustainability), 2012-2017

Texas A&M University  
Research Assistant, Department of Geography, Texas A&M University, 2004-2009  
Lab Instructor, Department of Geography, Texas A&M University, 2005-2008  
Teaching Assistant, Department of Geography, Texas A&M University, 2004

The National Disaster Reduction Center of China  
Assistant Engineer (Full Time), 2003-2004

Peking University, China  
Research Assistant, Department of Ecology, 2000-2003
GRANTS

- 2013-2016, Ph.D. Co-advisor (with Dr. Joanna Endter-Wada). Doctoral Fellowship for Enjie Li, Coupling Water and Land Use Planning. iUTAH NSF EPSCoR ($71,677).
- 2013-2015, Co-Principal Investigator (PI: Dr. Carlos Licon). Urban Growth Patterns, a Century of Transformation in Utah Communities. Utah Agricultural Experiment Station ($11,393).
- 2013-2014, Co-advisor (with Dr. Joanna Endter-Wada). Undergraduate Research assistantship, Population Growth and Land Use and Land Cover Change in the Wasatch Front Metropolitan Area. iUTAH NSF EPSCoR ($9,840).
- 2012-2017, Principal Investigator. Water-Related Agricultural Land Use in Utah’s Urban Edge. Utah Agricultural Experiment Station ($22,500).
- 2011-2013, Principal Investigator. Land Use and Land Cover Dynamics under Climate Change in Urbanizing Intermountain West. Utah Agricultural Experiment Station ($18,040).
- 2010-2011, Co-Principal Investigator (PI: Dr. Bo Yang, Co-PI: Professor Nancy Mesner). Integrating Land Use Planning Tools for Groundwater and Surface Water Protection in Middle Bear River Watershed (Cache Valley). Funded by Research Catalyst (RC) Seed Grant, Utah State University ($18,533).
PUBLICATIONS (* denotes graduate student; ** denotes undergraduate student)

Peer-Reviewed Journal Articles


**Peer-Reviewed Book Chapters**


**Peer-Reviewed Conference Proceedings**


**Invited, Non-referred Article**


**Professional Conference Papers/Presentations**

2018.


- Li, S. Rapid urbanization in China: A story of Shenzhen. Invited presentation at Utah Valley University’s Twenty-Fifth Annual Environmental Ethics Symposium, Orem, Utah,


• Li, S. Evaluating Plan implementation in the transitional China: A conformance based study of Shenzhen’s master plans. The 2013 Association for China Planning (IACP) conference. Shanghai, China, June 29-July 1, 2013.


• Li, S. Urban development as a fight between city government and local agencies: A case study of Bao’an District, Shenzhen. The 2008 Annual Meeting of the Association of American Geographers (AAG). Boston, Massachusetts, USA, April 17-21, 2008.


AWARDS AND SCHOLARSHIPS


2008 Graduate Student Research and Presentation Grant (Office of Graduate Studies, Texas A&M University)

2005-2008 Conference Travel Grant (Department of Geography, Texas A&M University)

2004 Incentive Tuition Scholarship (College of Geosciences, Texas A&M University)

2003 Second prize of China National Environmental Science and Technology (The Ministry of Environmental Protection of China)

2001-2002 Outstanding Graduate Student Award (Peking University)

2001-2002 “Antai” University Fellowship (Peking University)

1998-1999 Third place prize of Academic Scholarship (Beijing Normal University)
TEACHING

The University of Arizona
- Instructor PLG 580—Environmental Spatial Analysis (Spring 2018, Spring 2019)
- Instructor PLG 495/595—Geodesign Studio (Spring 2018, Spring 2019)
- Instructor, PLG 472/572 – Environmental Land Use Planning (Fall 2017, Spring 2019)
- Instructor, GEOG 461– Urban GIS (Fall 2017, Fall 2018, Fall 2019)
- Instructor, PLG 599-018 Independent Studies (Fall 2018)
- Instructor, GIST 602b—Vector GIS (Summer 2018, Summer 2019)

Utah State University
- Instructor, LAEP 3400/6400 – Geodesign Studio: Advanced Geographic Information and Tools (Spring 2015, Spring 2016)
- Instructor, LAEP 3300 – Advanced Computer Applications in Landscape Architecture (Spring 2010, Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2015)
- Co-instructor, LAEP 4100 – Urban Theory, Systems, and Design (Fall 2009)
- Co-instructor, LAEP 4130 – Emerging Areas (Spring 2010)
- Co-instructor, LAEP 4350/6650 – International Travel Course to China (Summer 2013)
- Co-instructor, LAEP 6110 – Landscape Planning for Wildlife (Spring 2011)
- Instructor, LAEP 6860 – Trends in Landscape Architecture Seminar (Fall 2011, Fall 2012, Fall 2013)
- Co-instructor, LAEP 6890 – Seminar on Thesis Proposals and Procedures (Spring 2010)
- Co-instructor, LAEP 6100 – Regional Landscape Analysis and Planning (Fall 2010, Fall 2011, Fall 2012, Fall 2013)

Texas A&M University
- Lab instructor, GEOG 203 – Planet Earth System Science (Fall 2005, Spring 2006)
- Lab instructor, GEOG 332 – Thematic Cartography (Fall 2006, Spring 2007)
- Lab instructor, GEOG 390 – Principles of GIS (Fall 2007, Spring 2008, Fall 2008)
- Lab instructor, GEOG 475 – Advanced GIS (Spring 2005)
- Teaching assistant, GEOG 662 – GIS in Land and Property Management (Fall 2004)
Invited Lectures in other LAEP classes


- **Li, S.** 2010. Urban and regional planning in China. LAEP 3700 – City and regional planning. Invited by Instructor Bo Yang, Utah State University.


Advising for Student Awards and Honors

- Co-Instructor (Monica Landgrave Serrano, Emma James, Jon Choi, Jenny Moscato, Graduate students), Social Equity in Stormwater Management in Tucson. Second Place Award in Planning Excellence Competition, University of Arizona (2018).

- Co-Major Advisor (Enjie Li, PhD student), Modeling Residential Water Demands under Climate Change in a Transitional Urban System. NSF iUTAH/EPSCoR Graduate Fellowship (2013-2017).

- Faculty Advisor (Kimberly Harris, BLA), “New West” Development for Remote Western Towns: A Case Study of Utah’s Scenic Byway 12 Corridor. Undergraduate Research and Creative Opportunities Grant, Utah State University (2012-2013).

- Faculty Advisor (Allan Perry, BLA), Land Use Related Groundwater Change: A Case Study for Sanpete County, Utah. The 11th annual Utah Research Presentation to Utah Legislators on Capitol Hill, Salt Lake City, Utah (2012).

- Faculty Advisor (Cameron Bodine and Allan Perry, BLA), Land Use Related Groundwater Change: A Case Study for Sanpete County, Utah. First Place in the Student Poster Contest in the 2011 Utah Planning Students’ Organization “Planning for Sustainability” Conference, University of Utah, Utah (2011).

- Faculty Advisor (Cameron Bodine and Allan Perry, BLA), Land Use Related Groundwater Change: A Case Study for Sanpete County, Utah. First Place in the Student Poster Contest at the 2011 Utah Geographic Information Council (UGIC) Conference, Logan, Utah (2011).

- Faculty Advisor (Blake Burton, Andrew Stringfellow, and Jeremy Webb, BLA). Estimating impervious surface using remote sensing and parcel data: A comparative evaluation. First Place in the Student Poster Contest at the 2010 Southwest ESRI Users Group (SWUG)/Utah Geographic Information Council (UGIC) Conference, Moab, Utah (2010).
SERVICE

Professional Service

- Manuscript Reviewer for Journals: GeoJournal; Computers, Environment, and Urban Systems; GeoCarto; Cities; Journal of Environmental Planning and Management; Ecological Engineering; Journal of Urban Management; Landscape and Urban Planning; Environment and Planning B; Environment Management; Journal of the American Water Resources Association
- Grant Proposal Reviewer, Utah Agricultural Experiment Station, 2012, 2017; Geography and Spatial Sciences, National Science Foundation, 2011.
- Theme Track Chair, Council of Educators in Landscape Architecture Conference, 2016.

Service at The University of Arizona

University

- Committee Member, Faculty Search Committee, School of Geography and Development

College of Architecture, Planning and Landscape Architecture

- Faculty Advisor, International Student Club, College of CAPLA
- Promote & Tenure Review Committee Member
- Promotion Review Committee Member for career track faculty candidates.
- Committee Member, College Faculty Status Committee, CAPLA
- Post Tenure Audit Faculty Observer

School of Landscape Architecture and Planning

- Committee Member, The School Faculty Status Committee,
- Committee Member, Planning Program Curriculum Development Committee
• Course Reviewer, PLG 256 Sustainable Cities and Societies
• Course Reviewer, LAR 611 Design Studio IV

Service at Utah State University

*College of Agriculture and Applied Sciences*

• Committee Member, College of Agriculture and Applied Sciences Awards Committee, 2011-2016.
• Committee Member, College of Agriculture and Applied Sciences Safety Committee, 2015-2016.

*Department of Landscape Architecture and Environmental Planning*

• Committee member, organizing committee of Council of Educators in Landscape Architecture Conference, 2015-2016.
• Faculty advisor, LAEP Charrette Week, Utah State University, 2010-2016.
• Faculty coordinator, LAEP Speaker Series, LAEP, Utah State University, 2011-2016.
• Faculty representative to the Technology and Research Committee of the LAEP Advisory Board, Utah State University, 2009-2013.
• Committee member, Faculty Search Committees, LAEP, Utah State University, 2012, 2013.
• Committee member, MLA and BLA Graphic Presentation Committee of LAEP for Landscape Architecture Accreditation Board (LAAB), Utah State University, 2010-2011.
• Committee member, MLA and BLA Curriculum Report Committee of LAEP for LAAB, Utah State University, 2010-2011.
BO YANG, PhD, PLA, ASLA, APA

School of Landscape Architecture and Planning
College of Architecture, Planning, and Landscape Architecture
The University of Arizona, Tucson, AZ 85721-0075
Office: 1040 N. Olive Road, A303k; 1+520-621-1009; boyang17@email.arizona.edu

EDUCATION

• Ph.D. in Urban and Regional Sciences (2009)
  Dept. of Landscape Architecture & Urban Planning, Texas A&M University

• Master of Landscape Architecture (2009)
  Dept. of Landscape Architecture & Urban Planning, Texas A&M University

• Master of Architecture (2004)
  Huazhong University of Science & Technology, China

• Bachelor of Architecture (2002)
  Huazhong University of Science & Technology, China

PROFESSIONAL APPOINTMENTS

• Founding Editorial Board Member. Socio-Ecological Practice Research. Springer (2018-present)

• Founding Principal. Luo & Yang Associates LLC (2018-present)

• Assistant Editor. Landscape Research. Routledge, United Kingdom (2017-present)

• Faculty Associate. Environmental Research Institute (2017-2018)

• Vice President for Research & Creative Scholarship, Council of Educators in Landscape Architecture (CELA) (2016-2018)

• International Advisory Committee. Academic Advisory Board, Center for Urban Design in Cold Region. Jilin Jianzhu University, Jilin, China (2017-2020)

• Changchun Urban Design Expert Advisor. Changchun City Planning Bureau, China (2017-2020)

• ChangBai Mountain Scholar (appointed by The People’s Government of Jilin Province, China). Jilin Jianzhu University (2016-2019)

• Associate Professor (w/ tenure). School of Landscape Architecture and Planning (2017-present)
  The University of Arizona

• Associate Professor (w/ tenure). Landscape Architecture & Environmental Planning (2015-2017)
  Utah State University

• Assistant Professor. Landscape Architecture & Environmental Planning (2009-2015)
  Utah State University

• Faculty Associate. Ecology Center (2011-2017)
  Utah State University

  Texas A&M University

• Teaching Assistant. Landscape Architecture & Urban Planning (2005-2007)
Texas A&M University

**Research Assistant.** College of Architecture (2002-2004)
Huazhong University of Science & Technology

PROFESSIONAL REGISTRATION
Registered Landscape Architect, State of Utah (by examination). License Number 10406661

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**RESEARCH**

**Grant and Fellowship (Funded)**

**External**

- 2019. Rainwater harvesting demonstration model for Tucson Water Department. **PI: Bo Yang** ($5,000)
- 2015-2016. Utah Botanic Center porous pavement green infrastructure performance, iUTAH NSF. **PI: Bo Yang**. Co-PIs: Ryan Dupont, David Anderson ($18,664)
- 2015-2016. Green infrastructure design for stormwater quality and climate change resilience: Monitoring and modeling study in semiarid environment. California Landscape Architectural Student Scholarship Fund (CLASS Fund) and CELA. **PI: Bo Yang**, Co-PI: Shujuan Li. Research assistant: Hailey Wall (National competition, only one proposal was funded) ($25,000)
- 2013-2014. Landscape Architecture Foundation, Landscape Performance Series Case Studies Review: Content Assessment. **PI: Bo Yang**, Co-PI: Mary Myers (Temple University) (National competition, only one proposal was funded) ($7,500)
- 2013-2014. Landscape Architecture Foundation, Landscape Performance Series Case Studies Review: Quality Assessment. **PI: Bo Yang**, Co-PIs: Jessica Canfield and Tim Keane (Kansas State University). (National competition, only one proposal was funded) ($15,000)
- 2013. Landscape Architecture Foundation (LAF) Faculty Fellowship. Case Study Investigation, LAF Landscape Performance Series [Selected as one of nine research fellows from the landscape architecture faculty across the nation]. Firms of collaboration: Design Workshop, Inc. **PI: Bo Yang**. Research assistants: Pamela Blackmore and Chris Binder ($6,720)
• 2012-2017. iUTAH – innovative Urban Transitions and Arid region Hydro-sustainability. National Science Foundation EPSCoR Grant. Team member of Focus Area 2 The social and engineered ecohydrologic system and Focus Area 3 The coupled human-natural system. Lead institution: Utah State University ($20,000,000, USU portion 37%; Bo Yang: $11,556)

• 2012. Landscape Architecture Foundation (LAF) Faculty Fellowship. Case Study Investigation, LAF Landscape Performance Series [Selected as one of ten research fellows from the landscape architecture faculty across the nation]. Firms of collaboration: Design Workshop, Inc. and Conservation Design Forum. PI: Bo Yang. Research assistants: Yue Zhang and Pamela Blackmore ($6,720)

• 2011. Landscape Architecture Foundation (LAF) Faculty Fellowship. Case Study Investigation, LAF Landscape Performance Series [Selected as one of ten research fellows from the landscape architecture faculty across the nation to conduct post-occupancy evaluation of exemplary design projects, in partnership with leading design firms]. Firm of collaboration: Design Workshop, Inc. PI: Bo Yang. Research assistant: Amanda Goodwin (http://lafoundation.org/news-events/blog/archives/2011/05/) ($3,500)

• 2008-2009. Using SWAT to compare planning methods for neighborhoods: Case study of stormwater in The Woodlands, Texas. Texas Water Resource Institute through the U.S. Geological Survey 104B program. PI: Bo Yang, Co-PIs: Ming-Han Li, Chang-Shan Huang ($5,000) (Competitive, funding rate 25%-30%)

• 2003-2004. Old city renewal in Wuhan: Case study of Tongfeng and Tongren communities. Graduate Student Research Grant, Huazhong University of Science & Technology, China. Sole PI: Bo Yang (Chinese Yuan 5,000)

Internal (UA and USU) (Funded)

• 2019-2020. CAPLA Teaching Innovation Grant. PI: Bo Yang. Co-PIs: Drs. Meredith and Buzzard. ($4,000)


• 2014-2016. Utah Agricultural Experiment Station (UAES) Grant. Stormwater quality monitoring and modeling of Utah’s largest green infrastructure community development. Sole PI: Bo Yang ($19,998)

• 2012-2017. Utah Agricultural Experiment Station (UAES) Project. Land-use planning for farmland and water resource protection in Utah’s Wasatch Front urban-rural gradient. Sole PI: Bo Yang (operating budget $22,500, UTA 01105)

• 2012-2014. Utah Agricultural Experiment Station (UAES) Grant. Water resource protection in rural-urban interface: Land use planning for Cache Valley, Utah. Sole PI: Bo Yang ($17,331)

• 2011-2013. Utah Agricultural Experiment Station (UAES) Grant. Low-impact development for stormwater quality and climate change resilience in Utah communities. Sole PI: Bo Yang ($37,331)

• 2010-2011. Integrating land use planning tools for groundwater and surface water protection in Middle Bear River Watershed (Cache Valley). Research Catalyst Grant, Utah State University. PI: Bo Yang; Co-PIs: Nancy Mesner, Shujuan Li ($18,533)

• 2009. Travel and Preliminary Data Collection Grant. College of Humanities, Arts, and Social Sciences (HASS), Utah State University. Sole PI: Bo Yang ($1,450)
PUBLICATION (* denotes graduate student; ** denotes undergraduate student)

Accepted/Published Journal Article

[SCI: Science Citation Index; SSCI: Social Science Citation Index]


• Yang, B., Li, S.-J. (2016). Web-enhanced teaching of landscape architecture digital graphics: An
evaluation of benefits and challenges. Landscape Research Record, No.3, 28-37. [acceptance rate 20.0%]


- Canfield, J., **Yang, B.** (2014). Reflections on Developing Landscape Performance Case Studies. Landscape Research Record, No.1, 310-317. [acceptance rate 51.3%]


- Li, S.-J., **Yang, B.,** Jie, Y. * (2014). 3D Digital Graphics in Landscape Architecture Professional Practice: Current Conditions in a Nutshell. Landscape Research Record, No.1, 2-10. [acceptance rate 51.3%]


- (SSCI) **Yang, B.,** Volkman, N. J. (2010). From traditional to today: Revelation from Chinese garden
design. *Urban Design International*, 15(4), 208-220. [Impact Factor: 0.61]


**Books**


**Edited Peer-reviewed Proceedings**

Edited Special Issue


Peer-reviewed Book Chapter


Peer-reviewed Conference Papers


Peer-Reviewed Research Report

Note: Completed eleven research reports for the Landscape Architecture Foundation’s (LAF) Landscape Performance Series, Case Study Investigation Program (2011-2013). These reports were reviewed by the LAF Research Committee and external reviewers (academic researchers and practitioners) before publication. (PDF downloads available at http://works.bepress.com/bo_yang)

Published
(1) Residential Landscape Performance

  (http://landscapeperformance.org/case-study-briefs/capitol-valley-ranch)

  (http://landscapeperformance.org/case-study-briefs/cascade-garden)

  (http://landscapeperformance.org/case-study-briefs/riverside-ranch)

(2) Streetscape Landscape Performance

  (http://landscapeperformance.org/case-study-briefs/charles-city-permeable-streetscape)

  (http://landscapeperformance.org/case-study-briefs/cherry-creek-north-and-fillmore-plaza)

  (http://landscapeperformance.org/case-study-briefs/park-avenue-us50-redevelopment)

  (http://landscapeperformance.org/case-study-briefs/south-grand-boulevard-great-streets-initiative)

(3) Community Landscape Performance

  (http://landscapeperformance.org/case-study-briefs/daybreak-community)

  (http://landscapeperformance.org/case-study-briefs/high-desert-community)

In Review/Revision

• Yang, B., Goodwin, A. * Rancho Viejo Community Landscape Performance Benefits Assessment. Available at: http://www.lafoundation.org/?page_id=408&template_id=31&preview=true

Invited Panel Discussion, Workshop & Presentation

Panel Discussion & Conference Presentation (Invited)

  (Other panelists: Billy Fleming, Don Norrell, James Stickley)

• Yang, B. (2019). The role of green infrastructure in dry environments: Examples from Utah and Arizona. Networking for Environmental Sustainability in Arid Region Urban Communities. Conference sponsored by the National Science Foundation, Texas Tech University, Lubbock, Texas, August 13-16,
2019 (Invited by Dr. Melissa Currie)


- (Panel/Section 3 discussant). International Symposium on Planning & Design Based on “Sponge City Landscape.” Huazhong University of Science & Technology, Wuhan, China (12/19-20, 2015).

- (Panel discussion). A Landscape Architect’s Perspective: Ecological wisdom applied to environmental planning and green infrastructure. Panel: Integrating Ecological Wisdom with Ecology: A New Strategy for Socio-Ecosystem Planning and Management. The Ecological Society of America (ESA) 100th annual conference, August 9th-14th, 2015, Baltimore, USA. (with Drs. Wei-Ning Xiang, Duncan Patten, Robert Young, Chundi Chen, and Varenyam Achal)


- (Presentation) Yang, B. Green infrastructure design for storm water management in community development. Invited by Dr. Sam Liang to present at the Twenty-Fifth Annual Environmental Ethics Symposium, Utah Valley University (4/3/2014)


30-June 2, 2013.

**Workshop (Invited)**
- Low-impact development and green infrastructure. Salt Lake City, Utah. All-day workshop presented to a group of engineers, landscape architects, architects, water quality specialist, and high school teachers (presented with Kris Kvarfordt and Amanda Goodwin). Invited by HalfMoon Seminars (Altoona, Wisconsin) (1/12/2012)

**Keynote Address (Invited)**

**Presentation (Extramural, invited)**
- Introduction to ecological wisdom. Jilin Jianzhu University (Invited by Dr. Hongyu Zhao) (3/2018).
- Introduction to landscape architecture & green infrastructure for campus. STAR Academic High School (Invited by Dr. Adriana Zuniga-Teran) (10/25/2017).
- Landscape Performance Assessment and Research Trends in the USA. Changchun Planning Bureau, Changchun, China (May 2017).
- Overview of Landscape Architecture, Architecture, and Planning Education and Professional Registration in the USA. Jilin Jianzhu University, Changchun, China (May 2017).
- On Technical Writing. Jilin Jianzhu University, Changchun, China (May 2017).
- Green infrastructure design for improving stormwater quality: Monitoring and modeling study in Daybreak community. iUTAH NSF RFA2 meeting. Presented to Utah research institutions (Invited by Dr. Courtney Flint) (11/9/2016).
- Landscape Performance Assessment. Department of Landscape Architecture, School of Architecture and Urban Planning, Huazhong University of Science & Technology, Wuhan, China (Invited by Department Head Dr. Min Wan) (12/21/2015).
- Green Infrastructure and Stormwater Management: An Overview. Department of Landscape Architecture, School of Architecture and Urban Planning, Huazhong University of Science & Technology, Wuhan, China (Invited by Department Head Dr. Min Wan) (12/21/2015).
- Green Infrastructure Design for Stormwater Runoff and Water Quality: Empirical Evidence from Multi-Scale Community Developments. Department of Landscape Architecture, Southeast University
Nanjing, China (11/11/2015).

- Ecological Wisdom, Landscape Performance Assessment, and Green Infrastructure Planning and Design. School of Architecture, Nanjing Tech University (Invited by Dr. Xiaoguang Liu) (7/13/2015).
- Research Collaborations and Beyond. College of Landscape Architecture, Nanjing Forestry University (Invited by Provost Dr. Hao Wang) (7/12/2015).
- Green infrastructure: Overview and applications. CMP 4960/6960 Green Infrastructure, Department of City and Metropolitan Planning, University of Utah; (Cross listing) CEE 4930/6930 Green Infrastructure, Department of Civil and Environmental Planning, Utah State University. (Invited by instructor Drs. Sarah Hinners and Ryan Dupont) (9/4/2015)
- 2013 Landscape Architecture Foundation Case Study Investigations of three Design Workshop projects. Invited by Allyson Mendenhall to present to all the Design Workshop offices (Continuing Education Units for landscape architecture professionals) (11/12/2013)
- Green infrastructure design for stormwater runoff and water quality: Empirical evidence from multi-scale community developments. College of Landscape Architecture, Nanjing Forestry University. (Invited by Dr. Jin Wan, 6/7/2013)
- Green infrastructure design in community developments: Learning from three U.S. case studies. Invited by Dean Dr. Baofeng Li, School of Architecture and Urban Planning, Huazhong University of Science & Technology. (6/5/2013)
- Stormwater management in large-scale community development. Invited by Dr. Zhifang Wang, College of Architecture and Landscape Architecture, Beijing University. (5/20/2013)
- Green infrastructure design in community development. Interdisciplinary research seminar, invited by The University of Utah Metropolitan Research Center and Global Change and Sustainability Center. (11/20/2012)
- What we learned from Landscape Architecture Foundation’s Landscape Performance Series. Invited by Principal and Director Allyson Mendenhall to present to Design Workshop regional offices (11/6/2012)
- The art and science of landscape architecture. Invited by Dr. Nick Safai to present to CEEN 2900 Special Topics in Civil Engineering, Engineering Department, Salt Lake Community College, Utah. (9/9/2011)

Peer-Reviewed Abstract/Presentation & Panel Discussion (Contributed)


• McKenna Drew*, Durfee, D. *, Yang, B. (2017). Green infrastructure as a campus stormwater management technique. 8th Annual Intermountain Sustainability Summit, Weber State University, March 16-17, 2017. (Poster competition)


• **Yang, B.**, Li, S.-J. (2015). Ecological planning for urban sustainability: Manifestation of Ian McHarg’s ecological wisdom. The Ecological Society of America (ESA) 100th annual conference, August 9th-14th, 2015, Baltimore, Maryland.


Other Publication (non-referred)


TEACHING

TEACHING EXPERIENCE

University of Arizona

• (forthcoming) Co-Instructor (100%): PLG 580/LAR 623 Environmental Spatial Analysis/Landscape Planning Studio. Spring 2020.
• Co-Instructor (50%): LAR 511 Design Studio II. Spring 2019, Spring 2018.
• Co-Instructor (50%): PLG 580/LAR 623 Environmental Spatial Analysis/Landscape Planning Studio. Spring 2019, Spring 2018.
• Instructor (100%): LAR 612 Design Studio V. Fall 2018, Fall 2018, Fall 2017 (Elizabeth “Liba” Wheat Memorial Prize Award 2017, 2018)

Utah State University

• Co-Instructor/Lead: LAEP 6910 Reading Seminar I (11 students, graduate level). Fall 2017.
• Instructor: LAEP 4940/6940 Green Infrastructure Design (studio course, undergraduate & graduate levels). Spring 2017.
• Instructor: LAEP 2600 Landscape Construction I (40-55 students, undergraduate & graduate levels). Fall 2014, Fall 2013, Fall 2012, Fall 2011, Fall 2010, Fall 2009.
• Co-Instructor (20% role): LAEP 4120 Emerging Areas in Landscape Architecture (studio course) (27 students, undergraduate & graduate levels). Spring 2010.
• Co-Instructor (50% role): LAEP 4350 Travel Course (China) (31 students, undergraduate & graduate levels). Summer, 2013. (http://laep.usu.edu/htm/faculty-staff/bo-yang/bo-yang-courses; Trip story at http://www.laep.usu.edu/htm/works-publications, pp. 26-28)
• Co-Instructor (20% role): LAEP 4350 Travel Course (20 students). Spring 2010.
• Co-Instructor (20% role): LAEP 6910 Reading Seminar I (8-11 students, graduate level). Fall 2014, Fall 2013, Fall 2012, Fall 2012, Fall 2011, Fall 2009.
• Co-Instructor (20% role): LAEP 6930 Reading Seminar II (8-11 students, graduate level). Spring 2011.
• Co-Instructor (10% role): LAEP 6860 Graduate Seminar (8-11 students, graduate level). Fall 2014, Fall 2013, Fall 2012, Fall 2012, Fall 2011, Fall 2009.
**Texas A&M University**

- Teaching Assistant: LAND 620 Open Space Development I (graduate level design studio; Instructor: Dr. Jon Rodiek). Fall 2005.

**Community Service Project (University of Arizona, as Major Advisor)**

- STAR Academic High School, South Tucson, Arizona (2018). In collaboration with STAR, UA School of Geography and Development, Udall Center for Studies in Public Policy, Watershed Management Group, Tierra y Libertad Organization, and the Sonoran Institute. *(Phase I construction completed 12/2018; featured in Landscape Architecture Magazine July 2019, column NOW, Turn the Temperature Down: Tucson Verde Para Todos takes a local—and more equitable—approach to green infrastructure)*
- Green Infrastructure Masterplan for Elvira Neighborhood, South Tucson, Arizona (2019). In collaboration with Sonoran Institute, UA School of Geography and Development, University of Maryland (2019).

**Charrette (Utah State University)**

- Best Friends & Kanab City 2017 Charrette, Faculty advisor of History, Sustainability, and Environment. (11 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2017.
- Salt Lake City Granary District 2015 Charrette, Faculty advisor of Stormwater Management. (7 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2015.
- Ogden Valley 2014 Charrette, Faculty advisor of Property Ownership and Property Rights team. (7 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2014.
• Brigham City 2013 Charrette, Faculty advisor of Highway 13 Corridor team (7 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2013.
• Bear Lake 2012 Charrette, Faculty advisor of Pickleville team (4 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2012.
• Cedar City 2011 Charrette, Faculty advisor of Downtown Housing development team (8 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2011.
• Providence City 2010 Charrette, Faculty advisor of Town Center development team (8 students, undergraduate & graduate levels). Dept. of Landscape Architecture & Environmental Planning, Utah State University, Spring 2010.

Invited Design Critique & Guest Lecture (University of Arizona)

Architecture
• Guest reviewer: ARC301 Design Studio III: Integrations of Place (invited by Professor Teresa Rosano, 10/21/2019)
• Guest reviewer: ARC451b/510f Schematic Review (invited by Professor Courtney Crosson, 10/7/2019)
• Guest reviewer: ARC452 Capstone Schematic Review (invited by Professors Christopher Domin and Daniel Hoffman, 2/28/2019)
• Guest reviewer: ARC 451B Design Studio 7 (invited by Professor Courtney Crosson, 10/29/2018)

Landscape Architecture and Planning
• Guest reviewer: LAR 596C Landscape Architecture Seminar III (invited by Dr. Margaret Livingston, Fall semester 2019)
• Guest lecture: PLG 444/544 Site Planning. Green Infrastructure Planning and Design Case Studies and Landscape Performance Assessment (invited by Professor Gina Chorover, 1/16/2019)
• Guest reviewer: LAR 596D Landscape Architecture Seminar IV (invited by Dr. Margaret Livingston, Spring semester 2018)
• Guest reviewer: LAR 610 Design Studio III (invited by Professor Kelly Cederberg, 9/19/2018)
• Guest lecture: PLG/RNR 256 Sustainable Cities and Societies (invited by Dr. Gary Pivo, 9/18/2018)
• Guest reviewer: LAR 596C Landscape Architecture Seminar III (invited by Dr. Margaret Livingston, 9/6/2018, 9/13/2018, and last quarter of Fall semester)
• Guest reviewer: LAR 555 Landscape Construction (invited by Professor Kirk Dimond, 4/11/2018)
• Guest lecture: Green Infrastructure Planning and Design Case Studies. SBE Guest Lecture Series (invited by Dr. Adriana Zuniga-Teran) (3/2/2018)
• Guest reviewer: LAR 596D Landscape Architecture Seminar IV. Spring 2018 (invited by Dr. Margaret Livingston, 2/28/2018)
• Guest reviewer: LAR 596C Landscape Architecture Seminar III. Fall 2017 (invited by Dr. Margaret Livingston, Oct 2017, Nov 2017)
• Guest lecture: Introduction to green infrastructure and climate change resilience. PLG 572/472 Environmental Land Use Planning (invited by Dr. Shujuan Li) (10/26/2017)

**Interdisciplinary**

• Guest lecture: Green infrastructure technical modules. ENVS 450/550 Green Infrastructure (invited by Professor Grant McCormick, 11/12/2019)
• Guest speaker: College-wide Faculty Research Presentations and Discussion with CAPLA Futures Council. Introduction to Landscape Performance (invited by Dean Nancy Pollock-Ellwand, 10/8/2019)
• Guest lecture in Civil Engineering Speaker Series. Green Infrastructure Planning and Design: A Landscape Approach (invited by Dr. Jennifer Duan, 10/1/2019)
• Guest reviewer: Design proposal review. ENVS 450/550 Green Infrastructure (Invited by Dr. Tanya Quist, 9/19/2019)
• Guest speaker: Overview EPA RainWorks Challenge Design Competition. ENVS 450/550 Green Infrastructure (Invited by Dr. Tanya Quist, 9/12/2019)
• Guest speaker: Introduction to Landscape Architecture. RNR 496B-002 / 596A-002 Ecology of Water Harvesting (Invited by Dr. Laura Meredith, 9/5/2019)
• Guest speaker: Introduction to Landscape Architecture. ENVS 450/550 Green Infrastructure (Invited by Professor Grant McCormick, 9/5/2019)
• Guest lecture: NSF team discussion with stakeholders (A science-policy dialogue to explore pathways for water harvesting in Tucson neighborhoods) (invited by Drs. Andrea Gerlak and Mitch Pavao-Zuckerman, 3/15/2019)
• Guest lecture: Introduction to landscape architecture and green infrastructure design, for graduate students in Hydrology and Atmospheric Sciences) (invited by Dr. Thomas Meixner, 9/28/2018)

**Invited Design Critique (Extramural)**


**Arizona State University**

• The Design School Design Excellence Jury, Arizona State University (invited by School Director Jason Schupbach) (Spring 2019)
• Invited jury member for final project presentation. LDE 461 Landscape Architecture III (South Mountain Village Site Design - Green Infrastructure Prototype) (invited by Dr. Paul Coseo) (Fall 2014)
Invited Design Critique & Guest Lecture (Utah State University)

Invited Design Critique
- LAEP 4120 Capstone Studio, 2015
- LAEP 3610 Landscape Construction II, 2015
- LAEP 4120 Emerging Area in Landscape Architecture, 2013

Invited Guest Lecture
- Conservation Subdivision Design and Curve Number Method Applications. CEE 4930/6930 Green Infrastructure, Department of Civil and Environmental Planning, Utah State University (invited by instructor Dr. Ryan Dupont) (9/8/2016)
- Green infrastructure design: Case studies in Utah and Texas. Civil and Environmental Engineering (CEE) 5460/6460 Water Resources Engineering (invited by instructor Dr. David Rosenberg, 10/9/2012)
- Ecohydrological planning and design in landscape architecture. Watershed Sciences (WATS) 4490 & 5490 Small Watershed Hydrology (invited by instructor Dr. Patrick Belmont, 4/18/2012)
- Landscape performance assessment. LAEP 4130 Emerging Areas of Landscape Architecture (invited by instructor Dr. Carlos Licon, 3/22/2012)
- Chinese garden design and philosophy. LAEP 2300 & 6230 History of Landscape Architecture (invited by instructor Professor Michael Timmons, 2/1/2010, 1/31/2011, 1/25/2013, 1/27/2014)
- Chinese garden design and philosophy. LAEP 1030 Introduction to landscape architecture (invited by instructor Professor David Anderson, 9/16/2011, 1/26/2011)
- Chinese garden design and philosophy. LAEP 1030 Introduction to landscape architecture (invited by instructor Professor Susan Buffler, 9/24/2010, 9/18/2009)
- Green infrastructure and low-impact development. LAEP 6860 Graduate Seminar (invited by instructor Dr. Sean Michael, 9/15/2010, 9/9/2009)
- Assessing planning approaches by watershed streamflow modeling: Case study of the Woodlands, Texas (invited by College of Natural Resources, 9/23/2009)

Invited Design Critique & Guest Lecture (Texas A&M University)
- Stormwater management in community planning: Case study of The Woodlands, Texas. PLAN 658 Plan Implementation (invited by instructor Dr. Elise Bright, Fall 2008)
- Soil and Water Assessment Tool (SWAT) applications in GIS hydrologic modeling. BAEN 673 Modeling Small Watershed (invited by instructor Dr. Clay Munster, Spring 2008)
- Advanced topics in SWAT applications in GIS hydrologic modeling. BAEN 673 Modeling Small Watershed (invited by instructor Dr. Clay Munster, Spring 2008)
- Stormwater management in community planning and design. LAND 621 Open Space Development II. (Graduate level design studio. Invited by instructor Professor Nancy Volkman, Spring 2008)
- Chicago World Expo and American landscape development. (Translator) Presenter: Prof. Nancy Volkman (invited by Yunnan University, Kunming, China, December 2006)
- Chinese garden design and philosophy. LAND 200 Introduction to Landscape Architecture Practice  
  (invited by instructor Dr. Christopher Ellis, Fall 2005)

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Faculty Role</th>
<th>Degree Sought</th>
<th>Topic/Title</th>
<th>(Expected) Graduation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yuheng Zhang</td>
<td>Advisor a</td>
<td>MLA</td>
<td>Landscape performance</td>
<td>2018</td>
</tr>
<tr>
<td>Elliott Bartels</td>
<td>Mentor</td>
<td>MLA</td>
<td>Latodami envisioned</td>
<td>2018</td>
</tr>
<tr>
<td>Tai An</td>
<td>Advisor a</td>
<td>MLA</td>
<td>Landscape performance</td>
<td>2019</td>
</tr>
<tr>
<td>Mario Nuno-Whelan</td>
<td>Advisor a</td>
<td>MLA</td>
<td>Tucson green infrastructure *</td>
<td>(Spring 2020)</td>
</tr>
</tbody>
</table>

* provided funding support

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Faculty Role</th>
<th>Degree Sought</th>
<th>Topic/Title</th>
<th>(Expected) Graduation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shuolei Chen</td>
<td>Member(PhD) a</td>
<td>MLA,PhD</td>
<td>Park Quality*</td>
<td>(Spring 2020)</td>
</tr>
<tr>
<td>Tony Melcher</td>
<td>Member†</td>
<td>PhD</td>
<td>Urban Stormwater *</td>
<td>2019</td>
</tr>
<tr>
<td>Trixie Rife</td>
<td>Member†</td>
<td>PhD</td>
<td>Logan “Green” Street</td>
<td>2019</td>
</tr>
<tr>
<td>Osmer Beck</td>
<td>Member</td>
<td>MLA</td>
<td>Renewable Energy *</td>
<td>2009</td>
</tr>
<tr>
<td>Jeff Dzikowski</td>
<td>Member</td>
<td>MLA</td>
<td>Sustainable Sites Initiative *</td>
<td>2012</td>
</tr>
<tr>
<td>Yue Zhang</td>
<td>Major Prof. a</td>
<td>MLA</td>
<td>Mount Pleasant City Park *</td>
<td>2012</td>
</tr>
<tr>
<td>Amanda Goodwin</td>
<td>Major Prof. a</td>
<td>MLA</td>
<td>Stormwater BMPs *</td>
<td>2013</td>
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<tr>
<td>Jie Yan</td>
<td>Member a</td>
<td>MLA</td>
<td>Digital Communication *</td>
<td>2014</td>
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<tr>
<td>Chris Binder</td>
<td>Research Advisor a</td>
<td>MLA</td>
<td>Landscape Performance</td>
<td>2015</td>
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<tr>
<td>Stephen Peaden</td>
<td>Research Advisor a</td>
<td>MLA</td>
<td>Logan GIS Database</td>
<td>2017</td>
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<td>Grant Hardy</td>
<td>Research Advisor a</td>
<td>MLA</td>
<td>GI Performance</td>
<td>2017</td>
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<tr>
<td>Allan Perry</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>Sanpete County</td>
<td>2012</td>
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<td>Gordo Wood</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>Groundwater</td>
<td>2013</td>
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<tr>
<td>Pamela Blackmore</td>
<td>Major Prof. a,b</td>
<td>BLA</td>
<td>EPA Database</td>
<td>2013</td>
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<tr>
<td>Devon Gibby</td>
<td>Research Advisor c</td>
<td>BLA</td>
<td>Streetscape Performance</td>
<td>2013</td>
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<tr>
<td>Zach Taylor</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>EPA RainWorks</td>
<td>2013</td>
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<tr>
<td>Luigi Dragonetti</td>
<td>Major Prof. a,b</td>
<td>BLA</td>
<td>GI Performance</td>
<td>2014</td>
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<tr>
<td>Tim Bowler</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>GI in Dominican Republic</td>
<td>2014</td>
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<td>Sam England</td>
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<td>BLA</td>
<td>GI Performance</td>
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<td>Di Wang</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>GI Performance</td>
<td>2014</td>
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<tr>
<td>Sam Taylor</td>
<td>Major Prof. a,b,c</td>
<td>BLA</td>
<td>Performance Database</td>
<td>2015</td>
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<tr>
<td>Nick Decker</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>Wasatch Front GI Inventory</td>
<td>2015</td>
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<tr>
<td>Hailey Wall</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>Logan Urban Design</td>
<td>2016</td>
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<td>John Locke</td>
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<td>BLA</td>
<td>GI Performance</td>
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<tr>
<td>Rebecca Thorpe</td>
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<td>BLA</td>
<td>GI Performance</td>
<td>2016</td>
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<td>Abram Sorensen</td>
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<td>BLA</td>
<td>GI Performance</td>
<td>2016</td>
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<td>Brett Hoffer</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>3D Modeling</td>
<td>2017</td>
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<tr>
<td>Mckenna Drew</td>
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<td>BLA</td>
<td>GI Performance</td>
<td>2017</td>
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<tr>
<td>Emmeline Hooper</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>GI Performance</td>
<td>2017</td>
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<tr>
<td>Tyson Murray</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>GI Performance</td>
<td>2017</td>
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<tr>
<td>Darci Williams</td>
<td>Research Advisor a</td>
<td>BLA</td>
<td>EPA RainWorks</td>
<td>2017</td>
</tr>
</tbody>
</table>
David Durfee
Research Advisor
BLA
EPA RainWorks
EPA RainWorks
2017

a provided funding support
b major professor of Honors thesis
c undergraduate Teaching Fellowship (UTF, $750)
* denotes graduate thesis/dissertation topic. GI, green infrastructure.
† not serving on the advisory committee after leaving USU.

Significant Student Award & Recognition (As Major Advisor)

National
• 2nd Place, Demonstration Project Category. 2018 EPA Campus RainWorks Challenge design competition. (Re)Searching for a Spot. Students: Matthew Lutheran, Aaron Johnson, Zhiyuan Song, Samantha Swartz, Jack Anderson. ($3,000 student and faculty prize)
Available at (https://www.epa.gov/green-infrastructure/2018-campus-rainworks-challenge)

Available at (https://www.epa.gov/green-infrastructure/2018-campus-rainworks-challenge)

• Honorable Mention, Master Plan Category. 2017 EPA Campus RainWorks Challenge design competition. West University Wash Revival. Students: Sam Hauserman, Andre Rioux, Brad Kindler, Brendan Ore.
Available at (https://www.epa.gov/green-infrastructure/2017-campus-rainworks-challenge#Arizona%20DP)

Available at (https://www.epa.gov/green-infrastructure/2017-campus-rainworks-challenge#Arizona%20DP)

State

• Student Collaborative Honor Award. 2019 Arizona Chapter American Society of Landscape Architects. Socio-Hydrology. Students: Jennifer Moscato, Jon Choi, Cody White

• McKenna Drew and David Durfee (2017). Green infrastructure as a campus stormwater management technique. 2017 Research on Capitol Hill, Salt Lake City, Utah.

**College/School/University**

• 2nd Place. 2018 Friends of Planning (FOP) Award. PLG 580/LAR 623 class project. School of Landscape Architecture and Planning, University of Arizona.
• Hailey Wall (2016). Utah State University Undergraduate Olmsted Scholar of 2016 (Note: Only one undergraduate student from the LAEP Department is chosen for this award)
• Hailey Wall (2015). Undergraduate Researcher of the Year (2015-2016), CAAS, USU.
• Hailey Wall (2015). Best Research Poster (undergraduate), Research Week, USU.
• Pamela Blackmore (2013). Outstanding Honor’s Thesis Award, USU Honors program. (Note: Only one thesis is chosen for this award at USU)
• Pamela Blackmore (2013). Utah State University Undergraduate Olmsted Scholar of 2013 (Note: Only one undergraduate student from the LAEP Department is chosen for this award)
• Pamela Blackmore (2013). National Finalist, Undergraduate Olmsted Scholar of 2013 (Note: One of the three finalists from U.S. landscape architecture programs. Pam was the first recipient in LAEP Department history)

**Select Student Advisees’ Professional Employment**

• Yuheng Zhang. Shanghai Tongji Urban Planning & Design Institute, Shanghai, China
• Tyson Murray. Design Workshop. Lake Tahoe, Stateline, Nevada
• McKenna Drew. Bureau of Land Management. Salt Lake City, Utah
• David Durfee. LOCI. Salt Lake City, Utah
• Brett Hoffer. LOCI. Salt Lake City, Utah
• Pamela Blackmore. Master of Landscape Architecture (w/ full scholarship). Kansas State University
• Yue Zhang. Landscape Designer, The Planning Center, California
• Amanda Goodwin. Stormwater Inspector and Reclamation Consultant, Encana Corporation
• Jeff Dzikowski. Landscape Designer, Design Workshop, Salt Lake City, Utah
• Jess Yan. GIS Center (part-time), Utah State University
• Allan Perry. Environmental Planner, Transcon Environmental, Inc.
• Rob Waner. GIS Specialist, ValleyCrest, California
• Osmer Beck. Environmental Planner at Transcon Environmental
PROFESSIONAL EXPERIENCE

- Luo & Yang Associates, LLC 2018-
- SWA Group, Houston Summer 2007
- HNTB, Kansas City Summer 2006
- SWA Group, Houston Summer 2005
- Huazhong Architectural Design & Research Institute, Wuhan, China Part-time 2004
- Guangzhou Urban Planning & Research Institute, Guangzhou, China Summer 2001
- Zhongnan Architectural Design & Research Institute, Wuhan, China Summer 1998

SELECTED PROJECTS

Planning and Urban Design
- Oyster Creek New Community and Town Center, Texas. (SWA 2005)
- Kunshan Urban Design, Champs Elysees Blvd Design of Kunshan Flower Bridge International Community, Kunshan, Shanghai, China. (SWA 2005)
- Schematic Design of Yongqing District, Wuhan, China. 2004
- Schematic Design of Wujiashan Taiwan Commercial District, Wuhan, China. 2003
- Urban Design of Zhongshan Commercial and Cultural District, Guangzhou, China. 2001

Landscape Architecture
- Buffalo Bayou West, Houston, Texas. (SWA 2007)
- Northwest Vista College Palmetto Arts Center, San Antonio, Texas. (SWA 2007)
- Hangzhou Sheraton Mixed-use Development, Hangzhou, China. (SWA 2007)
- Nanhai Leigang Park, Nanhai, China. (SWA 2007)
- Erfurt Park Master Plan. Shawnee, Kansas. (HNTB 2006)
- Harvest Home Campus Master Plan, Kansas City, Missouri. (HNTB 2006)
- Timber Lane Utility District Park & Trail Master Plan, Spring, Texas. 2005 (supervised by Dr. Jon Rodiek, TAMU)
- Dalian Amber Bay Residential Community Design, Dalian, China. (SWA 2005)
- Texas A&M University Texarkan Phase I, Texarkan, Texas. (SWA 2005)

Architecture
- Wuhan Bus Terminal, Wuhan, China. 2003
- Affiliated Middle School of Huashi Normal University, Wuhan, China. 2003
- Municipal Government Office Building of Yiyang, Yiyang, China. 2002 (B.Arch final project)

SELECT PROJECT CONSULTANT
- Residential landscape design, Tucson, Arizona (2018)
- Shennongjia National Park Dajiut Lake Scenic Area, China (2017)
- Zitsing Lake Scenic Spot, Nanjing, China (research report, 2016)
AWARDS, HONORS, AND SUPPORT

• 2019 President’s Esteemed Faculty. University of Arizona
• 2018 President Award. Council of Educators in Landscape Architecture (CELA)
• 2016 Excellence in Research and/or Creative Work Award (Junior Level). Council of Educators in Landscape Architecture (CELA)
• Researcher of the Year 2014-2015, Dept. of Landscape Architecture & Environmental Planning, USU, 2015
• Research Fellow (2013). Landscape Architecture Foundation
• Research Fellow (2012). Landscape Architecture Foundation
• Research Fellow (2011). Landscape Architecture Foundation
• Undergraduate Research Mentor of 2013-2014, College of Agriculture and Applied Sciences ($500, CAAS), 2013
• Travel Grant for the 2013 American Water Resources Association (AWRA) Conference, Portland ($500 UAES, $1,000 CAAS)
• Travel Grant for the 2013 American Society of Landscape Architects (ASLA) Conference, Boston ($2,000 CAAS)
• Travel Grant for the 2013 Council of Educators in Landscape Architecture (CELA) Conference, The University of Texas at Austin. ($500 UAES, $500 CAAS, $500 LAEP)
• Feature of the Month. Ecology Center, Utah State University. February 2012
• Travel Grant for the 2012 Council of Educators in Landscape Architecture (CELA) Conference, University of Illinois at Urbana-Champaign. ($1,500, funded by Ecology Center)
• Travel Grant for the 2011 American Society of Landscape Architects (ASLA) Conference, San Diego, California ($500 COA, $400 LAEP)
• Travel Grant for the 2011 Association of American Geographers (AAG) Conference, Seattle, Washington ($500 COA, $400 LAEP)
• Participant of the 3rd Utah State University Proposal Writing Institute (2011) ($5,000)
• Research and Presentation Grant (2008). Office of Graduate Studies, TAMU. ($400)
• Travel Grant for the 49th Conference of Association of Collegiate Schools of Planning (ACSP) (2008). Chicago, Illinois. LAUP, TAMU. ($250)
• Department Head Award (2008). LAUP, TAMU. ($250)
• Travel Grant for the 48th Conference of Association of Collegiate Schools of Planning (ACSP) (2007). Milwaukee, Wisconsin. LAUP, TAMU. ($250)
• Grant for the International Conference on Sustainable Urbanism (2007). LAUP, TAMU ($250)
• The Park People Scholarship (2006-2007). ($2,000)
• Timber Lane Utility District Park & Trail Mater Plan, Spring, Texas (2005). Through Dr. Jon Rodiek. LAUP, TAMU. ($3,000)
• R. Joseph Reeves Endowed Memorial Scholarship (2005). College of Architecture, TAMU. ($1,000)
• First Prize in Student Research Week (2005). TAMU. ($250)
• Incentive Tuition Scholarship (2004-2005). College of Architecture, TAMU. ($1,000)
• Outstanding Graduate Student (2004). College of Architecture, Huazhong University of Science &
  Technology, China.
• Outstanding Academic Performance Scholarship (2003). College of Architecture, Huazhong University
  of Science & Technology, China. (RMB 2,000)
• Outstanding Undergraduate Student (2002). College of Architecture, Huazhong University of Science &
  Technology, China.
SERVICE

International/National

Professional Organization

• Member of Research Committee (2016-2019), Landscape Architecture Foundation
• CELA Representative (2016-2018), Board of Landscape Architecture Foundation
• Vice President for Research and Creative Scholarship (2016-2018), Council of Educators in Landscape Architecture (CELA)
• Chair, Standing Committee on Research (2016-2018), Council of Educators in Landscape Architecture
• Chair, CLASS Fund/CELA Grant Proposal Selection Committee (2016-2018)
• Member of Executive Committee (2016-2018), Council of Educators in Landscape Architecture
• Chair (2014-2016), Design Implementation Track, CELA Conference
• Co-Chair (2012-2013), Design Implementation Track, CELA Conference

National/International Conference

• Conference Organizing Committee. The 1st Tongji Forum on Ecological Wisdom Inspired Urban and Rural Ecological Practice. Tongji University, Shanghai, China, July 9-10, 2016.
• Co-Chair (2015). 2016 Council of Educators in Landscape Architecture (CELA) Conference, Utah State University (host institution)

Abstract & Paper Reviewer

• Abstract Reviewer, Environmental Design Research Association (EDRA) Conference (2017-present, 5-8 abstracts annually)
• Abstract & Paper Reviewer, Council of Educators in Landscape Architecture (CELA) Conference (2009-present, 3-9 abstracts annually)
  Design Implementation Track
  Landscape Performance Track
  Research and Methods Track
  Sustainability Track
  Theme Track
  Urban Design Track
Editorial
• Editor-in-Chief (2018). Landscape Research Record, No.7
• Editor-in-Chief (2017). Landscape Research Record, No.6
• Editor (2017). CELA 2017 Conference Proceedings
• Lead Guest Co-Editor (2017). Modern Urban Research 2017 Special Issue
• Co-editor (2016). Landscape Research Record, No.5
• Co-editor (2015). Landscape Research Record, No.4
• Co-editor (2014). Design Implementation Track, Landscape Research Record, No.02.
• Co-editor (2013). Design Implementation Track, Landscape Research Record, No.01.

Ad-Hoc Manuscript Reviewer (2010-present, 50+ articles)
African Journal of Agricultural Research [Impact Factor: 0.51]
CELA Proceedings
Chinese Landscape Architecture [Impact Factor: 1.579]
Ecological Engineering [SCI, 5-Year Impact Factor: 3.430]
Environmental Management [SCI, Impact Factor: 2.177]
Environmental Modelling and Software [SCI, 5-Year Impact Factor: 4.990]
IACP Conference Proceedings
International Journal of Climate Change Strategies and Management
Journal of Environmental Planning and Management [SSCI, Impact Factor: 0.657]
Journal of Irrigation and Drainage Engineering [Impact Factor: 0.78]
Journal Urban Planning and Design Research
Landscape and Urban Planning [SCI/SSCI, 5-Year Impact Factor: 5.957]
Landscape Architecture Frontiers
Landscape Architecture Journal [Impact Factor: 1.205]
Landscape Ecology [SCI, Impact Factor: 3.833]
Landscape Journal
Landscape Research [SSCI, Impact Factor: 1.198]
Landscape Research Record
Modern Urban Research [Impact Factor: 1.536]
Professional Geographer [SSCI, Impact Factor: 1.347]
Socio-Ecological Practice Research
Sustainability [SCI, Impact Factor: 2.075]
Urban Forestry & Urban Greening [SCI/SSCI, 5-Year Impact Factor: 3.521]

Grant Proposal, Book Proposal & Research Report Reviewer
• Book Proposal Reviewer, Routledge (2018-present)
• Proposal Reviewer, North Carolina Water Resources Research Institute (2017)
• Research Report Reviewer, Landscape Performance Case Study Review for Landscape Architecture
Foundation (2015-present)
• Textbook Proposal Reviewer, John & Wiley and Sons (2012)

Professional Awards Jury
• Jury Member. 2016 American Society of Landscape Architects (ASLA) Professional Awards Jury (Research Category).
• “Sponge Campus” Landscape Design Competition. China (2015)

Promotion & Tenure External Reviewer
• Fall 2019 (1)
• Fall 2017 (2)
• Fall 2016 (1)
• Fall 2015 (1)

Vice President
Overseas Chinese Landscape Architect Association (OCLAA), 2007

University of Arizona
University
• Committee Member, Environmental Research Landscape Review Committee (Fall 2017-2018)

College/School
• CAPLA Council of Faculty Members (Fall 2019-present)
• CAPLA Curriculum Committee (Fall 2019-present)
• CAPLA Building Committee (Spring 2019-present)
• Design Professional Search Committee (Spring 2019)
• Committee Member, College Constitution and Bylaws Committee, College of Architecture, Planning and Landscape Architecture (Spring 2019-present)
• Committee Member, International Programs Task Force (co-chair for Research section), SPOAC (Fall 2018-Spring 2019)
• Committee Member, Strategic Planning and Operations Advisory Committee (SPOAC), College of Architecture, Planning and Landscape Architecture (Fall 2018-Spring 2019)
• Faculty Status Committee, CAPLA (since Fall 2018)

Utah State University
University/College
• Faculty Senate, LAEP, CAAS (Fall 2016-Spring 2017)
• University Safety Committee, CAAS (Fall 2016-Spring 2017)
• Co-organizer (with Dr. Ryan Dupont). NSF EPSCoR Focus Area 2 Green Infrastructure Facility Field Trip, Logan. (10/21/2013)
• Executive Committee Member. NSF EPSCoR Focus Area 3 Green Infrastructure Research Facility (GIRF), in collaboration with University of Utah (Fall 2013)
• Post-doc Search Committee. NSF EPSCoR Focus Area 2 The Social and Engineered Ecohydrologic System (Spring 2013)
• Reviewer, Utah State University Honors Program scholarship application evaluation (Spring 2015)
• Reviewer, College of CAAS, Honors Program prospective student application evaluation (Spring 2014)
• Reviewer, Utah State University Honors Program prospective student application evaluation (Spring 2013)
• Sustainability Curriculum Committee. College of Agriculture, Utah State University (Spring 2010-2011)

Department
• LAEP Department Speaker Series Faculty Coordinator (2016-2017)
• Craig Johnson Fund for Excellence Lecture Coordinator (Fall 2016). Speaker: Keith Bowers (10/28/2016)
• LAEP Department Thesis Reviewer (Fall 2012-Spring 2015, Fall 2016-Spring 2017)
• Faculty Search Committee Member, LAEP, Spring 2012.
• Prepared Curriculum Section of the Self-Evaluation Report (SER) for 2011 Landscape Architectural Accreditation Board (LAAB) review (BLA & MLA programs). (with Caroline Lavoie and Shujuan Li)
• Sigma Lambda Alpha (SLA) Advisor. Dept. of Landscape Architecture & Environmental Planning, Utah State University (2010-2015)
• Honors Program Advisor, Dept. of Landscape Architecture & Environmental Planning, Utah State University (since Oct. 2009)
• Faculty representative of Advancement Board (Diversity and Outreach). Dept. of Landscape Architecture & Environmental Planning, Utah State University (since 2009)
• Judge in Student Research Week, Texas A&M University, 2007.

MEMBERSHIPS
• Council of Educators in Landscape Architecture (CELA)
• American Society of Landscape Architects (ASLA)
• Arizona Chapter American Society of Landscape Architects (AzASLA)
• Council of Landscape Architectural Registration Boards (CLARB)
• American Planning Association (APA)
• Association of Collegiate Schools of Planning (ACSP)
• Overseas Chinese Landscape Architects Association (OCLAA)
• International Association for China Planning (IACP)
• Center for Watershed Protection (CWP)
• Sigma Lambda Alpha (SLA)
Kelly Cederberg
Curriculum vitae

PERSONAL DATA

Position:
Assistant Professor, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning (CAPLA), University of Arizona

Office address:
School of Landscape Architecture and Planning
College of Architecture, Landscape Architecture and Planning
University of Arizona
P.O. Box 210075
Tucson, AZ 85721-0075
(520) 626-7730
kelly.cederberg@arizona.edu

CHRONOLOGY OF EDUCATION

2013       M.L.A., University of Arizona, Tucson, AZ.
Master’s Report: Metamorphosis: A Master-Planned Community Renovation- From Struggling Golf Course to Vibrant Desert Community
Advisor: Margaret Livingston
Major Field: Landscape Architecture

2007       B.F.A., 3-D Studio Art, University of Arizona, Tucson, AZ.
Advisor: Carlton Bradford
Major Field: 3D Studies

1997       B.A., Communication Studies, Central College, Pella, IA.
Advisor: Dennis Doyle
Major Field: Communication Studies

Fields of Interest
Urban redevelopment strategies and land use change, golf course redesign/repurposing, teaching creative confidence and interdisciplinary design studios.

CHRONOLOGY OF EMPLOYMENT

Chronology of Employment- Academic
2015-May 2019  Assistant Professor, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning (CAPLA), University of Arizona, Tucson, Arizona.

2011, 2012 (Fall)  Teaching Assistant, School of Landscape Architecture and Planning, College of Architecture, Landscape Architecture and Planning, University of Arizona, Tucson, Arizona.


**Chronology of Employment- Professional**

2013 - 2015  Landscape Designer, Sites Southwest LLC, Albuquerque, NM

2012  Landscape Design Intern, Sites Southwest LLC, Albuquerque, NM

2011  STEP Landscape Architect Intern- USDA Forest Service - Coconino N.F., Red Rock Ranger District, Sedona, Arizona


**PUBLICATIONS/CREATIVE ACTIVITY**

**Chapters in scholarly books**

**Refereed journal articles**

**Refereed conference proceedings**

**Popular journals**
Media- Articles and Interviews
2018 Pigott, S. UA Students Take to Tucson’s Roads. UA News. https://uanews.arizona.edu/story/ua-students-take-tucsons-roads

Scholarly Presentations • Invited
2018 Guest reviewer, Arizona State University, Tempe, AZ.
2016 Guest reviewer, Arizona State University, Tempe, AZ.

Scholarly Presentations • Submitted with refereed abstracts


Refereed Abstracts

Cederberg, K. 2016. Golf course repurposing: An opportunity for retrofitting suburban communities to better serve the community and the ecosystem. Association of Collegiate Schools of Planning Annual Meeting, Portland, OR. (poster presentation not attended)
**Pro-Bono Service Learning/Outreach Projects**

2019  
Cobre Valley Rail Trail. Miami, Tri-cities and Globe, AZ. In conjunction with Gila County and Water Resources Research Center

2018  
Iron Horse Neighborhood Association Park Renovation Plan: plan for renovating the Iron Horse Neighborhood Park to make it safe and accessible and incorporate the wash into the park design.

2018  
Thrive 05: Plan for City of Tucson and ASU School of Social Work. Included an urban design assessment and an asset-based plan for making transportation more accessible, increasing quality of life and reducing crime in the 85705 zip code. Tucson, AZ.

2017  
Nogales Children’s Museum and Park Plan (City of Nogales and Nogales Children’s Museum non-profit). Plan for the conversion of 3 holes of a defunct golf course and clubhouse into a new children’s museum and park. Design focused on the preservation of wetlands, a child centered park and renovation of areas surrounding the clubhouse. Nogales, AZ.

2017  
Davis Monthan Air Force Base Ironwood Club Event Space: Plan included the renovation of an outdoor space for military celebrations and improved water management. Tucson, AZ.

2017  
Davis Monthan Air Force Base: Plan for General William Blanchard Golf Course. Tucson, AZ.

2017  
Tucson Commercial Clusters Report. City of Tucson. Analysis identifying historic commercial clusters within the City of Tucson with potential for adaptive reuse and urban design for walkability. Tucson, AZ

2017  
Livable Streets for Vibrant Communities. City of Tucson. Complete Streets Strategies for Tucson, AZ.

2017  
Marana’s Original Neighborhoods. Town of Marana. Community assessment and improvement plans for Marana’s wildcat neighborhoods.

2016  
La Doce. A plan for a cultural and business district on South 12th Ave. Tucson, AZ.

2016  
Rethinking the City of Tucson’s Major Streets and Routes Plan and Map: A toolbox of policy and design opportunity. Tucson, AZ.

2016  
Town of Marana: Parks, Recreation and Open Space 5-year Update and Strategic Plan

2016  
High Capacity Transit: Tucson’s Next Corridor- City of Tucson
2013 University of Arizona College of Natural Resources and USFS- Mt. Lemmon Children’s Forest- Master Plan Document

2012 Silvercroft Neighborhood Association and City of Tucson- Silvercroft Community Park Conceptual Design

HONORS AND AWARDS

2019 Faculty Advisor, AZ ASLA Student Individual Design Award
Project: A River Story
Student: Tess Wagner

2017 Faculty Advisor, AZ APA Award- Best Student Project
Project: Livable Streets for Vibrant Communities
Students: Connor Harmon, Brad Kindler, Amanda Maass, Chris Ortiz y Pino, Michele Scanze, Fei Yu, Yuheng Zhang.

2017 Faculty Advisor, AZASLA Honor Award- Student Collaborative
Project: High Capacity Transit: Planning Tucson’s next corridor
Students: Daniel Martin, Ryan Fagan, Alena Fast, Minette Mahoney, Tai An, Yanan Liu, Felicia Farrante & Domenico Martinelli

2016 Faculty Advisor, AZ APA Award- Best Student Project
Project: La Doce: Supporting a naturally occurring cultural and business district on South 12th Avenue
Students: Bridget Guiza, Chris Laria, Nicole Lavelly, Maureen McDonald, Brian Sabri, Nolan Bade, Xin Tan, and Collin Palen.

2016 NM ASLA Merit Award: Design Exploratory Category
Project: Valle de Oro Urban Wildlife Refuge-Sites Southwest
Firm: Sites Southwest- Albuquerque, NM
Role: Landscape Designer

2016 NM ASLA Merit Award: Planning & Analysis Category
Project: Fourth Street Revitalization
Firm: Sites Southwest
Role: Landscape Designer

ELECTED MEMBER OF HONOR SOCIETIES
Sigma Lambda Alpha

PROFESSIONAL MEMBERSHIPS
American Society of Landscape Architects
Council for Educators in Landscape Architecture
PRINCIPLE COURSES TAUGHT
Landscape Analysis
Design Studio 4- Interdisciplinary studio/Urban Design
Design Studio 3
Introduction to Design Thinking (online)
Consulting/co-teaching PLG 611 spring 2018/2019

M.L.A. AND THESIS COMMITTEES
Theses and Master’s Reports: served as committee member
2016 Alamri, Sultan. Aum Qasr Valley Environmental Rehabilitation Project: A connection to an elevated urban fabric

Undergraduate Capstone Reports for students in Bachelor’s for the Study of the Built Environment: advisor
2016 Zedick, Daniel. Improving Water Use in the Landscape Through Subsurface Drip Irrigation

SERVICE/OUTREACH

State
2013-2015- NM ASLA Executive Committee
2014-2015- NM ASLA Secretary

University
Jan 2018- May 2019 Member- Undergraduate Council
Academic programs subcommittee (2018-2019)
Academic policies subcommittee (Spring 2018)

College
2017-2019 Co-chair, Diversity and Inclusion Committee
2018-2019 CAPLA Strategic Plan Culture Task Force
2018 (spring) CAPLA Strategic Plan Partnerships/Community Working Group
2015-2018 Member, Design Thinking Committee
2015 IT Search Committee

Department
2018-2019 Sustainable Built Environments- Landscape emphasis area faculty advisor
2017-2019 Internal student recruitment to AMP Program
2016-2018 Prospective International Student Interviews
2016-2017 Tenure Track Associate Professor Hiring Committee

RELATED PROFESSIONAL SKILLS
Professional Landscape Architecture Registration pending (Spring 2019)
Beginning Irrigation Design Workshop, Irrigation Association Conference, Phoenix, Arizona, 2014
Be Loose Graphic Workshop with Mike Lin, Manhattan, Kansas, Jan. 2013
River Restoration Workshop, Fred Phillips Consulting, Yuma, Arizona, 2012
NATE RITCHIE
202.834.8043 | nate.ritchie@gmail.com | 112 W. 5th St. Tucson, AZ 85705

EDUCATION
Master of Landscape Architecture
University of Arizona, 2018

Bachelor of Arts: Philosophy & Psychology (Double major)
Asbury University, 2006

CERTIFICATIONS & TRAINING
• Completed 2 of 4 sections of the LARE exam to become a Registered Landscape Architect
• Principles of Irrigation: Landscape, Irrigation Association 2-day intensive course

CURRENT AFFILIATIONS
• ASLA Associate Member
• Lead, Emerging Professionals, Southern AZ American Society of Landscape Architects, 2018- present
• University of Arizona Liaison, Southern AZ American Society of Landscape Architects, 2018- present
• YARDS Youth Landscape Maintenance Training, Tucson Clean and Beautiful, 2017-present

WORK EXPERIENCE
Landscape Designer: 2016 – Present
Wheat Design Group, Tucson, AZ, wheatdesigngroup.com
• Drafting
• Marketing – Prop 407
Project Manager on 4 projects
Designer on over 20 projects

Graduate Teaching Assistant: Fall 2017
Foundational Studio

Graduate Research Assistant: Summer 2016

Founder: 2016
Sonoran Morphology, Tucson, AZ
• Concept development
• Design
• Construction management
• Communication with clients
Rincon Community Garden and residential landscape designs

University of Arizona College of Education, Project FOCUS
August 2014 – May 2016
Lead Instructor, Campus Life

SKILLS
Adobe Creative Suite  Microsoft & Apple OS
Autodesk AutoCAD  MicroStation
SketchUp  Final Cut Pro
Lumion  Microsoft Office

INTERESTS
Sonoran Desert ecology, native plants, irrigation design, outdoor spaces, graphic design.

AWARDS & SCHOLARSHIPS
2018  ASLA Merit Award
2018  AZ ASLA Student Collaborative Design Award
2018  Best Colleague Award
2018  Outstanding Community Service
2018  Desert Garden Club, Scholarship, University of Arizona, Tucson, AZ
2017  EPA Rainworks Challenge Demonstration Category – Honorable Mention
2017  AZ ASLA Park[ing] Day Award, ‘Opuntia Re-Connection’, University of Arizona, Tucson, AZ
2017  Mary M. and Cliffton E. Bloom Scholarship, University of Arizona, Tucson, AZ
2016  Ervin H. Zube Scholarship, University of Arizona, Tucson, AZ

LEADERSHIP & OUTREACH
2019  ASLA LARE Preparation Committee Member
2019  Emerging Professionals Chair, AZ ASLA
2018-2019  Invited Student Critique, CAPLA, University of Arizona, AZ
2017-2019  Board Member and Communication Chair, Women in Transportation
2017-2019  YARDS Youth Landscape Maintenance Training by Trees for Tucson
2017  Complete Streets Workshop, Living Streets Alliance
2016-2017  President, ASLA Student Chapter, University of Arizona, AZ
2015-2016  First Year Representative, ASLA Student Chapter, University of Arizona, AZ
VOLUNTEER

2019  Habitat for Humanity
2019  Cyclovia
2016  Adopt a Street, Tucson Clean and Beautiful
2015-2016  Freedom by Design

CONFERENCES

2019  ASLA, San Diego, CA (Upcoming)
2019  Desert Horticulture, Tucson, AZ
2019  Certified Irrigation Designer Course - Irrigation Association, Long Beach, CA
2018  Sports Turf Management Association, Phoenix, AZ
2017  Desert Horticulture, Tucson, AZ
2016  ASLA, New Orleans, LA

SELECT PROJECTS

Lead Designer, with AECOM for ADOT - I-10/Ruthrauff Road Traffic Interchange, 2013 – present

Construction of bridges over I-10, Union Pacific Railroad, and Davis Ave.; new on/off ramps, MSE retaining walls, drainage improvements, landscape, irrigation and highway improvements along I-10.

Project responsibilities: architectural treatments, landscape and planting designs (over 2000 plants), drafting, irrigation design

Lead Designer - Christ Presbyterian Church, 2017-2018

New design for Church courtyard between the Sanctuary, Narthex and Fellowship Hall; new planting designs for the streetscape and front landscape areas.

Project responsibilities: Concept development, incorporating feedback from church committees into the design, hardscape, planting, irrigation, and site feature design.

Lead Designer, for City of Tucson Parks and Recreation Department - Proposition 407: Bond Renders, 2018

Renders illustrating before and after signage, street markings, crosswalks, landscape and plantings, passive water harvesting, and roundabout on the Connections projects.

Project responsibilities: Create renderings, coordinate with City of Tucson Project Management
Designer, With Kittelson & Associates and AECOM for Pima County Department of Transportation - Aerospace Parkway, 2017 – 2019

Improvements to Aerospace Parkway between Old Nogales Highway and Raytheon Boulevard, and a new roadway “Southern Extension” from the Aerospace/Raytheon intersection going south to provide access for new development, native plant inventory and report, landscape, and erosion control plans.

Project responsibilities: native plant inventory and native plant inventory memo.

Designer, With Stantec and WSP for Pima County Department of Transportation - Benson Highway, 2017 – 2018

Native plant inventory and report, landscape, and erosion control plans. Landscape design includes water harvesting.

Project responsibilities: landscape and planting designs.
Curriculum Vitae

**Tim Johnson**, PLA, LEED® AP
Owner

Tim is the owner of JStudio and a registered landscape architect in Arizona, California, Utah, and New Mexico. His experience over the past 20+ years within the landscape architecture profession includes direction and oversight of landscape architecture staff and projects, environmental and riparian mitigation, site planning and design, graphic communications, construction document preparation, and construction administration.

Tim’s experience with the staff and processes of local jurisdictions enables him to help clients navigate the review and approval process with a direct and efficient manner. He is a native of the Sonoran Desert and is inspired by his experience working and living throughout the western U.S., Midwest, Alaska, and Europe. His strengths include his ability to provide creative solutions that meet clients' project needs and honor the environment within which they are designed.

**education:**
- MLA, Landscape Architecture, Utah State University, 1999
- BA, History, Arizona State University, 1996
- AA, Glendale Community College, 1994

**registration / certification:**
- 2006, Leadership in Energy & Environmental Design Accredited Professional
- 2005, Registered Landscape Architect, Utah License number 4812851-5301
- 2005, Registered Landscape Architect, California number LA5101
- 2003, Registered Landscape Architect, Arizona License number 38905
- 2002, Registered Landscape Architect, New Mexico License number 322

**affiliations:**
- American Society of Landscape Architects (ASLA)
- Arizona Chapter of the American Society of Landscape Architects (AZASLA) Executive Committee, Vice President 2005-2007, Southern Section Chair 2005-2007
- Urban Land Institute (ULI)
- American Planning Association (APA)
- United States Green Building Council (USGBC), Southern Arizona Chapter
Metropolitan Pima Alliance (MPA)
American Society of Civil Engineers, Southern Arizona Chapter (AZSCE)
Women in Transportation, Southern Arizona Chapter (WTS)
City of Tucson Resource Preservation Advisory Committee (RPAC)
Pima County Riparian Mitigation Work Group
City of Tucson Rainwater Harvesting Technical Advisory Group (Rainwater TAG)
Southern Arizona Home Builders Association (SAHBA)
American Institute of Architects, Allied Individual Member (AIA)

work experience:

JStudio | landscape architecture + site planning - Owner
4/2018 - present
Tucson, AZ

The Planning Center - Principal
3/2004 - 4/2018
Tucson, AZ

Novak Environmental, Inc. - Landscape Architect - Project Manager
Tucson, AZ

Land Patterns, Inc. - Landscape Architect
5/1999 - 7/2002
Colorado Springs, CO

US National Park Service - Historical Landscape Architect Intern
AK, NE, OH, MI, KS
9/1996 - 5/1999
Utah State University - Research Assistant & Teaching Assistant
Logan, UT

pro bono projects | service:

DM Youth Center, Tucson, AZ - conceptual site planning
Sister Jose Women's Shelter, Tucson, AZ - landscape & irrigation plan
Sky Island Public Charter School, Tucson, AZ - site analysis & master plan
Casa de los Niños Campus, Tucson, AZ - landscape, hardscape, & irrigation plans
City of Douglas Government Plaza Design, Douglas, AZ - conceptual site plan
Habitat for Humanity, Logan UT, Tucson, AZ - landscape design
La Frontera, Tucson, AZ - landscape & irrigation plans
San Xavier District, Tucson AZ - Safe Routes to School Photo Simulations and Landscape Concept Design
conference presentations:
AZ Planning Association State Conference
Crossing Disciplines in Code Writing and Design (co-presenter/panelist)
10/2017
AZ Tech Parks - Latin American Green Development Symposium
What is Green Design / Construction (presenter)
3/2016
AZ Planning Association State Conference
What is a TRE and what does it do?... (presenter)
10/2015
American Society of Landscape Architects (ASLA) National Conference
A Paradigm Shift in Irrigation Design: Calculating for Rainwater Harvesting (co-presenter)
9/2012
AZ Planning Association State Conference
From the Back of a Napkin to Avatar: Graphics as a Planning Translation Tool (co-presenter)
10/2011
AZ Planning Association State Conference
City of Tucson Commercial Rainwater Harvesting Requirements (co-presenter/panelist)
10/2010
AZ Nursery Association State SHADE Conference
City of Tucson Commercial Rainwater Harvesting Requirements (presenter)
4/2010
AZ Society of Civil Engineers (AZSCE-Southern Section) Luncheon
City of Tucson Commercial Rainwater Harvesting (presenter)
5/2009
Metropolitan Pima Alliance (MPA) Brown Bag Luncheon Luncheon
City of Tucson Commercial Rainwater Harvesting (presenter)
4/2009

selection committees | panels:
Women in Transportation (WTS) - Scholarship Review Committee
5/2009
University of Arizona (CAPLA) - Capstone Project Review Panel
4/2017
University of Arizona (CAPLA) - Capstone Project Review Panel
4/2014
American Society of Landscape Architects (ASLA) - NM State Awards Review Committee
10/2010
foreign languages:
   German - fluent
   Swiss German - conversational
   Spanish - beginning conversational
   French - beginning

computer skills:
   Advanced professional skills in AutoCAD, Adobe Suite (PS, AI, ID), SketchUp, Microsoft Office, Revu Bluebeam

professional project experience:

   commercial | office
   ● First and Main Town Center; Colorado Springs, CO
   ● Project designer for landscape and hardscape design of a 25-acre commercial town center. Project included anchor and boutique shopping landscape requirements, sub-surface fountain plaza, streetscape design, and pocket park.
   ● Walmart Neighborhood Market; Pima County, AZ
   ● Miramonte at the River Commercial, Tucson, AZ
   ● Pima County Administrative Building Landscape, Tucson, AZ
   ● Innovation and Technology Building at the UA Tech Park at the Bridges, Tucson, AZ
   ● Home Plate, Marana, AZ
   ● El Dorado Professional Plaza, Tucson, AZ
   ● El Rio Commerce Court, Tucson, AZ
   ● Casa de los Niños Campus, Tucson, AZ
   ● River Village Expansion Landscape, Pima County, AZ
   ● Agave Self Storage Landscape, Marana, AZ
   ● The Marketplace Expansion Landscape, Marana, AZ

   multifamily
   ● Pima Canyon Luxury Apartments, Pima County, AZ
   ● RendezVous Downtown Apartments & Plaza, Tucson, AZ
   ● Sterling Student Housing Mid Rise, Tucson, AZ

   infrastructure / utilities
   ● North Marana Development and Infrastructure Study, Marana, AZ
• TEP Pantano Substation; City of Tucson, AZ
• TEP Camino Del Cerro Substation; City of Tucson, AZ
• TEP Cienega Substation; City of Tucson, AZ.
• TEP Canoa Ranch Substation; Pima County, AZ
• TEP Sun City Substation; Pima County and Town of Oro Valley, AZ
• TEP Harrison Substation; City of Tucson, AZ
• TEP Orange Grove Substation; Pima County, AZ
• TEP Kino Substation and Nature Park, City of Tucson, AZ

mixed use

• Spring Creek Traditional Neighborhood Development (TND); Colorado Springs, CO
• Lowell Neighborhood; Colorado Springs, CO
• El Conquistador Apartments and Mixed Use Commercial Planned Area Development, Oro Valley, AZ

site planning

• The Bridges Block-1 Conceptual Site Plan, Tucson, AZ
• La Cholla and Tangerine Community & Church, Oro Valley, AZ
• Kachina Homes Community, Pima County, AZ
• Silverbell & Gorret Community Site Plan, Tucson, AZ
• Saguaro Bloom Neighborhoods (8A, 8B, 4, 3, 2, and 7), Marana AZ
• Kino South Master Plan, Tucson, AZ
• Lantana Apartments Expansion Site Plan, Tucson, AZ
• Marana Pumpkin Patch Site Plan, Marana, AZ
• Lazy-K Community Site Plan, Marana, AZ
• Houghton & Valencia (AZ State Land) Community Site Plan, Tucson, AZ
• Twin Peaks and Oasis Community, Marana, AZ
• Northstar Properties, Tucson, AZ
• Sonoran Corridor Master Plan, Pima County, AZ
• Southeast Employment & Logistics Center Master Plan, Pima County, AZ
• Sunset Professional Campus Master Plan, Tucson, AZ
• Pima Medical Campus Master Plan, Tucson, AZ
• Benedictine Monastery & Apartments Site Plan, Tucson, AZ
• Oracle and Linda Vista Apartments & Mixed Use Site Plan, Oro Valley, AZ
• The Canyons at Linda Vista Apartments and Mixed Use Site Plan, Oro Valley, AZ
• La Estancia Master Planned Community, Tucson, AZ
• Mountain Vail Community, Tucson, AZ
• Willow Ridge Community Site Plan, Marana, AZ
• Twin Peaks & Camino de la Manana Charter School Site Plan, Marana, AZ
• Eagles Nest Community Site Plan, Oro Valley, AZ
site, facility, or community master plans
- Pima County Aerospace Defense Research and Business Park, Pima County, AZ
- Sahuarita Southeast Conceptual Area Plan (SECAP); Town of Sahuarita, AZ
- Pima County Sports Facilities Assessment; Pima County, AZ
- El Corozon del Tres Rios del Norte Open Space and Recreation Master Plan, Pima County, Tucson, and Marana AZ
- Continental Ranch Open Space Assessment and Master Plan; Town of Marana, AZ
- Davis-Monthan AFB Recreation Center and Park; Tucson, AZ
- Holloman AFB Recreation Center and Park; Alamogordo, NM
- Saguaro Bloom Community Center, Marana, AZ
- Sunset Professional Park, Pima County, AZ

visual impact & viewshed analysis
- Silverbell Road Viewshed Analysis and Simulations, Tucson, AZ
- Canoa Ranch Power Substation Simulation; Pima County, AZ
- El Camino del Cerro Power Substation Simulations, Tucson, AZ
- North Star Properties Simulations, Tucson, AZ
- U-Haul Queen Creek Simulations, Queen Creek, AZ
- U-Haul Lincoln Simulations, Lincoln, IL
- U-Haul Starky Ranch, Odessa, FL

design charrettes
- El Mirage Design Charrette; El Mirage, AZ
- Nogales General Plan Design Charrette; Nogales, AZ
- Kayenta Township Design Charrette; Kayenta Township, Navajo Nation
- Tucson Streetcar Urban Land Use Plan (SLUP) Design Charrette; Tucson, AZ
- UA BioPark Design Charrette; Tucson, AZ
- UA Tech Park Design Charrette; Tucson, AZ
- City of Safford General Plan, Safford, AZ

regional planning efforts
- Sahuarita East Conceptual Area Plan (SECAP), Sahuarita, AZ
- Grant Road Improvement Plan, Tucson, AZ
- Kayenta Township Master Plan Update, Kayenta, Navajo Nation, AZ
- Nogales General Plan Update, Nogales, AZ
- El Mirage General Plan Update, El Mirage, AZ

master planned communities
- Spring Creek Traditional Neighborhood Development, Colorado Springs, CO
- Star Valley Master Planned Community; Pima County, AZ.
- Saguaro Bloom Master Planned Community, Marana, AZ
- Dove Mountain Master Planned Community, Marana, AZ
- Tribute Master Planned Community, Sierra Vista, AZ
- Sendero Pass Master Planned Community, Pima County, AZ
- Continental Reserve Master Planned Community, Marana, AZ

**recreational**
- Kino South Sports Complex, Tucson, AZ
- Santa Cruz River Shared Use Path; Marana, AZ
- Queen Creek Trail Master Plan; Queen Creek, AZ
- Saguaro Bloom Community Park; Marana, AZ
- Pima County Sports Facilities Assessment; Pima County, AZ
- El Corozon del Tres Rios del Norte Open Space and Recreation Master Plan, Pima County, Tucson, and Marana AZ
- Pathway to Discovery at UA BioPark; Tucson AZ
- Science Park Drive Loop Multi-Use Path; Tucson, AZ
- Pima Canyon Trailhead; Pima County, AZ
- Rita Road Multi-Use Path and Parklet Design Concept; Tucson, AZ
- Queen Creek Recreational Master Plan; Superior, AZ
- Esmond Station Neighborhood Park; Tucson, AZ
- Continental Reserve Park, Town of Marana, AZ
- U.S. National Park Service; NE, MI, KA, OH, AK.

**design guidelines**
- Continental Reserve Design Guidelines, Marana, AZ
- Sendero Pass Design Guidelines, Pima County, AZ
- Downtown Tucson Streetscape Design Manual, City of Tucson, AZ
- Fourth Avenue Streetscape Master Plan, Tucson, AZ
- La Estancia Master Planned Community Design Guidelines, Tucson, AZ

**residential communities**
- Kachina Homes Landscape, Pima County, AZ
- Twin Peaks and Oasis Community Landscape, Marana, AZ
- Star Valley Landscape, Pima County, AZ
- Lazy-K Landscape, Marana, AZ
- Tangerine Ridge Landscape, Marana, AZ
- Madera Highlands Black 24 Landscape, Sahuarita, AZ
- Mountain Vail Community Landscape, Tucson, AZ
- Willow Ridge Landscape, Marana, AZ
- Eagles Nest Community Landscape, Oro Valley, AZ
- Deseo Community Landscape, Pima County, AZ
- Rancho del Cobre Landscape, Oro Valley, AZ

**streetscape | transportation**
- Marana Main Street and Sandario Road Roundabout, Marana, AZ
- RendezVous Downtown Streetscape (Stone, Broadway, & Congress), Tucson, AZ
- Sterling Student Streetscape (1st Street & Tyndall Ave), Tucson, AZ
- Downtown Tucson Streetscape Design Manual, City of Tucson, AZ
- Grant Road Design Concept Report, City of Tucson, AZ
- Fourth Avenue Streetscape Master Plan, Tucson, AZ
- Grant Road Corridor Study, Tucson, AZ
- InterQuest Business Park Boulevard, Colorado Springs, CO
- Dove Mountain Boulevard, Marana, AZ
- Continental Reserve Loop Road, Marana, AZ
- Grant Road Corridor Study, Tucson, AZ
- Rita Road Landscape, Tucson, AZ
- Aerospace Defense Corridor, Pima County, AZ
- Tucson Downtown Urban Streetscape Design Guidelines, Tucson, AZ

**institutional | educational**
- The Renaissance Academy, Colorado Springs, CO
- Kino Hospital Campus, City of Tucson, AZ
- Planned Area Development (PAD)
- University of Arizona Science and Technical Campus, Tucson, AZ
- Vail High School and Early Childhood Center, Tucson, AZ
- Saguaro Springs Community Center; Marana, AZ
- TechPark AZ at The Bridges (formerly UA BioPark), Tucson; AZ
- UA TechPark, Tucson, AZ
- YMCA at UA TechPark Concept Plan; Tucson, AZ
- Esmond Station Elementary and Middle School; Tucson, AZ
- Western Institute for Leadership Development (WILD) Campus Landscape; Tucson, AZ
- Sky Islands High School Campus Master Plan Concept; Tucson, AZ
- Valley View Early Childhood Learning Center Playground; Pima County, AZ
- Casa de los Niños Campus, Tucson, AZ
religious
- St. Paul’s Catholic Church and School; Colorado Springs, CO
- Project Designer for church campus responsible for plaza design, landscape design, cost estimating, and construction observation.
- Beth-El Mennonite Church; Colorado Springs, CO

environmental
- Grant Road Professional Plaza-Riparian Mitigation Report; City of Tucson, AZ
- 22nd and Houghton WASH Report and Mitigation Plan; City of Tucson, AZ
- Star Valley Riparian Mitigation Plans; Pima County, AZ
- TEP Cienega Substation – Environmental Resources Report; City of Tucson, AZ
- Mountain Vail – Environmental Resources Report; City of Tucson, AZ
- Rosehill Wash Restoration Plan; Tucson, AZ
- Valencia Wash Restoration Plan; Pima County, AZ
- Rodeo Wash Restoration Plan; Tucson, AZ
- TEP Kino Substation Riparian Mitigation and NPPO, Tucson, AZ
- TEP Orange Grove Substation Landscape, NPPO, Environmental Resources Report, Pima County, AZ
- Willow Ridge NPPO, Marana, AZ
- Eagles Nest Community NPPO, Oro Valley, AZ
- Deseo Community NPPO, Pima County, AZ

military
- Davis-Monthan Air Force Base Renovations; City of Tucson, AZ
- Holloman Air Force Base Renovations; City Alamogordo, NM
- Border Patrol Landscape, Tucson, AZ (Davis-Monthan AFB)

miscellaneous
- Commercial Rainwater Harvesting, Technical Advisory Committee & Seminars, Tucson AZ
- Marana Pumpkin Patch Amusement Park Master Plan, Marana, AZ
- Los Reales Landfill Landscape, Tucson, AZ
- Waste Management Landscape, Marana, AZ
- Komatsu Testing Facility Landscape, Pima County, AZ
- Glendale Assisted Living Landscape, Glendale, AZ

water resource management | irrigation design
- Saguaro Bloom Irrigation Master Plan, Town of Marana, AZ
- Vail Academy Irrigation and Rainwater Harvesting Plan; Tucson, AZ
- Esmond Station Park Irrigation Master Plan; Tucson, AZ
over-structure projects

- RendezVous Downtown Apartments & Plaza, Tucson, AZ
- Sterling Student Housing Mid Rise Plaza and Rooftop Pool, Tucson, AZ
DR. NANCY POLLOCK-ELLWAND

Professor and Dean

*College of Architecture, Planning + Landscape Architecture*

University of Arizona, 1040 N. Olive Rd.
P.O. Box 210075
Tucson, Arizona, USA
85721-0075

(520) 310-4235
pollockellwand@email.arizona.edu

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**Education**

**PhD** 1997

University of Waterloo, Canada
Planning

**MArch** 1987

University of Manitoba, Canada
Master of Architecture

**BLA** 1978

University of Guelph, Canada,
Bachelor of Landscape Architecture

**Professional Affiliations**

**Fellow** – *Canadian Society of Landscape Architects* (CSLA)

**World Heritage Evaluation Panel Co-Chair**—*International Council on Monuments and Sites* (ICOMOS)

**Member**—International Federation of Landscape Architects (IFLA)


**Full Member** — *Alberta Association of Landscape Architects* (AALA); and *Ontario Association of Landscape Architects* (OALA)

**Full Member** — *American Society of Landscape Architects* (ASLA)

**Member**—*Alliance for Historic Landscape Preservation*
# Work History

**September 1984 to Present**  
**Cultural Landscape Consultant and Advisor**  
Serving as Individual Practitioner to Multi-Disciplinary Team Member  
Canada, Australia and USA

**September 2017 to Present**  
**Professor and Dean**  
College of Architecture, Planning and Landscape Architecture, University of Arizona  
Tucson, USA

**January 2010 to August 2017**  
**Professor and Dean**  
Faculty of Environmental Design, University of Calgary  
Alberta, Canada

**January 2007 to December 2009**  
**Professor and Head & Chair (Dean)**  
School of Architecture, Landscape Architecture and Urban Design, University of Adelaide  
Adelaide, Australia

**April 2006 to June 2006**  
**Visiting Professorship**  
Laboratory of Ecosystem Science and Landscape Planning, University of Tokyo  
Tokyo, Japan

**August 1999 to December 2006**  
**Associate Professor of Landscape Architecture**  
School of Environmental Design and Rural Development, University of Guelph  
Guelph, Canada

**May 1989 to July 1999**  
**Assistant Professor of Landscape Architecture**  
School of Landscape Architecture, University of Guelph  
Guelph, Canada

**April 1988 to March 1989**  
**Architectural Fellowship Recipient**  
International Design Division, Shimizu Corporation/University of Manitoba  
Tokyo, Japan

**September 1984 to May 1987**  
**Master of Architecture**  
University of Manitoba  
Graduate Student and Self-employed Landscape Architect for Parks Canada  
Winnipeg, Canada

**April 1981 to August 1984**  
**Landscape Architect**  
Parks Canada, Historic Sites. Prairie and Northern Region  
Winnipeg, Canada

**August 1980 to March 1981**  
**Landscape Designer**  
Self-employed  
Orthez, France

**June 1978- July 1980**  
**Landscape Designer**  
Roman Fodchuk and Associates, Calgary; Red Deer Recreation Department, Red Deer; Don Baron Ltd., Edmonton  
Calgary, Red Deer & Edmonton, Canada
Expert Advising/Juror

2018 Cultural Landscape Workshop. Upon invitation of ICOMOS Mexico coordinating and delivering heritage conservation workshop to public and private sector practitioners now working on the recovery of cultural landscapes post-2017 Mexico City and region earthquake (October)


2017 ICOMOS (UNESCO) Representative to the World Design Summit. Montreal, Canada


2017 Juror. Designer of the Year. Western Living Magazine

2015 – 2017 Vice President, North America Region. UNESCO’s International Council on Monuments (ICOMOS), International Scientific Committee on Cultural Landscapes


2016-2017 Part of 5-person expert panel struck by ICOMOS Canada, providing advisory service to jurisdictions across Canada seeking inclusion on the nation’s new World Heritage Tentative List

2016 Midstream Field Mission Specialist on World Heritage nominations for State Parties in Czech Republic and Germany (June)

2016 Upstream Field Mission Specialist for World Heritage nomination for Saudi Arabia (September)

2016 International Panelist participating in Workshop on the development of Bhutan’s new Heritage Bill. (June) Paro, Bhutan
<table>
<thead>
<tr>
<th>Year</th>
<th>Role</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 – Present</td>
<td><strong>ICOMOS/IFLA Member</strong> (Joint- International Council on Monuments and Sites/ International Federation of Landscape Architects) <strong>International Scientific Committee on Cultural Landscapes</strong></td>
<td>Voting Member for Canada (2000 to 2006); Expert Advisor to Executive Council (2007 to present); World Heritage Nomination Desk Reviewer 2007-2014- regarding sites in Japan, China, Greenland, South Africa, England, USA &amp; Viking Age Sites in Northern Europe (Iceland/ Denmark/ Germany/ Latvia/ Norway); Co-Chair, Working Group on Heritage Landscapes at Risk and Advocacy &amp; Culturenature Committee Member. (2015 to present)</td>
</tr>
<tr>
<td>1989 – Present</td>
<td><strong>Fellow. Canadian Society of Landscape Architects</strong> (investiture 2016); <strong>Full Member. Alberta Association of Landscape Architects and Ontario Association of Landscape Architects</strong></td>
<td></td>
</tr>
<tr>
<td>2013 – 2017</td>
<td><strong>Member. Advocacy Task Force, Canadian Society of Landscape Architects</strong> (CSLA), Canada</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td><strong>Moderator. ICOMOS/IFLA- International Scientific Committee on Cultural Landscapes Annual Meeting 2015, October, Jeju Island, Republic of Korea</strong></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td><strong>Grant Reviewer for the Austrian Science Fund- FWF Der Wissenschaftsfonds</strong>, Austria</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td><strong>External Doctoral Examiner. Royal Melbourne Institute of Technology University (RMIT), Practice-Based PhD Practica Examinations and Exhibitions.</strong> (3 candidates- England, China and Estonia), Barcelona, Spain</td>
<td></td>
</tr>
<tr>
<td>2012 – 2016</td>
<td><strong>Panel Member</strong> for Alberta Association of Landscape Architects. <strong>Urban Design Review Panel, City of Calgary. Canada</strong></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td><strong>Urban Design Jury Member. Ciudades Humanas Ciudades Incluyentes International Committee, Mexico</strong></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Position/Role</td>
<td>Details</td>
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</tr>
<tr>
<td>2011</td>
<td><strong>Juror.</strong> <em>City of Calgary, Lion’s Award</em> (for heritage conservation efforts).</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td><strong>Panel Member.</strong> Province of Alberta appointee to <em>Oversight Panel judging the final selection of the new Royal Alberta Museum</em> Design-Build contractor, Edmonton, Canada</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td><strong>Juror.</strong> <em>City of Calgary Mayor’s Urban Design Award (MUDA) Competition,</em> Canada</td>
<td></td>
</tr>
<tr>
<td>2009–2010</td>
<td><strong>Organizing Committee Member</strong> for <em>2nd Xiamen Forum on Urban Environment (XIFUE)</em>, December 11-13, 2010. Organized with the Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, China</td>
<td></td>
</tr>
<tr>
<td>2009–2017</td>
<td><strong>Editorial Board Member.</strong> <em>International Journal of Urban Sustainability and World Ecology</em> (Taylor and Francis)</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td><strong>Vice Chancellor Team Member</strong> investigating the feasibility of setting up a SE Asian Centre for design education in Singapore, on behalf of the University of Adelaide, Australia</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td><strong>World Heritage Nomination International Advisory Team Member</strong> for <em>Mt. Fuji, Japan</em></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td><strong>Conference Co-organizer.</strong> “<em>How do you make a city hungry for design?</em>” National Wine Centre. Adelaide, Australia</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td><strong>Juror.</strong> National Australian Student Prize for the Advancement of Architecture. Student Organized Network for (SONA)</td>
<td></td>
</tr>
<tr>
<td>2008–2009</td>
<td><strong>Citizen Member.</strong> Port Adelaide Heritage Conservation Campaign, Australia</td>
<td></td>
</tr>
<tr>
<td>2007–2008</td>
<td><strong>Design Team Member.</strong> University of Adelaide lead on <em>Green Cathedral Project</em>. Water conservation landscape planning along the Torrens River, Adelaide. St. Peter’s Cathedral and Energy Architects, Australia</td>
<td></td>
</tr>
<tr>
<td>2007 &amp; 2009</td>
<td><strong>South Australia Design Awards Juror.</strong> <em>Australian Institute of Architects</em> and <em>Australian Institute of Landscape Architects</em> as well as the <em>Planning Institute of Australia</em>, Australia</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Position</td>
<td>Institution/Role</td>
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<tr>
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<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>2007 – 2009</td>
<td><strong>Full Member.</strong> <em>Australian Institute of Landscape Architects</em>, Australia</td>
<td><em>Australian Institute of Architects</em>, Australia</td>
</tr>
<tr>
<td>2003</td>
<td><strong>Examiner.</strong> <em>Council of Landscape Architectural Registration Board</em> (CLARB), USA</td>
<td></td>
</tr>
<tr>
<td>2002 &amp; 2003</td>
<td><strong>National Awards Juror</strong> (2002), and <strong>National Awards Chair</strong> (2003), <em>Canadian Society of Landscape Architects Awards of Excellence</em>, Canada</td>
<td></td>
</tr>
<tr>
<td>2001 – 2005</td>
<td><strong>Educator Member.</strong> <em>Ontario Association of Landscape Architects (OALA)</em> Executive Council, Educator from the University of Guelph, Canada</td>
<td></td>
</tr>
<tr>
<td>2000 – 2010</td>
<td><strong>International Member.</strong> <em>American Society of Landscape Architects</em>, USA</td>
<td></td>
</tr>
<tr>
<td>2000 – 2002</td>
<td><strong>Vice President.</strong> <em>Alliance for the Preservation of Historic Landscapes</em>, US-Canadian organization of academics, government agencies and practitioners</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td><strong>Conference Organizer.</strong> <em>Borderlands: The Shared Canadian and U.S. Experience of Landscape</em>. <em>Alliance for Historic Landscape Preservation Annual Meeting</em>, June 2-5, 1999, Niagara-on-the-Lake, ON, Canada</td>
<td></td>
</tr>
<tr>
<td>1997 – 2001</td>
<td><strong>Board Member</strong>, <em>Parks Research Forum of Ontario</em> (PRFO), Canada</td>
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</table>

**Awards, Fellowships, Grants**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Fellow Status granted by the <em>Canadian Society of Landscape Architects</em> (for Professional University Instruction, and Service to the Community or Public)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.csla-aapc.ca/people/college-of-fellows">Link</a></td>
</tr>
<tr>
<td>2015</td>
<td>“Notable Graduate”, <em>University of Guelph’s Landscape Architecture Program, 50th Anniversary Legacy Site</em> <a href="http://www.uoguelph.ca/sedrd/landscape-architecture">Link</a></td>
</tr>
<tr>
<td>2014</td>
<td>Faculty representative for the award, <em>Heroes of The Flood</em>, granted by the Province of Alberta, which recognized the work of the Faculty (with the City of Calgary and O’Brien Institute of Public Health) mounting an international symposium and block week studio centering on making Calgary more resilient- <em>After the Flood</em> (of 2013)</td>
</tr>
<tr>
<td>2009</td>
<td><em>American Society of Landscape Architects. Honor Award in Communications. (Contributor On Canadian Projects)</em></td>
</tr>
<tr>
<td></td>
<td><strong>THE MASTER LIST OF DESIGN PROJECTS OF THE OLMSTED FIRM, 1857-1979</strong></td>
</tr>
</tbody>
</table>
2009  
*Boston Society of Landscape Architects’ Award of Excellence.* (Contributor On Canadian Projects)

**THE MASTER LIST OF DESIGN PROJECTS OF THE OLMSTED FIRM, 1857-1979**

2009  
*J.B. Jackson Book Prize, Foundation for Landscape Studies.* (Contributor On Canadian Projects)

**THE MASTER LIST OF DESIGN PROJECTS OF THE OLMSTED FIRM, 1857-1979**

2007  
*Canada’s Walk of Fame Foundation, Toronto, Canada.*

**NORTHERN LIGHTS TEAM**

**FIRST PLACE- WINNER, DESIGN COMPETITION**

2006  
*Canadian Society of Landscape Architects, National Citation.*

**LANDSCAPE LEGACIES (UofT Press) POLLOCK-ELLWAND & PRESTON (2006)**

2004  
*Richardson Foundation*

**LANDSCAPE LEGACIES (UofT Press) POLLOCK-ELLWAND & PRESTON (2006)**

2003 – 2006  
*Social Science and Humanities Research Council (SSHRC): Standard Grant.*

**PRINCIPAL INVESTIGATOR**

**OLMSTED FIRM IN CANADA**

1999  
*International Countryside Exchange, Isle of Wight, England.*

**PLANNING TEAM MEMBER**

1999  
*Canadian Institute of Planners Award for Planning Excellence - Honorable Mention.* Creating Curricula and Software Tools for High School-Based Community Heritage and Economic On-line Resource Centers with Mapconnections Consortium.

**COMMUNITY-BASED INFORMATION SYSTEMS**

1998  

**RESEARCH GRANT**

1995 – 1997  
*Social Science and Humanities Research Council (SSHRC) Doctoral Fellowship.*

**DOCTORAL FELLOW**

1988 – 1989  
*Shimizu Corporation – University of Manitoba Architect Exchange Fellowship. Tokyo, JAPAN*

**ARCHITECTURAL FELLOW**

1987  
*American Institute of Architects Scholastic Award – The AIA School Medal and the Certificate of Merit from the Henry Adams Fund, University of Manitoba.* “The American Institute of Architects awards an engraved medal and certificate of merit to the top-ranking graduating student in each architecture program...”

[http://www.aia.org/education/AIA8087873](http://www.aia.org/education/AIA8087873)

**MEDAL & CERTIFICATE WINNER**
PAPERS AND PRESENTATIONS

Books


Chapters/Essays in Books/Guest Editing


2014 Guest Editor. Landscape/Paysage Special Issue on Resilience- Landscape Adaptations to Climate Change. Winter/Hiver 2014. Vol. 16 (4). “To Begin With” (pp. 11-12), “The Last Word” (p.54)


Major Refereed Journal Articles

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Title</th>
<th>Journal and Volume/Issue</th>
<th>Page/DOI</th>
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<tbody>
<tr>
<td>1995</td>
<td>Pollock-Ellwand, N.</td>
<td>“Cultural Landscapes and Environmental Ethics: The Case of Puslinch Township’s Historic Roadside Trees”</td>
<td>Journal of Agricultural and Environmental Ethics. 7(2): 189-203</td>
<td></td>
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<tr>
<td>Year</td>
<td>Presentation</td>
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</table>

**Refereed Conference Presentations and Proceedings**

- **2014**

- **2011**

- **2010**

- **2008**
  Ma, M. (Presenter) and Pollock-Ellwand, N. “Reanimation of a Heritage Site: The Case in Alhambra”. *Conference on Virtual Systems and Multimedia Dedicated to Digital Heritage (VSMM 2008)*, October 20th–25th, 2008 in Limassol, Cyprus

- **2007**

- **2007**
  Ma, M. (Presenter) and Pollock-Ellwand, N. “In Search of the Garden Atmosphere within the Court of the Lions, Granada, Spain: A Landscape Architectural Perspective”. *5th International Conference on Science and Technology in Archaeology and Conservation*, July 7-10, 2007 in Baeza and Granada, Spain

- **2005**

- **2005**
  Pollock-Ellwand in panel at *Council of Educators in Landscape Architecture (CELA)*. Session on Distance Education in Landscape Architecture. September, 25th, 2005. Athens, Georgia, University of Georgia, US
<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Details</th>
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<tbody>
<tr>
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<td>Details</td>
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</tbody>
</table>

**Invited Lectures/Presentations/Interviews**

- **2017**

- **2016**

- **2016**
<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td><em>makeCalgary 2013: Resilient</em>. Moderator at International Symposium (also Faculty Block Week Studio) called <em>After the Flood- Resilient City Design</em>. October 12th. (Invited)</td>
</tr>
<tr>
<td>Year</td>
<td>Event Description</td>
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<tr>
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<tr>
<td>2012</td>
<td>Presentation to the <em>Urban Development Institute</em>. Calgary, Alberta. November 27th. (Invited)</td>
</tr>
<tr>
<td>2012</td>
<td>“The Nexus of Planning and Design: What Does It Mean from A Practice and Educational Perspective?” <em>Can U (Canadian Urbanists)</em>. Downtown Campus, University of Calgary. October 14th. (Invited)</td>
</tr>
<tr>
<td>2012</td>
<td><em>makeCalgary 2012: Culture Space</em>. Moderator at Metropolitan Centre public presentation and debate on proposed design interventions. October 12th. (Invited)</td>
</tr>
<tr>
<td>2012</td>
<td>Panelist at <em>Chancellor’s Club</em> event discussing Cities as Economic Engines with Calgary and Edmonton (Mayors Nenshi and Mandel). (Invited)</td>
</tr>
<tr>
<td>2012</td>
<td>Presentation to the <em>Parliamentary Delegation Inquiry State of Victoria, Australia</em> (Outer Suburban/Interface Services and Development Committee). Calgary, Fairmont Palliser, May 9th. (Invited)</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>2007</td>
<td>Coordination of <em>Community Workshop on Cultural Landscapes in Collaboration with University of Tokyo in Ohmi-Hachiman, Japan</em>, October 2nd to 5th, 2007, Japan. (Invited)</td>
</tr>
<tr>
<td>2003</td>
<td>“LA Title Acts and LARE: Do They Have to Go Together?”. <em>CSLA 2003 Awards Symposium</em>, March 1st. Winnipeg, University of Manitoba, MN. (Invited)</td>
</tr>
<tr>
<td>2003</td>
<td><em>Heritage Day Celebrations Wrap-Up Address</em>, February 14th, Guelph Youth Music Centre, Guelph, ON. (Invited)</td>
</tr>
<tr>
<td>Year</td>
<td>Title</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1998</td>
<td>“Gréber and the ‘Washington of the North’”. CSLA Conference, Université de Montréal. Montreal, PQ. (Non-refereed Presentation)</td>
</tr>
<tr>
<td>1998</td>
<td>Opening Address, Women in the Profession... a ten-year retrospective on the profession of Landscape Architecture. January. University of Guelph, Guelph, ON. (Invited)</td>
</tr>
</tbody>
</table>

**Manuals and Professional Report**

2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s) and Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001 to 2006</td>
<td>Pollock-Ellwand, N. and Cassidy, J. History of Cultural Form Course Manual: LARC*1950DE (Reader and Website as well for this Distance Course), Office of Open Learning, University of Guelph. 196 pages</td>
</tr>
<tr>
<td>2004</td>
<td>Nikittuittuq Ltd. Kekerten Historic Whaling Station Master Plan. Iqualuit, Nunavut: Nunavut Parks Department. 65 pages. (Part of Planning Team)</td>
</tr>
<tr>
<td>2004</td>
<td>Recreational Resources Ltd. Uvajuq (Mt. Pelly) Territorial Park Plan. Iqualuit, Nunavut: Nunavut Parks Department. 35 pages. (Part of Planning Team)</td>
</tr>
<tr>
<td>2001</td>
<td>Pollock-Ellwand, N. Community-Based Landscape Inventory. Parks Canada, Ontario Region, Cornwall, ON. March 20th. 28 pages</td>
</tr>
<tr>
<td>2000</td>
<td>Pollock-Ellwand, N. Buxton National Historic Cultural Landscape Inventory: Phase One- Data Assembly. Parks Canada, Ontario Region, Cornwall, ON. March 30th. 61 pages</td>
</tr>
<tr>
<td>Year</td>
<td>Source</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------</td>
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<tr>
<td>2015</td>
<td>UToday Feature</td>
</tr>
<tr>
<td>2014</td>
<td>makeCalgary Talk</td>
</tr>
<tr>
<td>2007</td>
<td>Pollock-Ellwand, N. and Grosset, C.</td>
</tr>
<tr>
<td>2004</td>
<td>Pollock-Ellwand, N.</td>
</tr>
<tr>
<td>2003</td>
<td>Pollock-Ellwand, N.</td>
</tr>
<tr>
<td>Year</td>
<td>Author(s)</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
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</table>

**Edited Proceedings/Monographs**

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Title</th>
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**Thesis**

<table>
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<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Title</th>
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</table>
### Exhibitions

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td><em>Land Art Generator Initiative</em>. Online exhibition of group submission called Solar Dunes (three members: Nancy Pollock-Ellwand, Canada; Mansoor Ma, Adelaide, Australia; Daniel Xiang, China) to 2010 design completion for site in Abu Dhabi, UAE. <a href="http://landartgenerator.org/participants2010.html">http://landartgenerator.org/participants2010.html</a></td>
</tr>
<tr>
<td>1995</td>
<td>Work personally completed on the historic landscape restoration of Motherwell Homestead included in exhibition, <em>Interpretations of Nature</em>, held at the McMichael Canadian Art Collection.</td>
</tr>
</tbody>
</table>

### Interests

- Masters Swimming
- Cycling
- Rowing Sweep and Sculls
- Snowshoeing
- Back Country Hiking
- Cooking
ACCELERATED MASTER’S PROGRAM – IMPLEMENTATION REQUEST

Please include along with the attached form an outline of a sample plan of study for a student pursuing the AMP to earn both the bachelors and Master’s degree in 5 years time.

I. Requested by – College of Architecture, Planning and Landscape Architecture, School of Landscape Architecture and Planning

II. Master’s Degree & Major
   a. Master of Landscape Architecture (MLA)

III. Bachelor’s Degree & Major(s) Eligible for the AMP –
   a. Bachelor of Landscape Architecture (BLA)

A letter of support from the unit head/college dean must accompany this request for each Bachelor’s degree/major eligible for this AMP that is offered by a unit other than the unit submitting this request.

IV. AMP Admission Requirements – programs may have more stringent or additional requirements. List any additional unit/college admissions requirements in addition to the following University AMP Admission Requirements:

   a) Completion of a minimum of 75 undergraduate credit hours will be required at the time of application; a minimum of 90 undergraduate credit hours will be required at the time of entry into the AMP. If the student’s GPA falls below 3.3 at the time they have completed 90 units, the student will not be admitted into the program. Courses taken for audit may not be included in the total number of units counted for eligibility or admission.
   b) A minimum cumulative GPA of 3.3 on a minimum of 12 units of undergraduate coursework at the UA.
   c) Completion of at least 12 earned undergraduate credits in their major at the University of Arizona’s main campus. Units still graded Incomplete, units graded Pass/Fail or units taken as audit will not count toward the requirement of the 12 undergraduate units.
   d) Completion or near completion of general education requirements (no more than one course remaining).
   e) Submission of a graduate application and payment of a graduate application fee.
   f) Demonstration of the maturity necessary for success in an accelerated, highly competitive program.
   g) Expectation to complete the undergraduate degree within four years. The undergraduate degree requirements must be completed before the student is eligible to have the Master’s degree awarded.

V. AMP Degree & Tuition Policies – all AMPs must comply with the AMP Degree and Tuition Policies. List any unit/college policies requirements in addition to the following University AMP Degree and Tuition Policies:

   a) Students will be considered undergraduates until they complete their undergraduate requirements, which should be no later than the end of the fourth year.
   b) Students entering with Advanced Placement Credit and/or who attend summer school may complete their Bachelor’s degree in the Junior year.
   c) During years 1-3 (or approximately 0-90 credits) students will be taking undergraduate coursework and charged at the undergraduate rate.
   d) Once admitted to AMP, during the senior (or transition year), students may take up to 12 units of graduate coursework that may apply toward both the Bachelor’s and the Master’s degrees. Students will be charged at the undergraduate rate and retain eligibility for undergraduate scholarships.
e) Students classified as seniors who have not yet completed a bachelor’s degree may enroll in 500-level courses following the Graduate Credit for Seniors Policy. Courses numbered at the 600, 700 and 900 levels are not open to undergraduates.

f) After completion of all Bachelors’ requirements, students will be granted graduate status, be charged at the graduate rate, and be eligible for graduate assistantships. The student won’t be eligible to graduate nor will they be eligible for assistantships until all Bachelors’ requirements are completed. While an undergraduate, students are required to keep their graduate coursework cumulative GPA at 3.0, or higher if required by the graduate degree offering unit, to be admitted to the Master’s program.

g) Should a student have completed 12 graduate credits, but not yet completed the undergraduate degree, they will be considered graduate for financial aid and tuition purposes and coded as ‘graduate’ in UAccess. They will no longer be eligible for undergraduate scholarships, nor will they be eligible for graduate assistantships.

h) At least 12 graduate credits must be taken while in graduate status, after completing all degree requirements for the Bachelor’s.

i) Students should be encouraged to complete their undergraduate requirements as soon as possible, but not later than one semester before receiving their Master’s degree. Students finishing their undergraduate requirements later than one semester before receiving their Master’s degree will no longer be eligible for undergraduate scholarships, nor will they be eligible for graduate assistantships. Neither degree will be awarded until the undergraduate requirements are completed along with the Master’s requirements.

j) The BLA requires 120 units; 12 units would be shared between the BLA and the MLA:
   - LAR 526: Planting Design (4 credits)
   - LAR 540: History, Theory, and Contemporary Landscape Architecture (3 credits)
   - LAR 560: Professional Practice/Working Drawings (3 credits)
   - LAR 596A: Special Topics in Landscape Architecture (1 credit)
   - LAR 596B: Landscape Architecture Seminar II (1 credit)
## Proposed Sequence of Courses for AMP from BLA to MLA Program:

### CAPLA + MLA (4+1) Plan

**Plan (printed 11/13/2019)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC/LAR 101 A/B Foundation Studio*</td>
<td>4</td>
</tr>
<tr>
<td>ARC/LAR 131 A/B Thinking about Architecture**</td>
<td>2</td>
</tr>
<tr>
<td>MATH 108 Modeling with Algebraic and Trigonometric Functions.</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
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<td>Tier I Gen Ed</td>
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### Freshman Year

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>ARC/LAR 101 A/B Foundation Studio*</td>
<td>4</td>
</tr>
<tr>
<td>ARC/LAR 131 A/B Thinking about Architecture**</td>
<td>2</td>
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<td>ENGL 101</td>
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<tr>
<td>Tier I Gen Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>Tier I Gen Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

### Sophomore Year

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 2** Design Studio I.</td>
<td>6</td>
</tr>
<tr>
<td>Tier I Gen Ed</td>
<td>3</td>
</tr>
<tr>
<td>Tier I Gen Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 2** Design Studio II.</td>
<td>6</td>
</tr>
<tr>
<td>Tier II Gen Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior Year

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 3** Design Studio III.</td>
<td>6</td>
</tr>
<tr>
<td>LAR 470 Intro to GIS.</td>
<td>4</td>
</tr>
<tr>
<td>LAR 423 Plant Materials.</td>
<td>4</td>
</tr>
<tr>
<td>Tier II Gen Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 2** History and Theory of Landscape Architecture.</td>
<td>3</td>
</tr>
<tr>
<td>LAR 2** Landscape Construction.</td>
<td>3</td>
</tr>
<tr>
<td>LAR 420 Plant Materials.</td>
<td>4</td>
</tr>
<tr>
<td>Tier II Gen Ed</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior Year

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 4** Design Studio V - Interdisciplinary Outreach Studio (co-convened with Arch 451b). ~</td>
<td>6</td>
</tr>
<tr>
<td>LAR 440/540 History, Theory and Contemporary Landscape Architecture.</td>
<td>3</td>
</tr>
<tr>
<td>LAR 426/526 Planting Design. *</td>
<td>4</td>
</tr>
<tr>
<td>LAR 496A/526A Special Topics in Landscape Architecture.*</td>
<td>1</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 2** Design Studio VI - Capstone studio.</td>
<td>6</td>
</tr>
<tr>
<td>LAR 460/560 Professional Practice/Working Drawings.*</td>
<td>3</td>
</tr>
<tr>
<td>LAR 596B Landscape Architecture Seminar II.**</td>
<td>1</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

### MLA Year

#### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 569C Landscape Architecture Seminar III.</td>
<td>2</td>
</tr>
<tr>
<td>BE 480/580 Research Methods.</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 569D Landscape Architecture Seminar IV.</td>
<td>2</td>
</tr>
<tr>
<td>LAR 909/910 Master’s Report/Thesis.</td>
<td>9</td>
</tr>
</tbody>
</table>

---

* Learning objectives are outlined in the BLA Curriculum Map

*UG section needs to be created

**Shared credits between BLA and MLA

* Need letter of support from Architecture

existing CAPLA courses

new course needed

MLA Courses
VALIDATE: EMPLOYMENT POTENTIAL

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate Programs</th>
<th>Location Nationwide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Level Bachelor’s degree</td>
<td>Time Period 9/1/2018 - 8/31/2019</td>
</tr>
<tr>
<td>Selected Programs Landscape Architecture (04.0601)</td>
<td>Career Outcomes mapped to Selected Programs of Study Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

HOW MANY JOBS ARE THERE FOR YOUR GRADUATES?

For your project criteria, there were 11,534 job postings in the last 12 months.

Compared to:

- 31,389,607 total job postings in your selected location
- 11,211,265 total job postings requesting a Bachelor’s degree in your selected location

The number of jobs is expected to grow over the next 8 years.

GROWTH BY GEOGRAPHY

<table>
<thead>
<tr>
<th>Geography</th>
<th>Selected Occupations</th>
<th>Total Labor Market</th>
<th>Relative Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationwide</td>
<td>10.23 %</td>
<td>5.78 %</td>
<td>Average</td>
</tr>
</tbody>
</table>
### How Has Employment Changed for Career Outcomes of Your Program?

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment (BLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>106,850</td>
</tr>
<tr>
<td>2015</td>
<td>107,070</td>
</tr>
<tr>
<td>2016</td>
<td>103,670</td>
</tr>
<tr>
<td>2017</td>
<td>100,960</td>
</tr>
<tr>
<td>2018</td>
<td>99,140</td>
</tr>
<tr>
<td>2028</td>
<td>109,286</td>
</tr>
</tbody>
</table>

Employment data between years 2019 and 2028 are projected figures.

### Details by Occupation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>9,426</td>
<td>NA</td>
<td>80,480</td>
<td>-1.8%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Architects</td>
<td>2,108</td>
<td>NA</td>
<td>18,660</td>
<td>-2.0%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>
HOW VERSATILE IS MY PROGRAM?

Graduates of this program usually transition into any of the 2 different occupation groups:

<table>
<thead>
<tr>
<th>Occupations Group</th>
<th>Market Size (postings)</th>
<th>Percentage of Career Outcome demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>9,426</td>
<td>81.7%</td>
</tr>
<tr>
<td>Architects</td>
<td>2,108</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

WHAT SALARY WILL MY GRADUATES MAKE?

The average salary in the nation for graduates of your program is $60,234

This average salary is Above the average living wage for your region of $31,450
Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.

<table>
<thead>
<tr>
<th>Occupation Group</th>
<th>25th Percentile</th>
<th>Average</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>$55,121</td>
<td>$63,354</td>
<td>$69,658</td>
</tr>
<tr>
<td>Architects</td>
<td>$56,216</td>
<td>$61,407</td>
<td>$68,172</td>
</tr>
</tbody>
</table>

WHERE IS THE DEMAND FOR MY GRADUATES?

![Map of the United States showing job posting demand by location.](image)

### TOP LOCATIONS BY POSTING DEMAND

<table>
<thead>
<tr>
<th>Location</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>2,095</td>
</tr>
<tr>
<td>Texas</td>
<td>985</td>
</tr>
<tr>
<td>Florida</td>
<td>700</td>
</tr>
<tr>
<td>Virginia</td>
<td>500</td>
</tr>
<tr>
<td>Washington</td>
<td>489</td>
</tr>
<tr>
<td>New York</td>
<td>429</td>
</tr>
<tr>
<td>State</td>
<td>Number</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>423</td>
</tr>
<tr>
<td>North Carolina</td>
<td>395</td>
</tr>
<tr>
<td>Colorado</td>
<td>359</td>
</tr>
<tr>
<td>New Jersey</td>
<td>349</td>
</tr>
</tbody>
</table>
VALIDATE: COMPETITIVE LANDSCAPE

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Nationwide</td>
</tr>
<tr>
<td>Degree Level</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Time Period</td>
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</tr>
<tr>
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</tr>
<tr>
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</tr>
</tbody>
</table>

OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>% Change (2013-2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degrees Conferred</td>
<td>674</td>
<td>-31%</td>
</tr>
<tr>
<td>Number of Institutions</td>
<td>54</td>
<td>0%</td>
</tr>
<tr>
<td>Average Conferrals by Institution</td>
<td>12</td>
<td>-33.30%</td>
</tr>
<tr>
<td>Median Conferrals by</td>
<td>12</td>
<td>-29.40%</td>
</tr>
</tbody>
</table>
MARKET SHARE BY PROGRAM

<table>
<thead>
<tr>
<th>Program</th>
<th>Conferrals (2017)</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture</td>
<td>674</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

MARKET SHARE BY INSTITUTION TYPE
Institution Type | Conferrals (2017) | Market Share (%)
--- | --- | ---
For-Profit | 6 | 0.89%
Private | 24 | 3.56%
Public | 644 | 95.55%

**TOP INSTITUTIONS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Georgia</td>
<td>Public</td>
<td>5.34%</td>
<td>0.06%</td>
<td>36</td>
<td>-30.80%</td>
</tr>
<tr>
<td>University of California-Davis</td>
<td>Public</td>
<td>4.60%</td>
<td>0.33%</td>
<td>31</td>
<td>-26.20%</td>
</tr>
<tr>
<td>Iowa State University</td>
<td>Public</td>
<td>4.45%</td>
<td>0.69%</td>
<td>30</td>
<td>-18.90%</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>-------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>California State Polytechnic</td>
<td>Public</td>
<td>4.45%</td>
<td>-2.26%</td>
<td>30</td>
<td>-54.50%</td>
</tr>
<tr>
<td>University-Pomona</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California Polytechnic State</td>
<td>Public</td>
<td>4.15%</td>
<td>-0.42%</td>
<td>28</td>
<td>-37.80%</td>
</tr>
<tr>
<td>University-San Luis Obispo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pennsylvania State University</td>
<td>Public</td>
<td>3.56%</td>
<td>-0.10%</td>
<td>24</td>
<td>-33.30%</td>
</tr>
<tr>
<td>Main Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas A &amp; M University</td>
<td>Public</td>
<td>3.26%</td>
<td>0.62%</td>
<td>22</td>
<td>-15.40%</td>
</tr>
<tr>
<td>College Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Wisconsin</td>
<td>Public</td>
<td>2.97%</td>
<td>0.43%</td>
<td>20</td>
<td>-20.00%</td>
</tr>
<tr>
<td>Madison</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona State University</td>
<td>Public</td>
<td>2.82%</td>
<td>0.38%</td>
<td>19</td>
<td>-20.80%</td>
</tr>
<tr>
<td>University-Tempe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado State University</td>
<td>Public</td>
<td>2.82%</td>
<td>1.09%</td>
<td>19</td>
<td>11.80%</td>
</tr>
<tr>
<td>University-Fort Collins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**TOP PROGRAMS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture</td>
<td>100.00%</td>
<td>0.00%</td>
<td>674</td>
<td>-31.50%</td>
</tr>
</tbody>
</table>
## ACTIVE COMPETITORS

|-------------|-------------|---------------------|---------------------|------------------|-------------------------------|

Report generated using Program Insight from Burning Glass Technologies
## VALIDATE: MARKET ALIGNMENT

### PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
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</thead>
<tbody>
<tr>
<td>Location</td>
<td>Nationwide</td>
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<tr>
<td>Degree Level</td>
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</tr>
<tr>
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<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

### JOB POSTINGS BY ADVERTISED EDUCATION (%)
JOB POSTINGS BY INDUSTRY (%)

- Professional, Scientific, and Technical Services (38%)
- Public Administration (20%)
- Administrative and Support and Waste Management and Remediation Services (8%)
- Educational Services (6%)
- Other (28%)

JOB POSTINGS BY EXPERIENCE REQUESTED (%)

- High School / Less than Associate's (0.6%)
- Associate's degree (0.4%)
- Bachelor's degree (91.4%)
- Master's degree (31.1%)
- Doctoral degree (11.8%)
TOP TITLES

Experience Level: All Experience

<table>
<thead>
<tr>
<th>Title</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Specialist</td>
<td>2,506</td>
<td>31.09%</td>
</tr>
<tr>
<td>Environmental Scientist</td>
<td>1,969</td>
<td>24.43%</td>
</tr>
<tr>
<td>Environmental Planner</td>
<td>801</td>
<td>9.94%</td>
</tr>
<tr>
<td>Landscape Architect</td>
<td>724</td>
<td>8.98%</td>
</tr>
<tr>
<td>Landscape Designer</td>
<td>266</td>
<td>3.30%</td>
</tr>
<tr>
<td>Environmental Protection Specialist</td>
<td>209</td>
<td>2.59%</td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td>126</td>
<td>1.56%</td>
</tr>
</tbody>
</table>

Bar chart showing distribution of experience levels: 0 to 2 years (34.2%), 3 to 5 years (46.3%), 6 to 8 years (9.6%), 9+ years (9.9%).
<table>
<thead>
<tr>
<th>Role</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Consultant</td>
<td>84</td>
<td>1.04%</td>
</tr>
<tr>
<td>Manager</td>
<td>64</td>
<td>0.79%</td>
</tr>
<tr>
<td>Safety Specialist</td>
<td>48</td>
<td>0.60%</td>
</tr>
<tr>
<td>Environmental Officer</td>
<td>43</td>
<td>0.53%</td>
</tr>
<tr>
<td>Environmental Manager</td>
<td>29</td>
<td>0.36%</td>
</tr>
<tr>
<td>Senior Environmental Consultant</td>
<td>26</td>
<td>0.32%</td>
</tr>
<tr>
<td>Planner</td>
<td>25</td>
<td>0.31%</td>
</tr>
<tr>
<td>Risk Assessor</td>
<td>23</td>
<td>0.29%</td>
</tr>
</tbody>
</table>

**TOP EMPLOYERS HIRING**

**Experience Level:** All Experience

<table>
<thead>
<tr>
<th>Employer</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Navy</td>
<td>274</td>
<td>3.40%</td>
</tr>
<tr>
<td>AECOM Technology Corporation</td>
<td>205</td>
<td>2.54%</td>
</tr>
<tr>
<td>Stantec, Inc.</td>
<td>203</td>
<td>2.52%</td>
</tr>
<tr>
<td>CDM Smith</td>
<td>112</td>
<td>1.39%</td>
</tr>
<tr>
<td>Tetra Tech</td>
<td>103</td>
<td>1.28%</td>
</tr>
<tr>
<td>Jacobs Engineering Group Incorporated</td>
<td>97</td>
<td>1.20%</td>
</tr>
<tr>
<td>Kimley-Horn and</td>
<td>93</td>
<td>1.15%</td>
</tr>
<tr>
<td>Company</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Associates</td>
<td>86</td>
<td>1.07%</td>
</tr>
<tr>
<td>Arcadis</td>
<td>65</td>
<td>0.81%</td>
</tr>
<tr>
<td>HDR Incorporated</td>
<td>60</td>
<td>0.74%</td>
</tr>
<tr>
<td>Resource Options Inc.</td>
<td>53</td>
<td>0.66%</td>
</tr>
<tr>
<td>Swca Incorporated</td>
<td>51</td>
<td>0.63%</td>
</tr>
<tr>
<td>Veolia North America, Llc</td>
<td>48</td>
<td>0.60%</td>
</tr>
<tr>
<td>State Florida</td>
<td>47</td>
<td>0.58%</td>
</tr>
<tr>
<td>Erm Group</td>
<td>44</td>
<td>0.55%</td>
</tr>
<tr>
<td>Wsp</td>
<td>44</td>
<td>0.55%</td>
</tr>
</tbody>
</table>
VALIDATE: KEY COMPETENCIES

PROJECT CRITERIA

<table>
<thead>
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TOP 15 SPECIALIZED SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Science</td>
<td>4494 (39%)</td>
<td>-8.57%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Budgeting</td>
<td>2031 (18%)</td>
<td>-10.04%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
<td>Percentage</td>
<td>Published</td>
<td>Cybersecurity</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>Environmental Laws and Regulations</td>
<td>1940 (17%)</td>
<td>37.08%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Project Management</td>
<td>1897 (16%)</td>
<td>-19.74%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Biology</td>
<td>1673 (15%)</td>
<td>-20.99%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>1661 (14%)</td>
<td>-1.71%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1644 (14%)</td>
<td>-10.21%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Compliance</td>
<td>1500 (13%)</td>
<td>-1.28%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>1371 (12%)</td>
<td>20.52%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Scheduling</td>
<td>1347 (12%)</td>
<td>1.88%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>1335 (12%)</td>
<td>-15.82%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>1228 (11%)</td>
<td>-38.4%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>1167 (10%)</td>
<td>19.02%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>1156 (10%)</td>
<td>4.22%</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Environmental Protection | 1013 (9%) | -11.69% | No | No

**TOP 15 BASELINES SKILLS**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills</td>
<td>4297 (37%)</td>
</tr>
<tr>
<td>Planning</td>
<td>3561 (31%)</td>
</tr>
<tr>
<td>Writing</td>
<td>2773 (24%)</td>
</tr>
<tr>
<td>Research</td>
<td>2330 (20%)</td>
</tr>
<tr>
<td>Microsoft Office</td>
<td>2101 (18%)</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>1965 (17%)</td>
</tr>
<tr>
<td>Teamwork / Collaboration</td>
<td>1919 (17%)</td>
</tr>
</tbody>
</table>
Organizational Skills | 1837 (16%)  
---|---  
Detail-Oriented | 1546 (13%)  
Problem Solving | 1362 (12%)  
Creativity | 1310 (11%)  
Written Communication | 1236 (11%)  
Microsoft Word | 1153 (10%)  
Computer Literacy | 1080 (9%)  
Microsoft Powerpoint | 1003 (9%)  

**TOP 15 SOFTWARE PROGRAMMING SKILLS**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td>Count (%)</td>
<td>Change (%)</td>
<td>Acquire?</td>
<td>Use?</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
<td>------------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Microsoft Office</td>
<td>2101 (18%)</td>
<td>-10.2%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>1965 (17%)</td>
<td>17.03%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>1156 (10%)</td>
<td>4.22%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Microsoft Word</td>
<td>1153 (10%)</td>
<td>-13.39%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Microsoft Powerpoint</td>
<td>1003 (9%)</td>
<td>-8.52%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Photoshop</td>
<td>873 (8%)</td>
<td>-22.36%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>SketchUp</td>
<td>739 (6%)</td>
<td>13.3%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Indesign</td>
<td>722 (6%)</td>
<td>-25.5%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Acrobat</td>
<td>593 (5%)</td>
<td>-15.24%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Creative Suite</td>
<td>486 (4%)</td>
<td>-7.62%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ArcGIS</td>
<td>380 (3%)</td>
<td>-0.43%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Illustrator</td>
<td>363 (3%)</td>
<td>0.82%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Skill</td>
<td>Postings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Work</td>
<td>6366 (55%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>3745 (33%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management</td>
<td>2453 (21%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Management and Restoration</td>
<td>2254 (20%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget Management</td>
<td>2035 (18%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>1966 (17%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Occupations

<table>
<thead>
<tr>
<th>Field</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Health and Safety</td>
<td>1875 (16%)</td>
</tr>
<tr>
<td>Drafting and Engineering Design</td>
<td>1455 (13%)</td>
</tr>
<tr>
<td>People Management</td>
<td>1402 (12%)</td>
</tr>
<tr>
<td>Regulation and Law Compliance</td>
<td>1213 (11%)</td>
</tr>
<tr>
<td>Graphic and Visual Design Software</td>
<td>1174 (10%)</td>
</tr>
<tr>
<td>Water Testing and Treatment</td>
<td>1141 (10%)</td>
</tr>
<tr>
<td>Air Quality</td>
<td>1110 (10%)</td>
</tr>
<tr>
<td>Ecology</td>
<td>982 (9%)</td>
</tr>
<tr>
<td>Construction Management</td>
<td>807 (7%)</td>
</tr>
</tbody>
</table>

### Top 15 Salary Premium Skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Value</td>
<td>Percentage</td>
<td>Change</td>
<td>Requirement</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>--------</td>
<td>------------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Budgeting</td>
<td>2031</td>
<td>(18%)</td>
<td>-10.04%</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Laws and Regulations</td>
<td>1940</td>
<td>(17%)</td>
<td>37.08%</td>
<td>Yes</td>
</tr>
<tr>
<td>Project Management</td>
<td>1897</td>
<td>(16%)</td>
<td>-19.74%</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Compliance</td>
<td>1500</td>
<td>(13%)</td>
<td>-1.28%</td>
<td>Yes</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>1228</td>
<td>(11%)</td>
<td>-38.4%</td>
<td>Yes</td>
</tr>
<tr>
<td>Water Quality</td>
<td>875</td>
<td>(8%)</td>
<td>-8.49%</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>820</td>
<td>(7%)</td>
<td>-18.14%</td>
<td>Yes</td>
</tr>
<tr>
<td>Technical Writing / Editing</td>
<td>813</td>
<td>(7%)</td>
<td>-18.2%</td>
<td>Yes</td>
</tr>
<tr>
<td>Legal Compliance</td>
<td>741</td>
<td>(6%)</td>
<td>6.16%</td>
<td>Yes</td>
</tr>
<tr>
<td>Land Use</td>
<td>578</td>
<td>(5%)</td>
<td>-15.68%</td>
<td>Yes</td>
</tr>
<tr>
<td>Natural Resource Management</td>
<td>576</td>
<td>(5%)</td>
<td>-13.51%</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Permitting</td>
<td>565</td>
<td>(5%)</td>
<td>-20.39%</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### TOP 15 COMPETITIVE ADVANTAGE SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>1897 (16%)</td>
<td>-19.74%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>1335 (12%)</td>
<td>-15.82%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>1167 (10%)</td>
<td>19.02%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Planning</td>
<td>957 (8%)</td>
<td>-7.62%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Consulting</td>
<td>878 (8%)</td>
<td>-29.25%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>820 (7%)</td>
<td>-18.14%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### TOP 15 CERTIFICATIONS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver’s License</td>
<td>2965 (26%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Requirement</td>
<td>Count (%)</td>
<td>Required</td>
<td>Background Check</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>Hazwoper</td>
<td>538 (5%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Security Clearance</td>
<td>274 (2%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Licensed Professional Engineer</td>
<td>177 (2%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>American Institute of Certified Planners</td>
<td>171 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Hazardous Materials Manager</td>
<td>116 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Occupational Safety and Health Administration Certification</td>
<td>111 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Landscape Architect License</td>
<td>106 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>American Board for Engineering and Technology (ABET) Accredited</td>
<td>72 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cdl Class B</td>
<td>66 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Project Management Certification</td>
<td>64 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>First Aid Cpr Aed</td>
<td>59 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
## Top 15 Salary Premium Certifications

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cdl Class C</td>
<td>57 (0%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Industrial Hygienist</td>
<td>47 (0%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Erosion, Sediment and Storm Water Inspector</td>
<td>44 (0%)</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

No certificates available

## Top 15 Competitive Advantage Certifications

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No certificates available
VALIDATE: EMPLOYMENT POTENTIAL

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>Arizona</td>
</tr>
<tr>
<td>Degree Level</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Time Period</td>
<td>9/1/2018 - 8/31/2019</td>
</tr>
<tr>
<td>Selected Programs</td>
<td>Landscape Architecture (04.0601)</td>
</tr>
<tr>
<td>Career Outcomes mapped to Selected Programs of Study</td>
<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

HOW MANY JOBS ARE THERE FOR YOUR GRADUATES?

For your project criteria, there were 227 job postings in the last 12 months.

Compared to:

- 875,530 total job postings in your selected location
- 275,216 total job postings requesting a Bachelor's degree in your selected location

The number of jobs is expected to grow over the next 8 years.

GROWTH BY GEOGRAPHY

<table>
<thead>
<tr>
<th>Geography</th>
<th>Selected Occupations</th>
<th>Total Labor Market</th>
<th>Relative Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>14.88 %</td>
<td>14.97 %</td>
<td>Average</td>
</tr>
<tr>
<td>Nationwide</td>
<td>10.23 %</td>
<td>5.78 %</td>
<td>Average</td>
</tr>
</tbody>
</table>
HOW HAS EMPLOYMENT CHANGED FOR CAREER OUTCOMES OF YOUR PROGRAM?

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (BLS)</td>
<td>1,480</td>
<td>1,650</td>
<td>1,680</td>
<td>1,890</td>
<td>2,030</td>
<td>2,332</td>
</tr>
</tbody>
</table>

Employment data between years 2019 and 2028 are projected figures.

DETAILS BY OCCUPATION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>152</td>
<td>0.9</td>
<td>1,420</td>
<td>9.2%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Architects</td>
<td>75</td>
<td>1.9</td>
<td>610</td>
<td>3.4%</td>
<td>14.1%</td>
</tr>
</tbody>
</table>
HOW VERSATILE IS MY PROGRAM?

Graduates of this program usually transition into any of the 2 different occupation groups:

<table>
<thead>
<tr>
<th>Occupations Group</th>
<th>Market Size (postings)</th>
<th>Percentage of Career Outcome demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>152</td>
<td>67.0%</td>
</tr>
<tr>
<td>Architects</td>
<td>75</td>
<td>33.0%</td>
</tr>
</tbody>
</table>

WHAT SALARY WILL MY GRADUATES MAKE?

The average salary in Arizona for graduates of your program is $59,918

This average salary is Above the average living wage for Arizona of $32,531
Report generated using Program Insight from Burning Glass Technologies
Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.

<table>
<thead>
<tr>
<th>Occupation Group</th>
<th>25th Percentile</th>
<th>Average</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>$58,780</td>
<td>$60,105</td>
<td>$74,508</td>
</tr>
<tr>
<td>Architects</td>
<td>$58,476</td>
<td>$58,233</td>
<td>$0</td>
</tr>
</tbody>
</table>

WHERE IS THE DEMAND FOR MY GRADUATES?

<table>
<thead>
<tr>
<th>Location</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>2,095</td>
</tr>
<tr>
<td>Texas</td>
<td>985</td>
</tr>
<tr>
<td>Florida</td>
<td>700</td>
</tr>
<tr>
<td>Virginia</td>
<td>500</td>
</tr>
<tr>
<td>Washington</td>
<td>489</td>
</tr>
<tr>
<td>New York</td>
<td>429</td>
</tr>
<tr>
<td>State</td>
<td>Number</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>423</td>
</tr>
<tr>
<td>North Carolina</td>
<td>395</td>
</tr>
<tr>
<td>Colorado</td>
<td>359</td>
</tr>
<tr>
<td>New Jersey</td>
<td>349</td>
</tr>
</tbody>
</table>
VALIDATE: COMPETITIVE LANDSCAPE

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>Arizona</td>
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<td>Bachelor's degree</td>
</tr>
<tr>
<td>Time Period</td>
<td>9/1/2018 - 8/31/2019</td>
</tr>
<tr>
<td>Selected Programs</td>
<td>Landscape Architecture (04.0601)</td>
</tr>
<tr>
<td>Career Outcomes mapped to Selected Programs of Study</td>
<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>% Change (2013-2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degrees Conferred</td>
<td>19</td>
<td>-32%</td>
</tr>
<tr>
<td>Number of Institutions</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Average Conferrals by Institution</td>
<td>10</td>
<td>-28.60%</td>
</tr>
<tr>
<td>Median Conferrals by</td>
<td>10</td>
<td>-28.60%</td>
</tr>
</tbody>
</table>
MARKET SHARE BY PROGRAM

Landscape Architecture (100%)

<table>
<thead>
<tr>
<th>Program</th>
<th>Conferrals (2017)</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture</td>
<td>19</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

MARKET SHARE BY INSTITUTION TYPE
### Institution Type

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Conferrals (2017)</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-Profit</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Public</td>
<td>19</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

### TOP INSTITUTIONS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona State University-Tempe</td>
<td>Public</td>
<td>100.00%</td>
<td>14.29%</td>
<td>19</td>
<td>-20.80%</td>
</tr>
<tr>
<td>Southwest University of Visual Arts-Tucson</td>
<td>For-Profit</td>
<td>0.00%</td>
<td>-14.29%</td>
<td>0</td>
<td>-100.00%</td>
</tr>
</tbody>
</table>

### TOP PROGRAMS

---

Report generated using Program Insight from Burning Glass Technologies
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture</td>
<td>100.00%</td>
<td>0.00%</td>
<td>19</td>
<td>-32.10%</td>
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</tbody>
</table>

**ACTIVE COMPETITORS**

|-------------|-------------|---------------------|---------------------|-------------------|------------------------------|
VALIDATE: MARKET ALIGNMENT

**PROJECT CRITERIA**

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>Arizona</td>
</tr>
<tr>
<td>Degree Level</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Time Period</td>
<td>9/1/2018 - 8/31/2019</td>
</tr>
<tr>
<td>Selected Programs</td>
<td>Landscape Architecture (04.0601)</td>
</tr>
<tr>
<td>Career Outcomes mapped to Selected Programs of Study</td>
<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

**JOB POSTINGS BY ADVERTISED EDUCATION (%)**


Report generated using Program Insight from Burning Glass Technologies

**JOB POSTINGS BY INDUSTRY (%)**

- Public Administration (38%)
- Professional, Scientific, and Technical Services (30%)
- Manufacturing (8%)
- Administrative and Support and Waste Management and Remediation Services (5%)
- Other (19%)

**JOB POSTINGS BY EXPERIENCE REQUESTED (%)**

- High School / Less than Associate's (0.6%)
- Associate's degree (0%)
- Bachelor's degree (91.5%)
- Master's degree (45.7%)
- Doctoral degree (20.1%)
**TOP TITLES**

**Experience Level: All Experience**

<table>
<thead>
<tr>
<th>Title</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Specialist</td>
<td>37</td>
<td>24.67%</td>
</tr>
<tr>
<td>Environmental Scientist</td>
<td>29</td>
<td>19.33%</td>
</tr>
<tr>
<td>Landscape Architect</td>
<td>27</td>
<td>18.00%</td>
</tr>
<tr>
<td>Environmental Protection Specialist</td>
<td>10</td>
<td>6.67%</td>
</tr>
<tr>
<td>Environmental Planner</td>
<td>8</td>
<td>5.33%</td>
</tr>
<tr>
<td>Consultant, Regulatory,Environmental Toxicology</td>
<td>7</td>
<td>4.67%</td>
</tr>
</tbody>
</table>

The bar chart shows the market share of job postings for different experience levels:
- 0 to 2 years (36.4%)
- 3 to 5 years (47.9%)
- 6 to 8 years (9.1%)
- 9+ years (6.6%)
## Top Employers Hiring

**Experience Level:** All Experience

<table>
<thead>
<tr>
<th>Employer</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Arizona</td>
<td>13</td>
<td>8.67%</td>
</tr>
<tr>
<td>US Navy</td>
<td>12</td>
<td>8.00%</td>
</tr>
<tr>
<td>Arcadis</td>
<td>4</td>
<td>2.67%</td>
</tr>
<tr>
<td>Kimley-Horn and Associates</td>
<td>4</td>
<td>2.67%</td>
</tr>
<tr>
<td>US Government</td>
<td>4</td>
<td>2.67%</td>
</tr>
<tr>
<td>Atwell</td>
<td>3</td>
<td>2.00%</td>
</tr>
<tr>
<td>Company</td>
<td>Value</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Balfour Beatty</td>
<td>3</td>
<td>2.00%</td>
</tr>
<tr>
<td>Calibre Corporation</td>
<td>3</td>
<td>2.00%</td>
</tr>
<tr>
<td>Bradley Stinson &amp; Associates</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>Calibre Systems Incorporated</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>City of Mesa</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>Freeport-McMoRan Copper &amp; Gold</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>Gila River Indian Community</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>Greey Pickett</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>Logan Simpson</td>
<td>2</td>
<td>1.33%</td>
</tr>
</tbody>
</table>
VALIDATE: KEY COMPETENCIES

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>States</td>
<td>Arizona</td>
</tr>
<tr>
<td>Degree Level</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Time Period</td>
<td>9/1/2018 - 8/31/2019</td>
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</tr>
<tr>
<td>Career Outcomes mapped to Selected Programs of Study</td>
<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

TOP 15 SPECIALIZED SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Science</td>
<td>67 (30%)</td>
<td>-8.57%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Budgeting</td>
<td>49 (22%)</td>
<td>-10.04%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>Change</td>
<td>Requires</td>
<td>Passed</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>--------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>44 (19%)</td>
<td>-1.71%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Project Management</td>
<td>42 (19%)</td>
<td>-19.74%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chemistry</td>
<td>38 (17%)</td>
<td>-10.21%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Laws and Regulations</td>
<td>35 (15%)</td>
<td>37.08%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>35 (15%)</td>
<td>20.52%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Scheduling</td>
<td>34 (15%)</td>
<td>1.88%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>34 (15%)</td>
<td>4.22%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Landscape Design</td>
<td>34 (15%)</td>
<td>-25.58%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Compliance</td>
<td>27 (12%)</td>
<td>-1.28%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Photoshop</td>
<td>25 (11%)</td>
<td>-22.36%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Legal Compliance</td>
<td>25 (11%)</td>
<td>6.16%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>24 (11%)</td>
<td>-15.82%</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### TOP 15 BASELINES SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>79 (35%)</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>77 (34%)</td>
</tr>
<tr>
<td>Research</td>
<td>67 (30%)</td>
</tr>
<tr>
<td>Writing</td>
<td>52 (23%)</td>
</tr>
<tr>
<td>Microsoft Office</td>
<td>46 (20%)</td>
</tr>
<tr>
<td>Teamwork / Collaboration</td>
<td>44 (19%)</td>
</tr>
<tr>
<td>Written Communication</td>
<td>41 (18%)</td>
</tr>
</tbody>
</table>
## Organizational Skills
- 37 (16%)

## Problem Solving
- 36 (16%)

## Detail-Oriented
- 31 (14%)

## Preparing Reports
- 30 (13%)

## Physical Abilities
- 25 (11%)

## Microsoft Excel
- 24 (11%)

## Microsoft Powerpoint
- 17 (8%)

## Creativity
- 17 (8%)

### TOP 15 SOFTWARE PROGRAMMING SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Count (Percentage)</td>
<td>Change (%)</td>
<td>Requires SQL</td>
<td>Requires Python</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>--------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Microsoft Office</td>
<td>46 (20%)</td>
<td>-10.2%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>34 (15%)</td>
<td>4.22%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Photoshop</td>
<td>25 (11%)</td>
<td>-22.36%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>24 (11%)</td>
<td>17.03%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>SketchUp</td>
<td>23 (10%)</td>
<td>13.3%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Indesign</td>
<td>19 (8%)</td>
<td>-25.5%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Microsoft Powerpoint</td>
<td>17 (8%)</td>
<td>-8.52%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Microsoft Word</td>
<td>16 (7%)</td>
<td>-13.39%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Acrobat</td>
<td>11 (5%)</td>
<td>-15.24%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Adobe Creative Suite</td>
<td>10 (4%)</td>
<td>-7.62%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ArcGIS</td>
<td>7 (3%)</td>
<td>-0.43%</td>
<td>No</td>
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<tr>
<td>Word Processing</td>
<td>4 (2%)</td>
<td>-19.34%</td>
<td>No</td>
<td>No</td>
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</table>
### TOP 15 SKILL CLUSTERS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Work</td>
<td>97 (43%)</td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>60 (27%)</td>
</tr>
<tr>
<td>Budget Management</td>
<td>49 (22%)</td>
</tr>
<tr>
<td>Project Management</td>
<td>44 (19%)</td>
</tr>
<tr>
<td>Drafting and Engineering Design</td>
<td>42 (19%)</td>
</tr>
<tr>
<td>Resource Management and Restoration</td>
<td>35 (15%)</td>
</tr>
<tr>
<td>Skill</td>
<td>Postings</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Writing</td>
<td>33</td>
</tr>
<tr>
<td>Graphic and Visual Design Software</td>
<td>32</td>
</tr>
<tr>
<td>People Management</td>
<td>31</td>
</tr>
<tr>
<td>Regulation and Law Compliance</td>
<td>28</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>26</td>
</tr>
<tr>
<td>Estimating</td>
<td>23</td>
</tr>
<tr>
<td>Earth and Space Science</td>
<td>23</td>
</tr>
<tr>
<td>Air Quality</td>
<td>21</td>
</tr>
<tr>
<td>Construction Management</td>
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<tr>
<td>Field</td>
<td>Value</td>
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<td>-----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Budgeting</td>
<td>49</td>
</tr>
<tr>
<td>Project Management</td>
<td>42</td>
</tr>
<tr>
<td>Environmental Laws and Regulations</td>
<td>35</td>
</tr>
<tr>
<td>Environmental Compliance</td>
<td>27</td>
</tr>
<tr>
<td>Legal Compliance</td>
<td>25</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>18</td>
</tr>
<tr>
<td>Technical Writing / Editing</td>
<td>16</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>14</td>
</tr>
<tr>
<td>Water Quality</td>
<td>14</td>
</tr>
<tr>
<td>Geology</td>
<td>12</td>
</tr>
<tr>
<td>Natural Resource Management</td>
<td>10</td>
</tr>
<tr>
<td>Environmental Permitting</td>
<td>6</td>
</tr>
<tr>
<td>Skill</td>
<td>Postings</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Resource Conservation and Recovery Act (RCRA)</td>
<td>6 (3%)</td>
</tr>
<tr>
<td>Project Planning and Development Skills</td>
<td>5 (2%)</td>
</tr>
<tr>
<td>Land Use</td>
<td>4 (2%)</td>
</tr>
</tbody>
</table>

**TOP 15 COMPETITIVE ADVANTAGE SKILLS**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>42 (19%)</td>
<td>-19.74%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>24 (11%)</td>
<td>-15.82%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>18 (8%)</td>
<td>-18.14%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Planning</td>
<td>16 (7%)</td>
<td>-7.62%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Geology</td>
<td>12 (5%)</td>
<td>-51.05%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>10 (4%)</td>
<td>19.02%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Skill</td>
<td>Postings</td>
<td>Salary Premium</td>
<td>Competitive Advantage</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------</td>
<td>----------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>Environmental Consulting</td>
<td>10 (4%)</td>
<td>-29.25%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Assessments</td>
<td>9 (4%)</td>
<td>-27.94%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Permitting</td>
<td>6 (3%)</td>
<td>-20.39%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Resource Conservation and Recovery Act (RCRA)</td>
<td>6 (3%)</td>
<td>-11.62%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Site Assessments</td>
<td>6 (3%)</td>
<td>12.94%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Report Writing</td>
<td>4 (2%)</td>
<td>-45.4%</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>California Environmental Quality Act (CEQA)</td>
<td>1 (0%)</td>
<td>7.61%</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Proposal Writing</td>
<td>1 (0%)</td>
<td>-31.96%</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

**TOP 15 CERTIFICATIONS**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver’s License</td>
<td>69 (31%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certification</td>
<td>Count (%)</td>
<td>Required</td>
<td>Eligibility</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Hazwoper</td>
<td>12 (5%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Hazardous Materials Manager</td>
<td>4 (2%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous Materials Certification</td>
<td>4 (2%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Licensed Professional Engineer</td>
<td>4 (2%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Information Systems Auditor (CISA)</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Information Systems Security Professional (CISSP)</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Chartered Life Underwriter (CIU)</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Information Systems Certification</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Occupational Safety and Health Administration Certification</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>American Institute of Certified Planners</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Certified Information Security Manager (CISM)</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Project Management Certification</td>
<td>3 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Skill</td>
<td>Postings</td>
<td>Salary Premium</td>
<td>Competitive Advantage</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------</td>
<td>----------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Certified Building Inspector</td>
<td>2 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cdl Class B</td>
<td>2 (1%)</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**TOP 15 SALARY PREMIUM CERTIFICATIONS**

No certificates available

**TOP 15 COMPETITIVE ADVANTAGE CERTIFICATIONS**

No certificates available
VALIDATE: EMPLOYMENT POTENTIAL

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate Programs</th>
<th>Metro Areas (MSAs)</th>
<th>Tucson, AZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Level</td>
<td>Bachelor’s degree</td>
<td></td>
</tr>
<tr>
<td>Time Period</td>
<td>9/1/2018 - 8/31/2019</td>
<td></td>
</tr>
<tr>
<td>Selected Programs</td>
<td>Landscape Architecture (04.0601)</td>
<td></td>
</tr>
<tr>
<td>Career Outcomes mapped to Selected Programs of Study</td>
<td>Landscape Architect, Environmental Planner / Scientist</td>
<td></td>
</tr>
</tbody>
</table>

HOW MANY JOBS ARE THERE FOR YOUR GRADUATES?

For your project criteria, there were 32 job postings in the last 12 months.

Compared to:

- 111,367 total job postings in your selected location
- 32,031 total job postings requesting a Bachelor’s degree in your selected location

The number of jobs is expected to grow over the next 8 years.

GROWTH BY GEOGRAPHY

<table>
<thead>
<tr>
<th>Geography</th>
<th>Selected Occupations</th>
<th>Total Labor Market</th>
<th>Relative Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tucson, AZ</td>
<td>15.15 %</td>
<td>17.14 %</td>
<td>Average</td>
</tr>
<tr>
<td>Arizona</td>
<td>14.88 %</td>
<td>14.97 %</td>
<td>Average</td>
</tr>
</tbody>
</table>
Nationwide | 10.23 % | 5.78 % | Average

**HOW HAS EMPLOYMENT CHANGED FOR CAREER OUTCOMES OF YOUR PROGRAM?**

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (BLS)</td>
<td>260</td>
<td>140</td>
<td>230</td>
<td>330</td>
<td>330</td>
<td>380</td>
</tr>
</tbody>
</table>

Employment data between years 2019 and 2028 are projected figures.

**DETAILS BY OCCUPATION**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Architects</td>
<td>18</td>
<td>3.4</td>
<td>70</td>
<td>-22.2%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Environmental and Climate Science</td>
<td>14</td>
<td>0.6</td>
<td>260</td>
<td>8.3%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>
HOW VERSATILE IS MY PROGRAM?

Graduates of this program usually transition into any of the 2 different occupation groups:

<table>
<thead>
<tr>
<th>Occupations Group</th>
<th>Market Size (postings)</th>
<th>Percentage of Career Outcome demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architects</td>
<td>18</td>
<td>56.3%</td>
</tr>
<tr>
<td>Environmental and Climate Science</td>
<td>14</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

WHAT SALARY WILL MY GRADUATES MAKE?

The average salary in Tucson, AZ for graduates of your program is $56,107

This average salary is Above the average living wage for Tucson, AZ of $32,011
No experience salary information is currently available
Salary numbers are based on Burning Glass models that consider advertised job posting salary, BLS data, and other proprietary and public sources of information.

<table>
<thead>
<tr>
<th>Occupation Group</th>
<th>25th Percentile</th>
<th>Average</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental and Climate Science</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Architects</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

WHERE IS THE DEMAND FOR MY GRADUATES?

TOP LOCATIONS BY POSTING DEMAND

<table>
<thead>
<tr>
<th>Location</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York-Newark-Jersey City, NY-NJ-PA</td>
<td>574</td>
</tr>
<tr>
<td>Los Angeles-Long Beach-Anaheim, CA</td>
<td>533</td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV</td>
<td>459</td>
</tr>
<tr>
<td>Sacramento--Roseville--Arden-Arcade, CA</td>
<td>356</td>
</tr>
<tr>
<td>San Francisco-Oakland-Hayward, CA</td>
<td>355</td>
</tr>
<tr>
<td>Area</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>300</td>
</tr>
<tr>
<td>Houston-The Woodlands-Sugar Land, TX</td>
<td>298</td>
</tr>
<tr>
<td>Seattle-Tacoma-Bellevue, WA</td>
<td>276</td>
</tr>
<tr>
<td>Denver-Aurora-Lakewood, CO</td>
<td>268</td>
</tr>
<tr>
<td>Philadelphia-Camden-Wilmington, PA-NJ-DE-MD</td>
<td>257</td>
</tr>
</tbody>
</table>
VALIDATE: COMPETITIVE LANDSCAPE

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Areas (MSAs)</td>
<td>Tucson, AZ</td>
</tr>
<tr>
<td>Degree Level</td>
<td>Bachelor's degree</td>
</tr>
<tr>
<td>Time Period</td>
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</tr>
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<td>Selected Programs</td>
<td>Landscape Architecture (04.0601)</td>
</tr>
<tr>
<td>Career Outcomes mapped to Selected Programs of Study</td>
<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

OVERVIEW

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>% Change (2013-2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degrees Conferred</td>
<td>0</td>
<td>-100%</td>
</tr>
<tr>
<td>Number of Institutions</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Average Conferrals by Institution</td>
<td>0</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Median Conferrals by</td>
<td>0</td>
<td>-100.00%</td>
</tr>
</tbody>
</table>
MARKET SHARE BY PROGRAM

<table>
<thead>
<tr>
<th>Program</th>
<th>Conferrals (2017)</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

MARKET SHARE BY INSTITUTION TYPE
Institution Type

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Conferrals (2017)</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-Profit</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Public</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

TOP INSTITUTIONS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Southwest University of Visual Arts-Tucson</td>
<td>For-Profit</td>
<td>NaN%</td>
<td>NaN%</td>
<td>0</td>
<td>-100.00%</td>
</tr>
</tbody>
</table>

TOP PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
<th>Market Share</th>
<th>Market Share Change</th>
<th>Conferrals</th>
<th>Conferrals Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>NaN%</td>
<td>NaN%</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
VALIDATE: MARKET ALIGNMENT

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Areas (MSAs)</td>
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<td>Bachelor’s degree</td>
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</tr>
</tbody>
</table>

JOB POSTINGS BY ADVERTISED EDUCATION (%)
# TOP TITLES

**Experience Level**: All Experience

<table>
<thead>
<tr>
<th>Title</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Specialist</td>
<td>5</td>
<td>29.41%</td>
</tr>
<tr>
<td>Landscape Architect</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>Environmental Protection Specialist</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>Site Planner</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>Environmental Planner</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Environmental Scientist</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Kold</td>
<td>1</td>
<td>5.88%</td>
</tr>
</tbody>
</table>

- **0 to 2 years**: 42.9%
- **3 to 5 years**: 50%
- **6 to 8 years**: 0%
- **9+ years**: 7.1%
Landscape Designer | 1 | 5.88%

## TOP EMPLOYERS HIRING

**Experience Level:** All Experience

<table>
<thead>
<tr>
<th>Employer</th>
<th>Postings</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Navy</td>
<td>4</td>
<td>23.53%</td>
</tr>
<tr>
<td>Kimley-Horn and Associates</td>
<td>3</td>
<td>17.65%</td>
</tr>
<tr>
<td>Monsanto</td>
<td>2</td>
<td>11.76%</td>
</tr>
<tr>
<td>City of Tucson</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Gray Television</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Pima County</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Stantec, Inc.</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>State of Arizona</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>University of Arizona</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Vantage</td>
<td>1</td>
<td>5.88%</td>
</tr>
<tr>
<td>Vantage Speciality Chemicals</td>
<td>1</td>
<td>5.88%</td>
</tr>
</tbody>
</table>
VALIDATE: KEY COMPETENCIES

PROJECT CRITERIA

<table>
<thead>
<tr>
<th>Validate</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Areas (MSAs)</td>
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<td>Landscape Architect, Environmental Planner / Scientist</td>
</tr>
</tbody>
</table>

TOP 15 SPECIALIZED SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
<th>Projected Growth</th>
<th>Salary Premium</th>
<th>Competitive Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Architecture</td>
<td>8 (25%)</td>
<td>-1.71%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>8 (25%)</td>
<td>4.22%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Skill</td>
<td>Percentage</td>
<td>Improvement</td>
<td>Online</td>
<td>Onsite</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------</td>
<td>-------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>SketchUp</td>
<td>7 (22%)</td>
<td>13.3%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Landscape Design</td>
<td>7 (22%)</td>
<td>-25.58%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Budgeting</td>
<td>5 (16%)</td>
<td>-10.04%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Protection</td>
<td>5 (16%)</td>
<td>-11.69%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hazardous Waste</td>
<td>5 (16%)</td>
<td>20.52%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Personnel Management</td>
<td>5 (16%)</td>
<td>-41.73%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sales</td>
<td>5 (16%)</td>
<td>-11.17%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Compliance</td>
<td>4 (12%)</td>
<td>-1.28%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Laws and Regulations</td>
<td>4 (12%)</td>
<td>37.08%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>4 (12%)</td>
<td>-8.57%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cost Estimation</td>
<td>3 (9%)</td>
<td>4.18%</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chemistry</td>
<td>3 (9%)</td>
<td>-10.21%</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
### TOP 15 BASELINES SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>15 (47%)</td>
</tr>
<tr>
<td>Writing</td>
<td>9 (28%)</td>
</tr>
<tr>
<td>Microsoft Office</td>
<td>8 (25%)</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>8 (25%)</td>
</tr>
<tr>
<td>Research</td>
<td>7 (22%)</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>7 (22%)</td>
</tr>
<tr>
<td>Teamwork / Collaboration</td>
<td>6 (19%)</td>
</tr>
<tr>
<td>Skill</td>
<td>Postings</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Positive Disposition</td>
<td>4 (12%)</td>
</tr>
<tr>
<td>Spanish</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Computer Literacy</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Oral Communication</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Preparing Reports</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Organizational Skills</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>English</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Written Communication</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Software</td>
<td>User Base</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Microsoft Office</td>
<td>8 (25%)</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>8 (25%)</td>
</tr>
<tr>
<td>SketchUp</td>
<td>7 (22%)</td>
</tr>
<tr>
<td>Adobe Acrobat</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Adobe Creative Suite</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Adobe Indesign</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Adobe Photoshop</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>Microsoft Powerpoint</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>Microsoft Word</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>comScore</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Google Drive</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>
## TOP 15 SKILL CLUSTERS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>People Management</td>
<td>9 (28%)</td>
</tr>
<tr>
<td>Drafting and Engineering Design</td>
<td>9 (28%)</td>
</tr>
<tr>
<td>Graphic and Visual Design Software</td>
<td>7 (22%)</td>
</tr>
<tr>
<td>Environmental Work</td>
<td>7 (22%)</td>
</tr>
<tr>
<td>Environmental Regulations</td>
<td>6 (19%)</td>
</tr>
<tr>
<td>Resource Management and Restoration</td>
<td>5 (16%)</td>
</tr>
<tr>
<td>Budget Management</td>
<td>5 (16%)</td>
</tr>
<tr>
<td>Estimating</td>
<td>4 (12%)</td>
</tr>
<tr>
<td>General Architecture</td>
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<td>Adobe Indesign</td>
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<td>Cost Estimation</td>
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Report generated using Program Insight from Burning Glass Technologies
### TOP 15 COMPETITIVE ADVANTAGE SKILLS

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<th>Competitive Advantage</th>
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### TOP 15 CERTIFICATIONS

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<td>b) Case Study Review</td>
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<tr>
<td>c) Quantitative and Qualitative Methods</td>
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<tr>
<td></td>
<td>Foundation Studio</td>
<td>Thinking About Architecture*</td>
<td>LAR 230</td>
<td>LAR 254</td>
<td>Design Studio I</td>
<td>Design Studio II</td>
<td>LAR 241</td>
<td>LAR 420</td>
<td>Design Studio III</td>
<td>LAR 423</td>
<td>LAR 470</td>
<td>Design Studio IV</td>
<td>LAR 440/540</td>
<td>LAR 426</td>
<td>LAR 596A</td>
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<tr>
<td>d) Framing Research Questions, Hypotheses, and Objectives</td>
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<td>e) Proposal Development</td>
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*Suggested name change: *Thinking About the Built Environment*

*Note: for BLA students research and scholarly methods is not emphasized, so this last section is not really necessary.*
### Master of Landscape Architecture Program Curriculum Matrix - Fall 2018

**Key:**
- **X** = Primary Learning Objective/Assessed
- **O** = Secondary Learning Objective/Assessed
- **+** = Introduced

#### History, Theory, & Criticism

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Contemporary Landscape Architecture</td>
<td>X X O O O</td>
<td>+ +</td>
</tr>
<tr>
<td>b) History of Landscape Architecture</td>
<td>O X</td>
<td></td>
</tr>
<tr>
<td>d) Principles and Aesthetics of Design</td>
<td>X O X X X O X O</td>
<td>+</td>
</tr>
<tr>
<td>e) Design Interpretation and Narration</td>
<td>X - X X X X -</td>
<td>+ O O</td>
</tr>
<tr>
<td>f) Critical Thinking</td>
<td>O O - O X X</td>
<td>- X</td>
</tr>
<tr>
<td>g) Design Critique and Evaluation</td>
<td>- X X - X X O O -</td>
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#### Design & Design Methods

<table>
<thead>
<tr>
<th>First Year</th>
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<th>Third Year</th>
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</thead>
<tbody>
<tr>
<td>a) Creative Problem Solving</td>
<td>X O - - X - O X X X X - X - X X X</td>
<td></td>
</tr>
<tr>
<td>b) Design Programming</td>
<td>X X - - X - X X X X - X X</td>
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</tr>
<tr>
<td>c) Landscape and Site Analysis</td>
<td>O X - - X - O X X X X O O</td>
<td>+ O O O X</td>
</tr>
<tr>
<td>d) Background Research for Design Applications</td>
<td>O - - X - O X X X X O X X X</td>
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<tr>
<td>e) Philosophical Concept Development</td>
<td>X - O X O X X -</td>
<td>+</td>
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<tr>
<td>f) Physical Concept Development (functional relationship diagrams)</td>
<td>X X X O X X -</td>
<td>- O</td>
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<tr>
<td>g) Iterative Design Development</td>
<td>X O X X -</td>
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<tr>
<td>h) Design Synthesis</td>
<td>X X X - X X X - X X</td>
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#### Sustainable Design Strategies & Natural Processes

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<tr>
<th>First Year</th>
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<th>Third Year</th>
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<tbody>
<tr>
<td>a) Resource Conservation</td>
<td>- X - 0 - X - 0 0 0 0 0 - 0 0 0</td>
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</tr>
<tr>
<td>b) Stormwater Management</td>
<td>- X X - - - - - - - - X - 0 0</td>
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<tr>
<td>c) Urban Heat Island Mitigation</td>
<td>- X - - - - - - - - - - - - X -</td>
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<tr>
<td>d) Urban Flooding Mitigation</td>
<td>- X - - - - - - - - - - - - 0 0</td>
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<tr>
<td>e) Plant and Ecosystem Science and Design</td>
<td>X - - X - 0 0 -</td>
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<tr>
<td>f) Land Stewardship</td>
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</tr>
<tr>
<td>g) Visual and Scenic Assessment</td>
<td>X X - - 0</td>
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<tr>
<td>h) Landscape Performance Assessment</td>
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#### Socio-Cultural Factors in Design

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<tr>
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<th>Third Year</th>
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</thead>
<tbody>
<tr>
<td>a) User Analysis</td>
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<tr>
<td>b) Cultural Analysis</td>
<td>X -</td>
<td></td>
</tr>
<tr>
<td>c) Community and Client Engagement</td>
<td>O - 0 - 0 X -</td>
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</tr>
<tr>
<td>d) Design for Diverse Populations</td>
<td>O - - - - 0 X -</td>
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<tr>
<td>e) Post Occupancy Evaluation</td>
<td>0 0</td>
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<tr>
<td>f) Human Health and Well-Being</td>
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#### Design Implementation

<table>
<thead>
<tr>
<th>First Year</th>
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<th>Third Year</th>
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<tbody>
<tr>
<td>a) Site Engineering</td>
<td>X</td>
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<tr>
<td>b) Construction Technology</td>
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<td></td>
</tr>
<tr>
<td>c) Site Materials</td>
<td>X 0</td>
<td></td>
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<tr>
<td>d) Construction Standards, Methods, and Applications</td>
<td>X X</td>
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<tr>
<td>e) Codes and Ordinances Related to Public Safety, Health, and Welfare</td>
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#### Professional Communication, Documentation, & Technology

<table>
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<tr>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
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</thead>
<tbody>
<tr>
<td>a) Written Communication*</td>
<td>O X - 0</td>
<td>O X - 0 X X X X X X - X - X X X</td>
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<tr>
<td>b) Oral Communication*</td>
<td>X X 0 0 0 -</td>
<td>X X 0 0 X X X 0 0 0 X X X X X X</td>
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<tr>
<td>c) Digital Media Graphics*</td>
<td>X X 0 0</td>
<td>X X 0 0 X X X 0 0 0 O O O</td>
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<tr>
<td>d) Hand Drawn Graphics*</td>
<td>O 0 0 -</td>
<td>O X 0 0 - O -</td>
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<tr>
<td>e) Geospatial Analysis</td>
<td>0 0 0</td>
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<tr>
<td>f) 2D Representations and 3D Modeling</td>
<td>X X 0</td>
<td>0 X X X</td>
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<tr>
<td>g) Technical Construction Drawings</td>
<td>X X</td>
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<tr>
<td>h) Project Proposal Writing</td>
<td>O 0 O</td>
<td>X 0</td>
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#### Professional Practice

<table>
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<tr>
<th>First Year</th>
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<th>Third Year</th>
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<tbody>
<tr>
<td>a) Business Practices</td>
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<tr>
<td>b) Interdisciplinary Practice</td>
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<tr>
<td>c) Construction Administration</td>
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<tr>
<td>d) Contracts</td>
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<tr>
<td>e) Policies and Regulations</td>
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<tr>
<td>f) Health, Safety, Welfare</td>
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<tr>
<td>g) Standard of Care, Professional Ethics and Values</td>
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<tr>
<td>h) Leadership</td>
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#### Research and Scholarly Methods

<table>
<thead>
<tr>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
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</thead>
<tbody>
<tr>
<td>a) Literature Review</td>
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<td>X X X X X X</td>
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<tr>
<td>b) Case Study Review</td>
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<td>- X X X</td>
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<tr>
<td>c) Quantitative and Qualitative Methods</td>
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<td>X X X X</td>
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<tr>
<td>d) Framing Research Questions, Hypothesis, and Objectives</td>
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<td>X O X X X</td>
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<tr>
<td>e) Proposal Development</td>
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</table>
DIVERSITY AND INCLUSIVE EXCELLENCE COMMITTEE REPORT AND ACTION PLAN

College of Architecture, Planning and Landscape Architecture (CAPLA)

Prepared By:

The CAPLA Diversity and Inclusive Excellence Committee

10/29/2018
CAPLA Diversity and Inclusiveness Goals and Action Plan

As CAPLA expands the influence and scope of the design and planning professional through an engaged process of making, risk-taking, and knowledge-building in support of a resilient and thriving natural and built environment, the CAPLA community is dedicated to nurturing and teaching design and planning methodologies grounded in responsible and sustainable real-world problem-solving with the potential to energize, improve, and inspire.

The College of Architecture, Planning and Landscape Architecture is a community of faculty, administrators, students, classified staff, and appointed personnel whose collective contributions are critical to its overall success. Every member of the community has a voice that should be respected, heard, and acknowledged.

Our Vision – Building a Changing World
## Our Values

<table>
<thead>
<tr>
<th>Value</th>
<th>Associated (Expected) Behaviors</th>
</tr>
</thead>
</table>
| **Emergent Thinking** | - Create and own transformative ideas  
- Foster future oriented research, teaching, and outreach  
- Apply expertise, skills, and knowledge to global challenges  
- Anticipate new opportunities to expand college reach and impact  
- Stay among the vanguard |
| **Curiosity** | - Encourage the spirit of inquiry and delight in learning  
- Make strategic decisions with an appropriate balance of invention, risk, and probable success  
- Provide inspirational solutions with impact  
- Explore the unknown  
- Apply lessons learned |
| **Design Perspective** | - Hone our sensibilities in this place that is the Sonoran Desert  
- Use design thinking methods which are empathetic and consider the well-being of all participants  
- Leverage studio culture and making environments to enhance student centered learning and applied research  
- Address the global impacts of the built environment  
- Demonstrate the value of design and planning in reshaping the world |
| **Interdisciplinarity** | - Use intellectual diversity as a means to create comprehensive thinking  
- Create thoughtful, purposeful partnerships  
- Remove barriers and develop rules of engagement to be applied to interdisciplinary processes  
- Support cross-institutional, cross-college, and cross-departmental activity  
- Facilitate inclusive approaches to problem solving |
| **Collaboration** | - Seek different perspectives, backgrounds, skills, and expertise  
- Respect the value, skills, and qualities of others  
- Strive for transparency, engagement, sharing, and divergent thinking  
- Teach and demonstrate collaborative problem solving skills |
| **Stewardship** | - Be accountable for our responsibilities and actions  
- Exhibit professional ethics, competence, and reliability  
- Treat all members of our community with respect, dignity, and empathy, empowering them to be excellent in their domains  
- Use resources fairly, ethically, and humanely to achieve goals in the present and to safeguard the future |

### Our 5th Aspiration
AREAS OF STRENGTH:

- Top level administration expresses value in diversity and inclusiveness and has participated in diversity and inclusiveness training.
- Inclusiveness is embedded as a responsibility in all staff and faculty job descriptions, job postings and other HR documents.
- HR staff meets periodically with all employees regardless of background to offer support.
- Search committees take an active approach to the recruitment of diverse employees.
• Traditions and celebrations at CAPLA are generally inclusive and provide foods for people with dietary restrictions and new requests are always welcome if someone is being excluded.
• CAPLA leadership is diverse in gender.
• Information on campus resources to support diverse students is provided during orientation.
• CAPLA has identified student learning outcomes and concepts related to diversity.
• CAPLA policies are inclusive and consider gender, race/ethnicity, disability, etc. and potential impact on diverse groups is taken into account when creating new policies.
• CAPLA has a plan to recruit, retain and graduate more diverse students and there are resources allocated for recruiting, retaining and graduating these students.
• CAPLA engages in outreach with diverse community groups and activities and reaches out to potential students from our regionally diverse communities.
• Development officers are aware of the diversity needs of the college.
• Researchers are encouraged to think about diversity and inclusiveness in their research projects.
• Advisors are trained to address diversity and inclusiveness issues, are knowledgeable about the resources available and are engaging in outreach to diverse students. The advising staff is diverse.
• CAPLA has sought available external funding to support efforts in diversity and the built environment.
• The building is accessible to students with disabilities and there is a gender–inclusive bathroom.
• CAPLA takes and asset-based approach to the highlights and gifts that diverse students bring to the college and uses asset-based language in recruiting.

AREAS FOR IMPROVEMENT:

• CAPLA does not have a diversity and inclusiveness statement and our values do not clearly show our value of inclusive excellence and is therefore not prominently displayed in our marketing materials, website, and other materials.
• CAPLA leadership has not yet allocated resources to support diversity and inclusiveness initiatives.
• Inclusiveness is not part of an employee orientation, nor are there incentives for professional development in diversity and inclusiveness.
• CAPLA has not yet conducted a diversity climate assessment examining student, faculty and staff behaviors or perceptions about diversity/inclusiveness.
• There is no college protocol for reporting bias incidents beyond the UA process involving the dean of students.
• CAPLA does not have a process for learning about the experiences of diverse students, staff and faculty.
- Students are not provided with skills and knowledge to successfully navigate diversity in and out of the classroom at CAPLA or at the university level.
- There is no training required for faculty on diversity and inclusiveness in the classroom.
- Inclusiveness is not embedded in the promotion and tenure process. Faculty are not rewarded or recognized for their contributions in mentoring diverse students or embedding diversity into their courses.
- Faculty who serve on promotion and tenure committees may or may not be aware of the way diversity impacts the process for women, people of color, disabled people and other diverse groups.
- The college does not currently raise funds specifically for diversity and inclusiveness.
- There is no lactation room, baby-changing facility or quiet space available to students for religious purposes.
- CAPLA does not currently collect data on progress toward diversity and inclusiveness goals

**DIVERSITY ACTION PLAN:**

The CAPLA Diversity and Inclusive Excellence Committee has developed the following goals and action items to support this mission:

<table>
<thead>
<tr>
<th>Goal</th>
<th>Action Plan</th>
<th>Priority</th>
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</thead>
<tbody>
<tr>
<td>Embrace Hispanic Serving Institution status</td>
<td>ADMINISTRATION: Educate faculty, staff and administrators on the benefits of UA being a Hispanic Serving Institution and how they may contribute.</td>
<td>High</td>
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</tbody>
</table>
| Continuously recruit diverse students.              | MARKETING & RECRUITING: Specify a plan to recruit, retain and graduate students from diverse groups  
MARKETING & RECRUITING: Emphasize recruitment in under-served Arizona populations, in part by leveraging new HSI status.  
FINANCE: Allocate resources to expand and enhance this work. | Medium   |
<p>| Embed diversity and inclusiveness in the culture of CAPLA | ADMINISTRATION AND UA DIVERSITY OFFICE: Provide new student, faculty, and staff orientations that introduce students to the | High     |</p>
<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPLA culture of diversity and inclusiveness.</td>
<td>FACULTY, STUDENTS AND LECTURE SERIES FACILITATORS: Create exhibits and/or invite more speakers, presenters, and professional from diverse backgrounds within our disciplines to the college.</td>
</tr>
<tr>
<td>Assess current climate and culture of CAPLA</td>
<td>CLIMATE AND CULTURE: Conduct a survey to ascertain whether students, staff, faculty, alumni, and community members from different backgrounds feel welcome working in or visiting our unit and to examine perceptions about diversity and inclusiveness. ADMINISTRATION: Propose the continuation of this Diversity and Inclusive Excellence Committee as a formal college committee, instead of ad-hoc or have it combined with the Culture Taskforce group.</td>
</tr>
<tr>
<td>Include diversity and inclusiveness in our leadership’s goals and values.</td>
<td>ADMINISTRATION: All top-level unit administration must participate in diversity and inclusiveness training. ADMINISTRATION: Provide incentives for people willing to take extra training and provide leadership in diversity. Identify diversity and training resources on and off campus. ADMINISTRATION: Continue to work throughout strategic plan development with SPOAC to make sure diversity and inclusiveness continues to be a part of the conversation. HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA’s diversity statement and cultural competencies. Will partner with university resources to leverage expertise and align initiatives. FACULTY P&amp;T: Train faculty who serve on P&amp;T committees in the way diversity impacts the tenure and promotion process for women,</td>
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Critical

High
people of color, disabled people, and other
diverse groups and make the process
transparent where inclusiveness is part of the
P&T process.

| Embed diversity in human resources, student affairs, and services. | HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Will partner with University resources to leverage expertise and align initiatives.  
NEW STUDENT ORIENTATION: Incorporate CAPLA diversity statement and micro aggression training into UA Clicks session for new CAPLA students.  
STUDENT ADVISING: All advisers should be required to participate in Diversity/Safe Zone training to support to college and university mission of inclusive excellence.  
MANAGING CONFLICT AND DISCRIMINATION: Create accessible information about the resources on campus for addressing discrimination and make sure unit leadership (and staff, faculty and students), especially new people, are aware of its location.  
CULTURAL COMPETENCY TRAINING: The training and development opportunities as offered by the UA should be communicated to CAPLA faculty and staff. Should there be interest, these development opportunities could be moved in house in coordination with UA units.  
CURRICULUM: Curriculum should be examined on an annual basis to ensure learning materials are compliant with CAPLA mission of diversity and inclusion. Additionally, each syllabus should include CAPLA's diversity statement, as well as information where more university and community resources are available. | High |
<p>| Support staff and faculty through professional development opportunities and cultural competency training. | ADMINISTRATION &amp; HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Partner with University resources to leverage expertise and align initiatives. FACULTY P&amp;T: Train faculty who serve on P&amp;T committees in the way diversity impacts the tenure and promotion process for women, people of color, disabled people, and other diverse groups and make the process transparent where inclusiveness is part of the P&amp;T process CULTURAL COMPETENCY TRAINING: The training and development opportunities as offered by the UA should be communicated to CAPLA faculty and staff. Conduct cultural competency training offered at least once annually, in coordination with all college meetings at the beginning of each semester. Should there be additional interest, these development opportunities could be moved in house in coordination with UA units. | High |
| Recruit and promote diverse faculty relative to teaching and research goals. | HUMAN RESOURCES: On-board and training of new staff/faculty/GA/TA regarding CAPLA's diversity statement and cultural competencies. Partner with University resources to leverage expertise and align initiatives. HUMAN RESOURCES: Post job posting to various jobs sites to encourage a more diverse pool of applicants. Utilize connections through current college personnel to draw in more diverse referenced applicants. Work with UA Diversity group to see what options are available to increase pool. FACULTY P&amp;T: Train faculty who serve on P&amp;T committees in the way diversity impacts the tenure and promotion process for women, people of color, disabled people, and other diverse groups and make the process transparent where inclusiveness is part of the P&amp;T process | Medium |
| Acknowledge the history of diverse groups and their contributions in different disciplines within CAPLA. | MARKETING AND PROMOTIONAL MATERIALS: The CAPLA website development team, working on a new website for the college should work with the DRC to ensure it complies with best practices and we will include CAPLA's diversity statement on the About Us page. | Medium |
| Ensure physical spaces are inclusive. Develop new, projects and initiatives to include more diverse groups in the community. | PHYSICAL STRUCTURE: Ensure college building(s) are accessible to individuals with disabilities and special needs, including updating doors without the accessible automatic door open button. Additionally, CAPLA should confirm necessary restroom requirements in coordination with ADA compliance. Additional consideration for a | Medium |</p>
<table>
<thead>
<tr>
<th>lactation room and religious observation space is necessary. Involve students with special needs to help identify issues with the building.</th>
<th>CURRICULUM: Curriculum should be examined on an annual basis to ensure learning materials are compliant with CAPLA mission of diversity and inclusion. Additionally, each syllabus should include CAPLA's diversity statement, as well as information where more university and community resources are available.</th>
</tr>
</thead>
</table>
| Continue to look externally for inspiration from our peers and aspirational institutions. | ADMINISTRATION: Identify our peers and aspirational institutions.  
DIVERSITY GROUP: Set up a routine for checking our peer/aspirational institutions to see what they are doing.  
DIVERSITY GROUP: Work with office of Diversity to see what they have learned.  
DIVERSITY GROUP: Disseminate information to schools and college leadership. |
| Create a budget for financing diversity and inclusiveness initiatives. | FINANCE: Fund projects that include diversity and inclusiveness adequately.  
FINANCE: Fund diversity initiatives with the unit's budget and not temporary funding. |
# Bachelor of Landscape Architecture

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
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<td>ARC 101A/B</td>
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<td>LAR 3**</td>
<td>Design Studio III</td>
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<td>Introduction to GIS for Landscape Architecture and Planning</td>
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<td>LAR 420</td>
<td>Plant Materials</td>
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<td>LAR 440</td>
<td>History, Theory, and Contemporary Landscape Architecture</td>
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<td>LAR 426</td>
<td>Planting Design</td>
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<td>LAR 496A</td>
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## Accelerated Masters Program - MLA Option

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<th>COURSE #</th>
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<td><strong>BLA SPRING 4</strong> - additional coursework</td>
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<td>LAR 596B</td>
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<td>LAR 909/910</td>
<td>Master's Report/Thesis</td>
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## Important Notes:

- A minimum of 122 units of coursework are required.
- Co-convened with ARCH 451a (Spring 3) and ARCH 451b (Fall 4) options studios.
- UA General Education (Tier 1 TRADS, NATS, & INDVS | Tier 2 IND-VS, NATS, & Humanities) requires one course to have a “diversity” emphasis focus.
- 500-Level courses may be taken during this time to prepare for Accelerated Masters Program.

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Sean Kramer
Student Academic Support Specialist
sikrame@email.arizona.edu | 520-621-0334
sbe.arizona.edu