NC STATE College of Design

Department of Landscape Architecture and Environmental Planning



SELF EVALUATION REPORT

MASTER OF LANDSCAPE ARCHITECTURE PROGRAM

Fall 2015-Spring 2021

Submitted to the LANDSCAPE ARCHITECTURAL ACCREDITATION BOARD American Society of Landscape Architects December 8, 2021

REQUEST FOR REVIEW

LANDSCAPE ARCHITECTURAL ACCREDITATION BOARD

June 24, 2021 Date

Invitation to review is extended by: (chief academic officer by name and title)

Dr. Randy Woodson, Chancellor, North Carolina State University

Identify the program in Landscape Architecture to be reviewed and the name of the institution.

Master of Landscape Architecture Program, Department of Landscape Architecture and Environmental

Planning, College of Design, North Carolina State University

This landscape architectural program certifies that it has been in operation since <u>1968</u> (date) and is legally entitled to confer the following first professional degree:

Master of Landscape Architecture

Preferred Dates for Review: Indicate first, second, and third preferences.

<u>1.</u> March 6-9, 2022_____

<u>2.</u> February 27-March 2, 2022_____

<u>3.</u> February 13-16, 2022_____

Please give complete address for the program requesting review. Include the name, phone number, and e-mail address for the program administrator.

Master of Landscape Architecture Program, Department of Landscape Architecture and Environmental

Planning, College of Design, North Carolina State University, 50 Pullen Road, Raleigh, NC 27695

Meg Calkins, FASLA, SITES AP, Department Head and Professor, 765-717-1148, mecalkin@ncsu.edu

PROGRAM SELF-EVALUATION REPORT

For the Academic Year 2020-2021 Institution: North Carolina State University

Program Department of Landscape Architecture and Environmental Planning

Degree Title/Degree Length Master of Landscape Architecture, three years

Chief Administrative Official of the Institution Dr. Randy Woodson, Chancellor Office of the Chancellor, Holladay Hall, NC State University, 27695 chancellor@ncsu.edu 919-515-2191

Chief Administrative Official of the College Dr. Mark Hoversten, Dean College of Design, NC State University, 27695 mehovers@ncsu.edu_919-515-8302

Chief Administrative Official of the Division N/A

Chief Administrative Official of the Department <u>Meg Calkins, Department Head</u> <u>Department of Landscape Architecture and Environmental Planning, NC State University, 27695</u> <u>mecalkin@ncsu.edu</u> 919-515-8342

Chief Administrative Official of the Program N/A

 Report Submitted by
 Meg Calkins
 12/08/2021

 name
 date

MINIMUM REQUIREMENTS

For Achieving and Maintaining Accredited Status

1. An accredited professional program's title and degree must incorporate the term "landscape architecture."

2. A professional program offering an accredited undergraduate professional degree must meet the following degree-length requirements.

a. An undergraduate professional program, leading to a Bachelor of Landscape Architecture (BLA) or a Bachelor of Science of Landscape Architecture (BSLA) degree must be a single degree program that has a minimum number of total credit hours equivalent to its institution's definition of four academic years of full-time undergraduate enrollment.

b. A professional program may allow for advance placement up to one academic year, provided it has a clearly articulated policy and criteria for advance placement and how the professional program determines whether an applicant meets the criteria. The advanced placement may be counted towards the minimum requirements referenced in 2.a above.

c. Any professional program that offers a degree with Bachelor of Landscape Architecture or BLA, or a Bachelor of Science of Landscape Architecture or BSLA in the degree title must meet the requirements of the LAAB accreditation standards. This includes a professional program that offers an BLA/BSLA degree with an advanced placement track or pathway. Any institution that offers a program or track leading to a degree with the words "Bachelor of Landscape Architecture," "BLA," "Bachelor of Science of Landscape Architecture," or "BSLA" in the title and does not comply with these Standards is not eligible to offer any accredited BLA/BSLA degree.

3. A professional program offering an accredited graduate professional degree must meet the following degree-length requirements:

a. The graduate professional program, leading to a Master of Landscape Architecture (MLA), must be a single degree program that has a minimum number of total credit hours equivalent to its institution's definition of three academic years of full-time graduate enrollment.

b. A professional program may allow for advanced placement of up to one academic year of study, provided it has a clearly articulated policy and criteria for advanced placement and demonstrates how the professional program determines whether an applicant meets the criteria. The advance placement may be counted towards the minimum requirements referenced in 3.a. above.

c. Any professional program that offers a degree with Master of Landscape Architecture or MLA in the degree title must meet the requirements of the LAAB accreditation standards. This includes a professional program that offers an MLA degree with an advanced placement track or pathway. Any institution that offers a program or track leading to a degree with the words "Master of Landscape Architecture" or "MLA" in the title and does not comply with these Standards is not eligible to offer any accredited MLA degree.

4. An institution may offer a program leading to a degree with the title "Master of Science in Landscape Architecture" or "Master of Arts in Landscape Architecture" that is not an accredited degree in Landscape Architecture without jeopardizing the institution's accredited degree in Landscape Architecture. In offering such a degree, an institution must disclose that the degree is not accredited in its public statements and to CLARB.

5. A professional program may be offered in whole or in part through an online platform. A professional program that offers all or part of its curriculum through an online platform must demonstrate that it meets all the requirements of these Standards.

five of whom hold professional degrees in landscape architecture and are full-time in the department.

landscape architecture, at least one of whom is full-time.

7. The parent institution must be accredited by an institutional accrediting agency recognized by the U.S. Department of Education.

levels with continuing full accreditation status has an FTE of at least seven instructional faculty, at least

Faculty instruction full-time equivalence (FTE) requirements are as follows:

Accreditation status has at least three FTE instructional faculty who hold professional degrees in

hold a professional degree in landscape architecture, at least three of whom are full-time in the

levels at the Candidacy or Initial Accreditation status has at least six FTE instructional faculty, at least five of whom hold professional degrees in landscape architecture, at least two of whom are full-time in

An academic unit that offers a single professional degree program at the continuing full

accreditation status has an FTE of at least five instructional faculty, at least four of these faculty members

An academic unit that offers professional degree programs at both the bachelor's and master's

An academic unit that offers a single professional degree program at the Candidacy or Initial

An academic unit that offers a professional degree program at both the bachelor's and master's

8. There must be a designated program administrator responsible for the leadership and management functions for the professional program under review. The program administrator shall have significant influence in the budget and personnel management decisions of the professional program.

9. The professional program must provide a comprehensive disclosure about the professional program's status and performance as set forth in Standard 1.E within a single-click link from the professional program's website.

10. The professional program must:

6.

a.

b.

c.

d.

the department.

department.

• continuously comply with accreditation standards,

• pay the annual sustaining and other fees as required, and

• regularly file complete annual and other requested reports, as required by the Accreditation Procedures.

11. The program administrator shall inform LAAB if any of these factors fails to apply during an accreditation period. The program administrator is also responsible for reporting any substantive changes to the professional program (changes that may affect the accreditation status as addressed in the LAAB Accreditation Procedures) when they occur.

The <u>Master of Landscape Architecture</u> program meets the minimum conditions to apply for LAAB accreditation.

Meg Calkins, FASLA Program Administrator Name

Professor and Department Head Title

Program Administrator Signature

December 1, 2021 Date

SCHEDULE

NC State University LAAB ROVE Team Visit Schedule March 6-9, 2022

DAY 1: SUNDAY, MARCH 6

- 1:00 pm Team arrival and check-in
- 2:30 pm Meeting with **Meg Calkins**, Head, Department of Landscape Architecture and Environmental Planning to finalize schedule, discuss the program in general and tour the facilities of the College of Design, Brooks 215
- 3:30- 4:30 pm Review of student work and facilities, Brooks Gallery and Rotunda, Adlakha, Boone, Calkins, Delcambre, Deming, Fox, Pasalar, Smith
- 5:00-6:00 pm Reception with students, faculty, college administration, local practitioners and friends, *Rotunda and Brooks Gallery*
- 8:00 pm Team Executive Session

DAY 2: MONDAY, MARCH 7

8:00 am	Breakfast with Department Head Meg Calkins, Jubala Coffee	
9:00-9:30 am	Meeting with Dr. Warwick Arden, Provost, Chancellor's Conference Room	
9:45-10:15 am	Meeting with Dean Mark Hoversten, FCELA, FASLA, Brooks 110	
10:30-12:00	 Meetings with students, Team Room, Belk Rotunda 10:30 First Year MLA Students 11:00 Second Year MLA Students 11:30 Third year MLA Students 	
12:15-1:15pm	Lunch with recent graduates and practitioners, KAM 130	
1:30-2:45 am	Presentation of curriculum by faculty to visiting team, Allred Gallery. Adlakha, Boone, Calkins, Delcambre, Deming, Fox, Pasalar, Smith	
2:45-3:15 pm	Break	
3:15-4:45 pm	Faculty interviews, Dean's Conference Room3:15Professor Kofi Boone3:45Associate Professor Carla Delcambre4:15Professor Elen Deming	
7:00 pm	Team dinner and Executive Session	

DAY 3, TUESDAY, MARCH 8

8:30-9:00 am	Check in wit	h Meg Calkins, program administrator if needed, Brooks 215
9:00-11:00	Faculty interviews, Dean's Conference Room	
	9:00	Associate Professor Celen Pasalar

	 9:30 Associate Professor Deepti Adlakha 10:00 Professor Andy Fox 10:30 Professor Gavin Smith 	
10:30-11:00	Break	
11:00-12:00	Meeting with Research and Extension Leaders, Celen Pasalar (Extension), Andy Fox (CDDL), Gavin Smith, Deepti Adlakha (NLI), Robin Moore (NLI), Nilda Cosco (NLI), <i>KAM 130</i>	
12:15-1:15 pm	Lunch Meeting with Professional Faculty, McCoy, Flink, Swink, Howe, Monette, Klondike, Sherk, Turner KAM 130	
1:30-2:15 pm	Meeting with College Staff, <i>Dean's Conference Room</i> Jill Orr, Executive Director of Development and External Relations Christine Klocke, Director of Communications and Marketing Kathleen Fenner, Career Services and Advising Courtney Ray, Graduate Student Services Coordinator	
2:15-2:45 pm	Meeting with LAEP and Arch University Program Assistant, Nikki Evans , Dean's Conference Room	
2:45-3:00 pm	Break	
3:00-3:30	Meeting with other department heads, David Hill , Architecture, Tsai Lu Liu , Industrial Design and Graphic Design, Derek Ham , Art + Design <i>Dean's Conference Room</i>	
3:45-4:30pm	Zoom with remote alumni, practitioners and members of the LAEP Professional Advisory Board, Dean's Conference Room	
4:30 pm	Meeting with Department Head, Meg Calkins if needed, Brooks 215	
5:00 pm	Team Executive Session	

DAY 4 WEDNESDAY, MARCH 9

8:00 am	Breakfast with Department Head, Meg Calkins to discuss team findings, Jubala Coffee
9:00-9:30 am	Review of team findings with Provost Warwick Arden, Chancellor's Conference Room
9:45-10:15 am	Discussions of team findings with Dean Mark Hoversten, Brooks 110
10:30-11:15 am	Report of team findings to landscape architecture faculty and students, Rotunda
11:30-12:30 pm	Lunch, then team departs from campus, KAM 130

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INTRODUCTION

1. History of Program.

In chronological form provide a brief history of the program being reviewed, concentrating on events since the last review.

The Master of Landscape Architecture (MLA) program is in the <u>Department of Landscape Architecture</u> and <u>Environmental Planning</u>, an academic unit of the <u>College of Design</u> at North Carolina State University (NCSU). The first professional MLA Degree has been accredited by the Landscape Architecture Accreditation Board (LAAB) since 1972.

The original School of Design at North Carolina State University was created by combining the Landscape Architecture program from the College of Agriculture and Life Sciences and the Architecture program from the College of Engineering in 1948. Over time, Art and Design and Product Design programs were added; they eventually became the Department of Art + Design and the Department of Industrial Design. The Department of Graphic Design was established in 1988.

The Ph.D. in Design program was established in 1999 offering the Doctor of Philosophy degree. The program has interdisciplinary groups of faculty advisors and students in coursework and research broadly related to seven research interest areas. They are: Design for Sustainability, Design for Health and Well-Being, Design and Technology, Design and the Urban Context, Design Methods, Design for Learning and Design History and Criticism. The most recent addition to the College of Design is the Doctor of Design program which was established in 2017. The program offers a Doctor of Design and expects to graduate their first students in the 2021-2022 year.

In 2001, the School of Design was restructured into the College of Design, which encompassed the School of Architecture and four departments: Art + Design, Graphic Design, Industrial Design, and Landscape Architecture. In 2011, the Graphic Design and Industrial Design programs were merged to form the Department of Graphic Design and Industrial Design.

From 1948 to 1968, the only degree offered by the Department of Landscape Architecture was a five-year Bachelor of Landscape Architecture (BLA). In 1968, the Master of Landscape Architecture (MLA) program was initiated and was first accredited in 1972. At the same time, the BLA program was changed to a four-year non-accredited Bachelor of Environmental Design in Landscape Architecture (BEDLA). In the 1970s, all departments in the school, including Landscape Architecture, became programs. After a few years, departmental status was reinstated and in the mid-1990s, departments regained control of their budgets.

The status of undergraduate landscape architecture education at NC State has had a varied history. In 1991, the BEDLA program had only twelve students. It was clear that the program should either be eliminated or converted to a professional degree program. In 1999, the Bachelor of Landscape Architecture program was created and accredited, and the BEDLA was phased out. Thus, there were two first professional degree programs in landscape architecture, one at the undergraduate level and one at the graduate level. These two programs remained in place until 2011 when the decision was made to

phase out the undergraduate BLA program due to several years of low enrollment. The last cohort of BLA students graduated in May 2016.

The decision to have an MLA-only Department resulted in a number of strategic changes. With a near exclusive focus on graduate education in Landscape Architecture, courses and curriculum shifted. New graduate courses were created aligning with emerging scholarship trends in the profession including Landscape Performance, and Environmental and Social Equity, etc. In addition to new graduate courses, new certificate programs were created including one in Disaster Resilient Policy, Engineering and Design. And new research entities were created including the Coastal Dynamics Design Lab. All of these initiatives created opportunities for new partnerships and instructional hires enriching the Department.

The long-standing Department reputation of effective community partnerships in planning, particularly in the areas of resilience and disaster recovery, prompted a name change inclusive of larger scales of landscape architecture. In 2020, the faculty unanimously voted to change the name of the *Department of Landscape Architecture* to the *Department of Landscape Architecture and Environmental Planning* (LAEP). This shift encompasses ongoing environmental planning expertise in the faculty and enables additional curriculum and faculty hiring priorities that include tools and techniques for addressing larger landscapes.

The Master of Landscape Architecture program has maintained its accreditation status through each subsequent review since 1972. Enrollment has fluctuated over the years between approximately 40 students in 2009 and 73 students in 2020-21.

With recent focused efforts, enrollment in the MLA program today (Fall 2021) has reached a high of 80 students and we do not plan to increase enrollment beyond this point due to class size considerations, faculty-student ratios, and studio space limitations. Our aim is to sustain a strong and agile academic and scholarly MLA program that enables faculty and students to fulfill its mission: to investigate and advance landscape-focused solutions to social and environmental imperatives. As supporters of the New Landscape Declaration, we emphasize evidence-based inquiry and design thinking that positions students and graduates to engage with and propel the landscape architecture profession into the future.

Our Master of Landscape Architecture (MLA) is a STEM-designated degree and fully accredited program that prepares graduate students for the rigors of professional practice, research, leadership, and community engagement. Students combine critical design thinking with the creativity, and passion to address diverse landscape architecture and environmental planning projects with a focus on:

- Landscape dynamics and resilient design;
- Community planning and design;
- Design for children and families;
- Research and scholarship for evidence-based design strategies; and
- Emerging digital design tools for representation, simulation, and evaluation.

<u>Faculty</u> in the Department of Landscape Architecture and Environmental Planning offer graduate seminar courses and studios, and engage in significant research and scholarly projects related to impacts of nature on child development; planning and design for environmental disaster resilience; environmental and social justice in design and planning; environment and behavior impacts on human health and economic development; smart and healthy cities; community design and development; the environmental and human health impacts of construction and building materials; and project life-cycle modeling, evaluation and performance.

We have forged strong relationships with academic partners and collaborations have increased both inside and outside the university, as the department partners with programs in the colleges of Natural Resources, Agriculture and Life Sciences, Engineering, the Poole College of Business, Institute of Transportation Research and Education, and with public and private landscape architecture practices.

2. Organizational Structure of the Program.

Provide a very brief description of the relationship of the degree program being reviewed to the organizational structure in which it is placed. Is the academic unit exclusively landscape architecture or does it also serve other disciplines (name them and show their relationship)? Is the degree program under review the only landscape architecture degree program or are there both undergraduate and graduate landscape architecture programs? (Organizational structure discussion will go into detail in Standard 2 Part A.)

The Department of Landscape Architecture and Environmental Planning (LAEP) offers both a first professional accredited Master of Landscape Architecture (MLA) Degree and a non-accredited MLA degree for students with prior LAAB-accredited degrees in landscape architecture. At the undergraduate level, we offer a Landscape Architecture minor to students in majors outside the department. The LAEP department does not serve any other disciplines or offer other degrees, however, LAEP faculty serve the College's PhD and Doctor of Design Programs through student dissertation committee advising.

Landscape Architecture and Environmental Planning is one of four departments and a school in the College of Design at North Carolina State University. Other departments are: Art & Design, Graphic Design and Industrial Design, and the School of Architecture. Four Department/School Heads (one Head serves both Graphic and Industrial Design) report directly to the Dean of the College of Design. These Departments, College Administrative Offices, Faculty Offices, classrooms and studios are housed in four buildings: Kamphoefner Hall, Brooks Hall, Leazar Hall and 111 Lampe Drive.

Meg Calkins, LAEP Department Head, is the administrator who manages the faculty and staff; the curriculum and course offerings; the budget; program assessments and accreditation; external relations and student recruiting, admissions and advising. Carla Delcambre, the Director of the Graduate Program (DGP), administers advising, the oral exam, and admissions and recruiting.

The Department is home to the <u>Natural Learning Initiative</u> (NLI). NLI, focused on children and natural learning environments, engages in research and scholarship, design assistance and continuing education for educators and designers. Until August 2021, Robin Moore was the Director of the Natural Learning Initiative overseeing seven full time employees. In August 2021, Dr. Deepti Adlakha assumed the position of Director. The Director of NLI reports to the LAEP Department Head.

The <u>Coastal Dynamics Design Lab</u> (CDDL) is co-directed by LAEP faculty member, Andy Fox and School of Architecture Head, David Hill. CDDL is addresses critical ecological and community development challenges in vulnerable coastal regions and shoreline communities. The lab has three full time employees and multiple student workers.

3. Response to Previous LAAB Review.

Describe the progress that has been made on the *Recommendations Affecting Accreditation* from the previous accreditation visit (not applicable to those seeking initial accreditation). List each prior

Recommendation verbatim and provide an updated recap of responses made on annual interim reports. List each *Consideration for Improvement* and provide an update.

The NCSU LAAB ROVE Team Report of 2016 identified <u>NO Recommendations Affecting Accreditation</u> and four *Considerations for Improvement*:

Consideration 1.1 (from Standard 1: Program Mission and Objectives): The program should establish metrics and a process to measure and document progress toward meeting the educational goals.

From 2019-2021, the LAEP faculty engaged in a visioning and goal setting process over four faculty retreats and multiple meetings that resulted in a revised mission statement, value statements, program goals, objectives, and both quantitative and qualitative evaluation metrics to measure achievement of the objectives. The goals and objectives were vetted with the Department's Professional Advisory Board and the Student Advisory Council. Evaluation measures and metrics for the objectives are already informing our progress toward meeting our goals and are resulting in curricular modifications and other program changes.

The University Office of Institutional Research and Planning (OIRP) requires an annual process of documenting and measuring Outcome Assessments based on overarching Program Objectives related specifically to each Department's curriculum goals. This annual process allows us to quantify specific and detailed outcomes for two overarching objectives each year. Refer to the Standard 4 chapter for more information on the Outcomes Assessment content and process.

Additionally, in 2019, the faculty developed an evaluation rubric for use during the Comprehensive Oral Examination. The rubric has helped to measure student preparedness for entry level practice.

Consideration 3.1 (from Standard 3: Professional Curriculum): Establish a mechanism for recording the discussions and rationales for curriculum review, adaptation and development.

The primary mechanisms for recording rationales for curriculum development are: metrics for achievement of the goals and objectives, the outcomes of the Professional Advisory Board and the Student Advisory Committee, and the outcomes of the biannual Faculty retreats and biweekly faculty meetings. Detailed notes are recorded in each of these settings, and where appropriate, votes are taken at all meetings where the curriculum is reviewed, adapted and/or developed.

Comprehensive reporting of the measures and metrics for achievement of the program goals and objectives has not yet been undertaken because they were just approved in May 2021 by the faculty. We plan to engage in an annual review of their achievement as a way to inform further curricular and program modifications.

Consideration 3.2 (from Standard 3: Professional Curriculum): Establish a comprehensive assessment methodology for evaluating the effectiveness of the curriculum.

The primary assessment method for evaluating the effectiveness of our curriculum is the use of multiple evaluation measures related to the LAEP Program Goals and Objectives. Please refer to responses to Considerations 1.1 and 3.1 above for additional discussion. The other assessment method is the Outcomes Assessment process undertaken annually through the University Office of Institutional

Research and Planning (OIRP). In 2020, the department was given the Outcomes Assessment Award of Excellence by the University Office of Institutional Research and Planning.

Consideration 3.3 (from Standard 3: Professional Curriculum): Embrace the Learning Outcome Assessment process and create a clear consistent means of documenting the results.

We engage yearly in the Learning Outcomes Assessment process and the reports from this will directly assist with assessment of the evaluation measures for our curriculum goals and objectives. Results of this process are documented and maintained in Department digital files. Reports from the Outcomes Assessment process inform curriculum modifications and development of courses.

Since the 2016 LAAB re-accreditation, we have regularly engaged in multiple assessment and evaluation activities for our curriculum. These assessments have led to improvements in our curriculum.

4. Describe current strengths and opportunities.

Strengths, opportunities, weaknesses, and challenges of the Department have been identified in multiple formal and informal venues. In 2021, we invited students, faculty, alumni, local practitioners, and others interested in the department to respond to surveys soliciting their sense of the program's strengths and weaknesses, and suggestions for improvement associated with the curriculum, community engagement, faculty expertise and scholarship, connections to practitioners and alumni, student diversity, program visibility/recognition, cost of education and facilities. The discussion below incorporates results from these surveys. Detailed results can be found in the **Addendum G** of this report.

Other sources that have identified the Department's strengths, opportunities, weaknesses and challenges are biannual faculty retreats, the LAEP Professional Advisory Board, the LAEP Student Advisory Council and informal conversations with faculty, students, alumni and departmental friends.

Our strengths and opportunities are discussed below with references to the LAAB Standards they support:

- Mission, Goals and Objectives (LAAB Standard 1) Our program has a clear mission, and goals and objectives that are supported by our curriculum, out-of-classroom offerings, scholarship and faculty expertise. Students are drawn to our program because of the curricular and research focus supporting our mission and goals.
- Diversity, Equity and Inclusion (LAAB Standard 2) Diversity, equity and inclusion in design and planning is a central consideration in several of our design studios and seminars. We offer a popular elective called LAR 535 Environmental and Social Equity and Design. Our faculty is relatively diverse as compared with competing MLA programs, however, despite our best efforts, our student body is not diverse with respect to race. This is a weakness.
- Rigorous and diverse curriculum (LAAB Standard 3) The MLA curriculum offers students a wide variety of engaged learning experiences while preparing them well for landscape architecture practice. The first half of the curriculum focuses on the fundamental tenets of landscape architecture education and the second half requires increased scholarly inquiry through advanced studio and course work, independent study, and elective courses, in and outside the program, reflective of the student's interests. In the second half students are given the opportunity to focus on imperatives such as climate change, coastal resilience, equity and

justice in communities, and smart and healthy city design. Alumni and professionals appreciate the balance of conceptual design thinking and technical skill in our graduates.

- Preparation for practice (LAAB Standard 4) Students are provided with a strong technical skill set, experience with real project stakeholders and research skills that prepare them well for landscape architecture practice and makes them very competitive in the entry level and internship job markets.
- Engaged students (LAAB Standard 4) Our students are engaged, passionate and motivated about social and environmental imperatives related to landscape architecture. This, along with their diverse backgrounds, translates into high quality, award-winning student work and a strong and engaged student community.
- Accomplished faculty members with diverse expertise (LAAB Standard 5) Our faculty members are leaders in their fields, and offer students a diversity of viewpoints, skills, and experiences both within and outside the classroom. The rich and extensive practice community in the Triangle allows us to engage leading professionals as Professional Faculty members to provide students with currency in practice.
- Culture of research and scholarly inquiry (LAAB Standard 5) Our faculty and students understand the meaning and value of research to the profession and society. With faculty as their models, the MLA curriculum prepares students to develop and apply research and strategic thinking in their work.
- Engaged teaching and scholarship (LAAB Standard 6) Supporting the NCSU Land Grant mission, we offer students multiple opportunities for community-engaged work in both classroom and research settings. We have ongoing relationships with the city of Raleigh, the city of Durham, and multiple communities in the coastal plain of North Carolina where we have engaged students in multiple projects over the course of several years. These ongoing relationships have resulted in significant impacts in these communities. Work with the communities has given students the opportunity to engage stakeholders with multiple viewpoints and experience resolving sometimes conflicting needs. This experience working with communities to establish priorities, set goals, plan, design and establish phasing gives students invaluable preparation for professional practice.



 Interdisciplinary experiences (LAAB Standard 6)
 We offer students multiple interdisciplinary learning experiences in the classroom and in special events such as DesignWeek. We have cultivated a strong relationship with the NCSU School of Architecture and offer multiple collaborative studios with Architecture faculty members. Our seminar courses are well subscribed by students from related disciplines.

• **Community and collegiality** (LAAB Standard 6) Our faculty are committed to departmental and college

well-being and are very supportive of the students and their professional development.

- Academic relationships (LAAB Standard 6) We enjoy strong teaching and research relationships with allied departments across campus, and other campuses such as UNC Chapel Hill and Duke.
- Strong relationships with practitioners (LAAB Standard 6) We have strong relationships in the local and national practice communities that benefit our students though professional mentoring, design feedback, internships and jobs. We engage practitioners in design reviews with local professionals and the COVID-19 pandemic has offered the opportunity to engage practitioners from across the country and internationally via online venues. We have a robust mentorship program where all students are matched with a professional mentor in their first

semester. These mentor relationships continue for the student's entire duration in our program. Many students do internships at the mentor's firm or are referred to other firms in the mentor's network. We host six or seven evening lectures per year that engage internationally significant lecturers and are well-attended by local, and even distant practitioners over Zoom. The department head participates on the North Carolina ASLA Executive Committee and we host alumni receptions at the national, regional, and state ASLA conferences. Lastly, our college newsletter goes to hundreds of alums and friends of the Department each month.



• Culture of making and building (LAAB Standard 7) Students are offered multiple opportunities to engage in construction and making activities in our Design Build studio course, in the Planting Design course, and in other studios. The College of Design has state of the art making facilities such as laser cutters, 3D printers and a materials lab with extensive metal and wood working equipment. The materials lab is staffed with experienced builders to instruct students on safe use of equipment.

- Financial Value (not an LAAB standard) Our MLA program is a great value for the cost as compared to competing MLA programs such as UVA, Cornell, Michigan and Harvard. Additionally, our Teaching and Research Assistantships pay tuition, health insurance and a stipend making them a great value particularly for out of state and international students.
- Location (not an LAAB standard) The Triangle (Raleigh, Durham and Chapel Hill) is a high-quality place to live and work. The region also offers a diversity of opportunities for community engaged projects for studio classes.

5. Describe current weaknesses and challenges.

Our current weaknesses and challenges are:

- Limited Student Body Diversity (LAAB Standard 2) Diversity, equity and inclusion is one of our Program Goals, yet the racial and ethnic diversity within the MLA student body falls far short of representing the racial and ethnic diversity within the State. We are making many efforts to recruit diverse students such as: marketing our program at HBCUs in the Southeast, forging a relationship with the BLA program at North Carolina A&T State University, and participating in the NOMAS Conference. While we offer scholarships to students of color, the amount of funding we have to offer does not compete well with our better-funded competitors. Ethnic diversity within the student body in some years has been better than racial diversity with international students from China, Indian, Bangladesh, Nepal, Iran, Brazil and Africa. However, the COVID-19 pandemic severely limited matriculation of International Students starting in Fall 2020.
- Limited funds for scholarships to recruit students (LAAB Standard 2) Recruiting graduate students can be challenging because we do not have generous scholarship funding to offer. The total amount of scholarships we had to offer in 2020-21 was \$26,530. Given our goal to diversify the MLA student body, we focused as much scholarship funding as possible on recruiting students from underrepresented populations. Our development and external relations staff have been very successful obtaining endowment funding for the College however, endowments take time to pay out and a sizable gift does not often result in a large scholarship. Another tool used to recruit high quality students is a teaching or research assistantship that is part of the Graduate Student Support Plan (GSSP). This plan pays tuition, health insurance and a small

stipend for the semester in which the student has the TA or RA job. It can be challenging to find courses that our Track III students are qualified to be teaching assistants for given their limited design experience.

- Non-competitive faculty salaries (LAAB Standard 5) Faculty salaries in the College of Design are low compared to our competitors and raises have not been given for three years due legislative budget challenges. While salaries are low, some productive faculty achieve additional compensation as University Faculty Scholars (five years of \$10,000) additionally, multiple faculty members in the department have achieved raises through retention offers.
- Heavy teaching loads (LAAB Standard 3) The College of Design Workload Policy mandates that faculty will teach 18 credit hours of courses each academic year. This translates to a studio (6 cr) and a seminar course (3 cr) each semester. Seminar courses range from an elective to a core technology/construction course. The maximum number of students in a studio section is fifteen (most are 12-14) and seminar courses range from eight to sixty students with several technology courses around 30 students each. Given the research and scholarship expectations of this R1 university, this teaching load is substantial. One way that faculty address this problem is by "buying themselves out" of course loads using their research funds. This works well for faculty members who have substantial grant funding, but it does not work for those with minimal funding. The cost of buying out of a three credit hour class ranges from \$8,000 to \$15,000 depending on the faculty member's salary.
- Limited physical space to grow (LAAB Standard 7) The MLA Program studios are located on the second floor of Kamphoefner Hall in a central location within the College. MLA students occupy two large studios that, together with a small pod of computers and a small classroom, support a sense of community within the program. As the program has grown in recent years, the studio spaces are quite tight eliminating breakout spaces for small groups and a small lounge. There is currently no more space in the College for the program to expand into.

The impact of the COVID-19 pandemic on the LAEP Program and Community

The COVID-19 pandemic impacted the LAEP Program and community in both negative and positive ways. Like everyone else, in mid-March 2020, we moved our classes entirely online. Within a week we were up and running with classes meeting on Zoom as the primary platform for seminars, studios and meetings. Many students remarked at the smooth transition of classes to the online setting and appreciated the faculty's efforts to deliver content and still engage them with care virtually.

While Zoom has been an effective space over the past year, our faculty members have employed multiple apps and tools to strengthen their online teaching, particularly in design studios. Apps such as Miro, Morpholio, Concept Board and Jamboard, have created spaces allowing for sketch communications, live collaborations, and demonstrations. This has provided students experience using these tools that they have taken into their internships and professional jobs after graduation.



Another positive outcome of the pandemic is increased use of the *flipped classroom*. Class time was used for demonstrations, field trips and discussions as learning content such as lectures and reading were provided to students prior to the class meeting. In our construction and materials class, lectures were recorded and provided a week ahead of class time to the students. Class time was used to meet outside and masked at significant project locations across the Triangle to discuss landscape structures and materials. We also visited multiple construction sites.

Instruction, studio desk crits and pin ups have been happening outside. Given the comfortable climate and

enjoyable green courtyards in the College, we expect that this trend to continue post-pandemic.

Another unexpected benefit of the Pandemic has been the broader access to professionals across the country and around the world for lectures and student internships. In 2020-21, we engaged guest lecturers and design critics from China, Thailand, Spain and the UK. Some of our students held internships with firms out of state from their apartments in Raleigh.

But the COVID-19 pandemic has had some negative impacts as well. Our strong community of students and faculty suffered both collectively and individually. Student work anxieties increased substantially and several reported feeling overwhelmed by the amount of time they spent on Zoom. They were frustrated by the loss of casual studio conversations with their peers and with faculty where they could express thoughts or ask questions. Many students experienced feeling of loneliness and disconnection that impacted their work. Students engaging in group projects experienced more challenges with collaboration than usual.



Faculty experienced challenges as well. They spent countless hours shifting teaching content online and communicating virtually with students resulting in some reduced scholarly productivity. The Provost recognized the increased burden of the Pandemic on scholarly productivity and created no penalty tenure clock extensions for tenure track faculty.

Throughout the pandemic, efforts were made to

engage students and faculty in mental health check ins, online social events and listening sessions. These events have helped maintain our sense of community in small ways, but we are all looking forward to coming back together face to face for large events and celebrations.

6. Describe any substantial changes in the program since the last accreditation review.

There has been a paradigm shift toward applied teaching and learning in the Department over the past six years with community engagement projects being taught in the Advanced Topic Studios, the Design Build Studio and some seminar courses. This has offered students invaluable experience with stakeholder engagement, real project opportunities and constraints, and community assistance processes. On-going relationships with communities such as Princeville, NC (the first incorporated

town by freed slaves in the US) and Lumberton, NC are strengthened by multiple ASLA awardwinning projects executed by LAEP faculty and students in partnership with the towns.

In December 2019, the LAR Faculty voted to change the name of our Department to the *Department* of Landscape Architecture and Environmental Planning (LAEP). This new name better describes the academic emphasis of our program, the curricular offerings, the LAEP Faculty expertise, and the broad reach of the profession of landscape architecture. Environmental planning is integrated with landscape architecture into many of our design studios (the foundation of our professional program) and many of our seminar courses. Additionally, our faculty's research focuses on the impacts of nature on child development; planning, design and policy for environmental disaster resilience; environmental and social justice; environment and behavior with the impact on human health and economic development; smart and healthy cities; community design and development; and the environmental and human health impacts of construction and building materials. Six faculty hold professional degrees in Planning and three are certified by the American Institute of Certified Planners (AICP). The Board of Trustees approved the department name change in July 2020.

Additionally, we changed the CIP Code of the Department to become a STEM designated program. This STEM designation allows our international graduates to engage in Optional Practical Training (OPT) in the US for up to three years. The CIP Code change was initiated in October 2019 and was approved by the UNC System Office in November 2020.

There have been some <u>personnel changes</u> in LAEP due to new hires, administrative position modifications and retirements.

- In 2018, Department Head and Professor Gene Bressler, FASLA, stepped down and transitioned to phased retirement. He retired fully in December 2020.
- Meg Calkins, FASLA, SITES AP, joined the Department in August 2018 as Department Head and Professor.
- In 2016, Mark Hoversten, FASLA, FCELA, joined the College of Design as Dean. Dr. Hoversten's academic home is in LAEP.
- In 2018, Art Rice transitioned from his position as Associate Dean in the College of Design back to full time teaching in the Department. He retired in July 2020.
- In 2017, Elen Deming, FASLA, FCELA, joined the College of Design as Director of the new Doctor of Design program. Dr. Deming's academic home is also in LAEP.
- In January 2019, **Gavin Smith**, PhD, AICP was hired with tenure at the rank of Professor.
- In August 2019, Carla Delcambre was awarded a tenure track position as Associate Professor. She previously taught as an Assistant Professor of Practice since 2005.
- **Robin Moore** stepped down as Director of the Natural Learning Initiative and Professor of LAEP and entered phased retirement in July 2021.
- **Deepti Adlakha** was hired as an Associate Professor and Director of the Natural Learning Initiative in August 2021.

LAEP Faculty have been promoted, tenured and honored since the last accreditation:

- Andy Fox was tenured and promoted to Associate Professor in 2016. He was promoted to Professor in 2019.
- Kofi Boone was promoted to Professor in 2019.
- Andy Fox and Kofi Boone were elevated to Fellowship in ASLA in 2019 and 2020 respectively.
- Celen Pasalar was tenured and promoted to Associate Professor in July 2020.
- **Robin Moore** was awarded the Alexander Quarles Holladay Medal in 2021.
- **Carla Delcambre** was awarded the NCSU Outstanding Teacher Award in 2020.

 Celen Pasalar was awarded the 2020 Council of Educators in Landscape Architecture (CELA) Award for Excellence in Service Learning, Junior Award

7. Describe who participated (faculty, administrators, students, alumni, outside professionals, etc.) in preparing this self-evaluation and briefly state their roles. The LAAB recommends involving as many people as possible in preparing the SER, as the process of self-evaluation can be one of the greatest benefits of accreditation.

Contributor	Section
Department Head and Professor Meg Calkins	Principal SER writer
Professors Andy Fox, Elen Deming and Gavin Smith	Program Mission and Objectives
Professor Kofi Boone	Program Autonomy, Governance, and Administration
Professor Gavin Smith	Program Mission and Objectives
Associate Professor Celen Pasalar	Introduction Chapter, Outreach to Faculty, Students, Alumni, and Practitioners
Associate Professor Carla Delcambre	Introduction Chapter, Outreach to Faculty, Students, Alumni, and Practitioners
University Program Associate, Nikki Evans	Administration
Graduate Research Assistant, Alex Craig	Digital Portfolio, Addenda
Design Librarian, Karen DeWitt	Library
CoD Director of Operations, Joe McCoy	Facilities
CoD Director of Career and Academic Advising Kathleen Fenner	Career Advising

Note: Begin a new page for each standard. Insert a tab here and between all other standards.

STANDARD 1: The program shall have a clearly defined mission supported by goals and objectives appropriate to the profession of landscape architecture and shall demonstrate progress towards their attainment.

INTENT: Using a clear concise mission statement, each landscape architecture program should define its core values and fundamental purpose for faculty, students, prospective students, and the institution. The mission statement summarizes why the program exists and the needs that it seeks to fulfill. It also provides a benchmark for assessing how well the program is meeting the stated objectives.

A. Program Mission

1. State the current program mission and date adopted.

PROGRAM MISSION

Our mission is to investigate and advance landscape-focused solutions to social and environmental design imperatives (Adopted May 2021).

2. Describe how the mission statement reflects the purpose and values of the program and how it relates to the institution's mission statement.

The chart in Section C of this chapter lays out the relationships between our program's mission, values, goals, objectives, and measures by which we will evaluate our progress toward meeting the goals and objectives.

PROGRAM VALUES

- We value landscape architecture education that prepares future professionals to engage in the breadth and depth of private and public professional practice.
- We value design and design thinking and its role in addressing environmental and societal imperatives.
- We value scholarship, research, discovery and lifelong learning that supports forward-thinking academic and professional practices.
- We value diversity, equity and inclusion in teaching, scholarship, engagement and the department.
- We value academic- and practice-based leadership and preparing our students to be future leaders in the profession.
- We value engagement with local, regional, national, and international communities. We believe
 it is important to provide our students opportunities to learn professional skills during these
 activities.

Our mission reflects the department's purpose and values through an emphasis on teaching students how to obtain and use evidence-based information gathered through research, and to apply it in a range of classroom- and field-based settings. To prepare them for professional practice in landscape architecture, students learn to address a range of social and environmental challenges, driven by the above values.

Teaching is complimented and advanced through the application of community engagement and research initiatives, undertaken by faculty members, which span all elements of the department's curricula, including studios, seminar courses, independent study classes and independent design projects.



The program's immediate "laboratories" are the urban, suburban, and rural landscapes of the Mountain, Piedmont, and Coastal Plain regions of North Carolina. The social, economic, and environmental imperatives resident within these landscapes fuel the program's academic, scholarly, and extension agenda. While representing accessible examples and situations to study, the knowledge and experiences derived extend and apply globally across multiple scales and cultures.

The first half of the academic program prepares students for

the current practice and discipline of landscape architecture. It equips them with the core knowledge base, tools, processes, and skills in design, site works, history and theory, planning, research, and the culture of professional practice.

The second half of the academic program positions students to pursue substantive inquiry of their own, those of the faculty, and those of the larger extended community. Students master bodies of knowledge, pursue evidence-based research, and hone verbal, written, and graphic communication skills.

Throughout their program of study, students combine critical design thinking with their intelligence, creativity, and passions. They will frame, engage, and challenge the imperatives of landscape architecture that involve health, safety, welfare, and quality of life.

The program's primary areas of advanced study are:

- Sustainable design of healthy and inclusive city, suburban, and rural landscapes in order to accommodate new projected population growth and development, regenerate brownfield and gray landscapes, address issues of diversity, equity and inclusion, and anticipate natural hazards, disasters and climate change imperatives facing our region and planet;
- Scholarship, research and evidence-based inquiry in order to learn from past experiences, identify emerging problems and challenges, apply findings to address them, evaluate outcomes, and develop new knowledge;
- Development and application of technologies (materials, methods documentation, digital technologies) in order to provide the know-how to better depict, inform, design, simulate, and test solutions and predict outcomes, as well as co-produce and share results with a range of stakeholders;

- Working productively with increasingly diverse clients and user groups within local, regional, national, or international contexts, in order to develop creative solutions to the problems confronting society.
- Environmental and social justice in order to design, foster and support just communities and places.
- Climate change mitigation, adaptation and disaster resilience in order to understand the relationships between our changing climate; associated environmental, social and economic impacts; and to apply interdisciplinary, multi-scalar design options for multiple stakeholders.

Both strategic plans of NC State University and the College of Design as well as their mission statements provide the fundamental underpinnings for the ideas and values developed and expressed in the Department of Landscape Architecture and Environmental Planning's program mission, goals, and objectives.

It should be emphasized that the Department of Landscape Architecture and Environmental Planning was and continues to be a major and equal participant in the formulation of the College of Design's Strategic Plan. While the department head was literally "at the table" alongside members of the College's Administrative Council who shared in giving form to the Strategic Plan, our department's faculty (and those faculties of the other academic units of the College) contributed ideas of substance and reviewed all drafts of the Strategic Plan. The process was highly iterative and transparent. It was accomplished during department faculty meetings and retreats and often during informal conversations. Notes and issues were shared and debated. Input and advice from both the professional community at large and the Department's external Professional Advisory Board was similarly obtained. The College's Strategic Plan, therefore, reflects both the spirit and values of the Department of Landscape Architecture and Environmental Planning.

Concurrent with and responding to the College's Strategic Planning process, the Department of Landscape Architecture and Environmental Planning undertook a rigorous analysis of its strengths and weaknesses. This included canvassing the interests of the faculty and students combined with advice provided by our external Professional Advisory Board and members of the professional landscape architecture community. We also paid attention to what was happening in the world with concerns about social and environmental justice, and resilience and adaptation to climate change, as both issues relate to landscape architecture and urban planning.

Within this context, the Department undertook and continues to evaluate the serious process of examining its core values, resources, and strengths and weaknesses. The charge of this process is to redefine the academic missions of the MLA program, its scholarship/creative works agenda, its productivity within the University's land grant extension mission and its roles in the College, University, professional practice arena, and external constituent communities. The departmental mission along with our stated goals and objectives that follow are the result of that ongoing, iterative design process. As a result, we identified a number of curricular areas from the past six years requiring improvement, and implemented strategies to address deficiencies and advance student learning.

B. Educational Goals

1. State the academic goals of the program.

Educational goals strategically integrate teaching, scholarship, and engagement, as these activities principally define our MLA program. They are:

GOAL 1: Ensure all students have mastered the appropriate **design and planning skills required to be a practicing professional**, recognizing the aim of the department is to create transdisciplinary thought leaders and advocates, guided by a passion for lifelong learning.

GOAL 2: **Transfer theoretical and applied knowledge** through engaged processes and problem types as appropriate for landscape architecture and environmental planning.

GOAL 3: Advance **diversity, equity, inclusion, and cultural competency** through the academic experience.

GOAL 4: Build upon the department's history of strong **academic and practice-based leadership** spanning environmental and social imperatives, emphasizing transformational actions and impacts.

GOAL 5: Develop, nurture, and sustain **internal and external partnerships** that advance the department's vision, including a focus on preserving the department's climate of collegiality.

2. Describe how the academic goals relate to the program's mission.

Our goals and objectives directly support the program's mission **to investigate and advance landscapefocused solutions to social and environmental design imperatives.** They provide the strategic path through which the MLA program will enhance the knowledge and capability of the students, faculty, alumni, and profession to positively contribute to the health, safety, and welfare of the public.

3. Describe how the program regularly evaluates its progress in meeting its goals.

<u>Quantifiable evaluation criteria specific to each of the program goals</u> are detailed with their respective objectives as defined in the chart in Section C of this chapter. These were developed in early 2021 and will be assessed each year moving forward.

Additionally, and through a broader evaluative lens, we have implemented program assessment strategies in many other venues:

Meetings with students: The Department Head and faculty meet with students both individually and in groups (the *Student Advisory Council*) to discuss the program, the curriculum, plans for the upcoming semesters, professional events, and questions and concerns. Notes are taken during these sessions and are used by the faculty in deliberations to restructure the program's curriculum, improve student-advising procedures, and enhance communication with the students.

Meetings with external constituents:

- The external LAEP Professional Advisory Board (PAB) is charged with the responsibility of advising the Department and the College on issues of program development, professional requirements and expectations, courses and curriculum, and professional relations. The department head meets with the Board four times a year. PAB members visit informally with students in the studios to view their work, and engage in conversations about the profession.
- All instructors delivering design studio courses are required to invite three or more **external reviewers** such as local practitioners, to participate in mid-term and final reviews of student work. These visitors are asked to offer oral and/or written comments about the students' work from the perspective of the content presented, the quality of the students' presentations (verbal and graphic), and how well the work was developed. The external reviewers are also asked to give the

instructor and/or the department head additional comments if they so choose. During the COVID-19 pandemic, online reviews allowed for broader inclusion of professionals from across the country.

- As a member of the Executive Committee (ExCom) of the North Carolina Chapter of the American Society of Landscape Architects (NCASLA), the department head participates in its monthly meetings and reports on and responds to questions about the academic activities of the Department and MLA program. NCASLA officers and members are invited to the College on a regular or drop-in basis to meet with students and faculty, and to observe the activities and works of the students. In addition, the department hosts one of the monthly meetings of the ExCom at the College. On these occasions, the ExCom receives a tour of the studios, visits with students at their respective workstations, and receives a detailed briefing followed by extensive discussion about the program and its relationship with the profession.
- Meetings with the North Carolina Board of Landscape Architects. NCBOLA is the agency that oversees licensure of landscape architects in the State of North Carolina. In 2018 and 2019, a representative from NCBOLA engaged interested MLA students in a presentation about preparation for licensure. Additionally, a representative from NCBOLA lectures annually in LAR 550 Professional Practice.
- Meetings with other professionals. LAEP faculty members hold leadership roles in and attend conferences of national organizations such as the: Landscape Architecture Foundation, Council of Educators in Landscape Architecture, American Society of Landscape Architects, Sustainable Sites Initiative and Environmental Design Research Association. Professional issues, trends and data are shared during these national meetings. Additionally, the department head attends meetings of the local ASLA chapter, meets with a number of non-alumni practitioners residing in the state, and attends open meetings of the local AIA chapter, ULI, and other organizations in order to connect with the external world, and to learn how they viewed the department. During these visits program strengths and weaknesses are discussed, as are a number of ideas for enhancing the program.

Student Performance Measurement tools:

- Rubrics: To more formally assess student work in design studios and seminar classes, instructors utilize grading rubrics. These rubrics identify grading criteria used to evaluate student project and assignments, and set forth in operational or performance terms, the basis for making judgments about the student's performance in discrete areas. Results are used by the faculty to understand how they might improve their classes and/or assignments.
- Student Course Evaluations and Surveys: At the end of each semester, students are asked to fill out standard university course evaluations. In addition, some instructors, although not required, distribute their own evaluations to seek more in-depth feedback from the students. Results of the university-based evaluation are made available to the faculty member and the department head. They are used to mentor faculty and are considered in the annual evaluation of the faculty.

Recognition through external awards programs: The program encourages and supports student and faculty entry of their work in various professionally sponsored awards venues such as *National ASLA Student and Professional Awards, North Carolina ASLA Student Awards, Tri-State ASLA Awards,* fellowships, and other related organizations and agencies. Recent submissions have been very successful indicating strong studio instruction. Dr. Celen Pasalar's 2016 studio project investigating the reclamation of an abandoned prison site in Wagram, NC won a national ASLA award. A student from the Coastal Dynamics studio won a national Student ASLA award in 2019, and three students won national

Student ASLA awards for two projects in 2020. In 2019, our students swept the Southeast Tri-State Student ASLA Awards over entries from other landscape architecture programs in the Southeast.

Tracking employment of recent graduates: Following the professional paths of our graduates provides useful data in terms of where and how our graduates fare in the job market including private firms, government offices, nonprofits and other venues. In 2019, we started an NCSU LAEP Alumni group on LinkedIn in order to track the firms and positions of our graduates. We use the LinkedIn group to publicize guest lectures and events. We publicize accomplishments of faculty, students and alumni on LinkedIn, Instagram and Facebook as well.



LAAB Accreditation Process: Accreditation is intended to be a very transparent process that involves a broad constituent/stakeholder community consisting of university administration, faculty, students, practitioners, alumni, and a host of stakeholders from within the public realm. The goal is threefold: to advance academic quality, to demonstrate accountability, and to engage purposeful change and needed improvement. To this end, the department necessarily strives to increase and enhance its outcomes assessment process with the goal of

providing both quantitative and qualitative evidence of its findings, proposed changes, and implemented changes.

Strategic Planning Process: Concurrent with the University's and College's *Strategic Planning Processes*, the LAEP faculty continues to build upon the ideas and findings of outcomes assessment to rethink the structure and content of the curriculum and courses. Compliance with these *Processes* requires the department head to submit an annual report of the department's activities and achievements to the Dean, which is then reviewed and discussed together.

C. Educational Objectives

1. List the educational objectives of the program.

Our departmental values and program goals, objectives and evaluation measures are presented below in a format showing the relationships among them. The evaluation measures are intended to be quantified annually, and adjustments will be made to goals and objectives as required.

GOAL 1:

Ensure all students have mastered the appropriate <u>design and planning skills required to be a</u> <u>practicing professional</u>, recognizing the aim of the department is to create transdisciplinary thought leaders and advocates, guided by a passion for lifelong learning.

VALUE: We value landscape architecture education that prepares future professionals to engage in the breadth and depth of private and public professional practice.

VALUE: We value design and design thinking and its role in addressing environmental and societal imperatives.

Objective 1A (Teaching & Mentorship): Provide students with interdisciplinary/ transdisciplinary learning experiences.	 Evaluation measures: Number and topical focus of collaborative studios Quality of collaborative work from interdisciplinary studios Number and disciplinary diversity of non-LAEP major enrollments in LAEP courses Number and type of non-LAEP elective courses taken by LAEP students Number and type of invited lecturers (individual courses and department-wide events) Number and type of interdisciplinary research projects and publications
Objective 1B (Teaching & Mentorship): Provide students with learning experiences at multiple scales, with emphasis on intersecting systems and complexity.	 Evaluation measures: Number and focus of design studio problems that span global, regional, site, and detail scales (e.g. climate crisis) Number and type of opportunities for LAEP students to access coursework in regional and global-scale issues Number and focus of co-produced trade and scholarly article publications Number and focus of co-produced conference presentations Number and type of opportunities for LAEP students to access training in materials research and construction Number and type of opportunities for LAEP students to access learning experiences in modelling and data visualization
Objective 1C (Teaching & Mentorship): Provide students with learning experiences in techniques and technologies for the practice of landscape architecture.	Evaluation measures: - Student performance in internships and the job market post graduation - Feedback from firm professionals in critiques - Feedback from professional mentors - Student performance in technology classes and their application of skills in design studios
Objective 1D (Teaching & Mentorship) Provide students with learning experiences in project design and planning processes such as problem identification, programming, site assessment, synthesis, conceptualization, and implementation.	 Evaluation measures: Complexity and completeness of student products Quality and amount of coursework in design development, materials and methods, construction documentation, and fabrication/implementation Oral examinations will demonstrate understanding of personal and professional design processes in environmental and societal context Research assistantship work and project delivery with faculty
Objective 1E (Scholarship): Maintain, and when possible expand, faculty expertise in relevant design and planning approaches, methods, and tools.	Evaluation measures: - Hiring for diversity of faculty expertise (tenure/tenure track and professional) related to innovative industry experience - Professional development opportunities for faculty - Trade and scholarly publications (number, venues, and modes) focused on design and planning skills and practice

GOAL 2:

Transfer theoretical and applied knowledge through <u>engaged processes and problem types</u> as appropriate for landscape architecture and environmental planning.

academie and professional practices.	
Objective 2A (Teaching & Mentorship): Engage students in theoretical and research frameworks, methods, literature, and critical evaluation.	Evaluation measures: - Coursework in Research Methods and Critical thinking skills - Independent coursework on student-generated research investigations - Student products (final class/studio projects across department, conference posters/presentations) - Quality and number of coursework in History, Theory and Criticism - Oral examinations will demonstrate understanding of history, theory, and criticism - Research assistantship work and publications with faculty - Number of MLA students advancing to doctoral programs (i.e., PhD, DDes, EdD) and teaching positions
Objective 2B (Scholarship): Contribute to the creation of new theoretical, contextual, and methodological knowledge in the field.	 Evaluation measures: Diversity of faculty expertise (tenure/tenure track and professional) in teaching, and in scholarship and research Publications (number, venues, and modes) Projects (number, types) Awards (number, venues, and modes) Presentations at state, national and international conferences Faculty participation in doctoral degree committees in the College of Design (PhD and DDes programs) as well as outside the College
Objective 2C (Service & Engagement): In transfer of knowledge, recognize the importance of engagement, collaboration, and co-production of learning.	 Evaluation measures: Assisting communities with building independent capacity for spatial and environmental decision making Helping communities identify and obtain additional resources (funding, policy change, technical assistance) Advising international, federal, and state agencies; nonprofits and other organizations identify design and policy improvements Participation in advisory and editorial boards Intellectual leadership in professional associations Testimonials from international, national, state and local partners
Objective 2D (General): Demonstrate impact and garner recognition from constituencies outside of the department.	 Evaluation measures: Demand for expertise (external lectures, invitations for essays and chapters; symposia and workshops; etc.) Citation levels for publications (e.g. i-index; h-index; Google scholar, etc.) Number of peer-reviewed journal articles Awards (number, venues, and modes): professional and scholarly awards Grants and Fellowships (number, amount, visibility, and prestige) National and international speaking engagements Testimonials from international, national, and local partners

VALUE: We value scholarship, research, discovery, and lifelong learning that supports forward-thinking academic and professional practices.

GOAL 3:

Advance diversity, equity, inclusion, and cultural competency through the academic experience.

VALUE: We value diversity, equity and inclusion in teaching, scholarship, engagement, and the department.

Objective 3A (Teaching & Mentorship): Recruit, retain, and graduate diverse students.	 Evaluation measures: Number and percent of student representation as compared to statewide demographics Number and percent of student representation as compared to enrollment rates of nationally accredited programs Amount of scholarships to diverse students Number, types, and locations of recruitment activities Number of diverse students matriculating and graduating from the program
Objective 3B (Teaching & Mentorship): Critically assess and adapt courses, public-facing events, and overall curriculum to achieve a high level of diversity, equity, and inclusion throughout the program.	 Evaluation measures: Numbers and types of authors and subjects of class readings, case studies, references, and invited guest critics and lecturers Number, types, and topics of representation in the departmental lecture series Number of diverse students participating in departmental and college organizations (i.e., Student ASLA, LAEP Student Advisory Board, Mentorship program, etc.) Number of students participating in external diversity organizations (NOMAS, WxLA, NAMLA, BlackLAN, etc.) Number of diverse students employed by funded faculty research Number and diversity of invited class speakers, guest lectures to the classroom
Objective 3C (Scholarship): Recruit, develop, and retain a diverse faculty.	 Evaluation measures: Number and percent of faculty and staff representation Number and types of participation in diverse faculty networks (i.e., CELA, IFLA, and other groups) Number, types, and topics of representation in the departmental lecture series Faculty compensation (as compared to equivalent rank, position, responsibilities, etc.)
Objective 3D (Service & Engagement): Engage and serve a diverse constituency of partners, communities, and organizations external to the department and university.	Evaluation measures: - Quantity and geography variety (i.e., urban/rural; mountain/piedmont/coastal; nationwide, international) of communities engaged - Type of demographics of communities served as compared to statewide demographics - Quantity and type (i.e., academic, NGO, governmental, community group) of project partners engaged - Quantities, types, and topics represented through service and engagement activities

GOAL 4:

Build upon the department's history of strong academic- and practice-based leadership spanning environmental and societal imperatives, emphasizing transformational actions and impacts.

VALUE: We value academic- and practice-based leadership and preparing our students to be future leaders in the profession.

Objective 4A (Teaching & Mentorship): Prepare students for leadership positions in the profession and the academy.	 Evaluation measures: Speaking and presentation skills Writing skills; marshalling evidence base for argument and positions of advocacy Student leadership positions in LAEP committees, professional association committees, other organizations and initiatives Participation in the writing of trade and scholarly articles
Objective 4B (Scholarship): Provide students with opportunities to co- produce and disseminate scholarly products.	Evaluation measures: - Co-produced journal articles with faculty - Co-written and implemented research grants; pre- and post-award experience with faculty - Co-produced research summaries / reports for practitioner audiences - Co-production of research strategy, including research questions, analysis, and dissemination of findings with community partners, government officials, and others through meetings, workshops, conferences, legislative testimony, etc.
Objective 4C (Service & Engagement): Provide students with learning opportunities that require engagement with and empathy for individuals and communities.	 Evaluation measures: Co-produced engagement strategies with community partners Quantity and types of fieldwork and service-learning experiences Quantity and types of engagement methods and tools used Co-presented findings in public venues (i.e., public meetings, conferences, legislative briefings, etc.) Co-production of grants to aid individuals and communities
Objective 4D (General): Demonstrate impact and garner recognition from constituencies outside of the department.	 Evaluation measures: Awards (number, venues, and modes) for community engaged work Competitive Fellowships and internships (e.g., SE Climate Adaptation Science & Adaptation Center; Presidential Management Fellowship (USFS) Pursuit of non-traditional career and advancement tracks in cognate fields and knowledge partners Testimonials from community partners, international, federal and state officials, nonprofits, and others Grants awarded (number, amount, type/source)

GOAL 5:

Develop, nurture, and sustain internal and external partnerships that advance the department's vision, including a focus on preserving the department's climate of collegiality.

VALUE:

We value engagement with local, regional, national, and international communities. We believe it is important to provide our students opportunities to learn professional skills during these activities.

Objective 5A (Teaching & Mentorship): Create curricular opportunities that involve students, faculty and/or constituencies from other disciplines.	Evaluation measures: - Lectures, studio reviewers, financial sponsors - Non-department students enrolled in LAEP classes - Interdisciplinary certificates led by LAEP faculty - Non-departmental students enrolled in LAEP-led certificates - LAEP faculty participating in non-departmental masters and PhD committees - LAEP Faculty holding appointments in other departments
Objective 5B (Teaching & Mentorship): Encourage senior faculty to actively mentor junior faculty to support junior faculty's progress toward retention, promotion and tenure.	Evaluation measures: - Grants pursued (amount and funder) - Grants awarded (amount and funder) - Peer-reviewed publications submitted by mentor/mentee partnership - Peer-reviewed publications created by mentor/mentee partnership approved - Mentor/mentee presentations submitted to workshops/conferences - Mentor/mentee presentations to workshops/conferences approved
Objective 5C (Scholarship): Engage in co-design and/or co-production of knowledge, creative works, or end- user projects and publications.	 Evaluation measures: Peer-reviewed publications (number, type/venue; university partners by department) Presentations (number, type/venue; university partners by department; external partners) Research grants pursued (number, type and amount; university partners by department; external partners) Research grants awarded (number, type, and amount; university partners by department; external partners) Research grants awarded (number, type, and amount; university partners by department; external partners) Incorporation of research findings into LAEP and other department's coursework (course number) Research findings leading to policy change Research findings leading to follow-on funding Testimonials of impact (partner)
Objective 5D (Service & Engagement): Foster long-term relationships and partnerships with university partners.	Evaluation measures: - Service / Engagement Grants pursued (number, type and amount; university partners by department; external partners) - Service / Engagement Grants awarded (number, type and amount; university partners by department; external partners) - Service / Engagement Grant impacts (policy change; other) - Testimonials

Objective 5E (Service & Engagement): Foster long-term relationships and partnerships with community partners.	Evaluation measures: - Co-developed grants - Joint presentations at conferences - Number of service days - Number of presentations at public meetings, governmental board meetings - Testimony provided at state and national legislative committee meetings
Objective 5F (Service & Engagement): Engage alumni and other practitioners to contribute to the program.	 Evaluation measures: Number of lectures and continuing education credited events Studio reviews Mentorship of students Number of joint projects Number of student internships Number of CEU credit bearing events and lectures that serve the local professional community
Objective 5G (General): Demonstrate impact and garner recognition from constituencies outside of the department.	Evaluation measures: - Awards (number, venues, and modes) - Receipt of philanthropic gifts (numbers and amount)

2. Describe how educational objectives fulfill the educational and mission goals.

The educational objectives listed above operationalize our program mission, *to investigate and advance landscape-focused solutions to social and environmental design imperatives*, and the goals that support the mission. Attainment of the mission, goals and objectives will be assessed through the evaluation measures for <u>each objective</u>, <u>each year</u>. From this data, we will gauge our progress toward achieving our educational goals and mission and modify them as needed.

D. Long Range Planning Process

1. What is the program's long-range planning process?

The program's long range planning process involves in-depth reflection and visioning twice a year at LAEP faculty retreats, quarterly with the *LAEP Professional Advisory Board* (PAB) and six times per year with the *Student Advisory Committee* (SAC). Program and curricular issues, student recruiting and diversity, faculty scholarship, out-of-classroom opportunities for students, and the existing mission, values, goals, and objectives are considered in these meetings.

Over the past two years, the long-range planning process has resulted in major modifications to the mission statement, goals, objectives and objective measures. We recognized a shift in our values due to changes in the profession, our student body and faculty expertise. The mission, goals and objectives that were put in place in 2015 did not accurately reflect our program in 2021.

Several factors led to the new Mission, Goals and Objectives:

 Perhaps the greatest change is our emphasis on addressing larger-scale environmental and social imperatives such as global climate change in our professional curriculum. Along with ASLA, the Landscape Architecture Foundation and other professional groups, we believe that the profession of landscape architecture must address resilience, climate change, sustainability and environmental and social justice.

- In this STEM-oriented university, we have opportunities to magnify the impact of our research through partnerships and grants, so are growing expertise in faculty scholarship, funded research and community engagement.
- The professional community is growing along with our region and we recognize that we have the opportunity to grow the program in size, enrollment, reach, and thus impact, visibility, and reputation.
- The **composition of our faculty** has also changed over the past few years with multiple retirements and new faculty members.
- Lastly, there is an increasing emphasis in higher education (and within LAAB) on measurement and assessment of learning, curricular and program outcomes.

SHORT and LONG RANGE PLANS

<u>Multiple short- and long-range plans</u> are either in progress or being considered for implementation in the next few years. They are:

Pathways into the MLA Program for undergraduate students. In 2010, the decision was made to eliminate the Bachelor of Landscape Architecture program at NC State to commit more resources to the Master of Landscape Architecture program. However, there is interest in landscape architecture education among NCSU undergraduates in design studies, architecture, horticulture and environmental science. These students obtain our landscape architecture minor. Some of these students engage in the first year of our MLA program as seniors, then transition into the second year of our program as graduate students. We only allow motivated and high achieving undergraduates to engage in this pathway into our program. A long-range plan is to study the potential for formalizing this pathway into the MLA program. We also plan to work with the Art and Design department head to explore a new Landscape Architecture track in the Design Studies program that could lead to Track II MLA. We also plan to study the feasibility of an unaccredited Bachelor of Science in Landscape Architecture with a two-year accredited MLA or an accredited Bachelor of Landscape Architecture program.



Interdisciplinary Graduate Certificate in Landscape and Environmental Planning. In support of Goal #5, we have been actively marketing our courses to graduate students from outside our program for the past few years. This has resulted in rich discourse and relationships with allied disciplines, as well as interest in our field and related environmental and societal imperatives by students outside the department. We have begun work on a certificate in landscape and environmental planning that is intended for students from other graduate programs to obtain a better understanding of issues addressed in our classes.

Course sequence revisions. We are planning multiple course sequence revisions due to a number of issues. Our international and out-of-state students struggle to pay for summer tuition for our plant ID and planting design classes, so we are considering how to move the plants classes into the fall or spring semester of the academic year. Overall, we plan to offer electives and technology enrichment courses in the summer sessions and keep required courses within the fall and spring semesters.

Strengthening the plants and ecology curriculum. We are just beginning discussions about the contents of the existing plants courses and a possible ecology course within the curriculum. While there are many successful outcomes from the plants courses, we do feel as if they could better cover plant communities and ecological systems related to plants. They could also better support work in our studios.

Increasing racial diversity of MLA students. Diversity, equity and inclusion is one of our Program Goals, yet the racial and ethnic diversity within the MLA student body falls far short of representing the racial diversity within the State of North Carolina. We are currently engaging in substantial efforts to recruit students of color; however, our funding resources are minimal compared with our competitors. We plan to continue our recruiting efforts and engage in fundraising to attract diverse students to our program.

Hiring a tenure track faculty member with a professional degree in landscape architecture and professional practice. While a highly accomplished group of professional faculty members teach part time in our program, our students would benefit from an additional tenure track/tenured faculty member with a professional degree in landscape architecture and experience in professional practice. The last two tenure track hires have been faculty members with degrees related to landscape architecture (urban planning and architecture/urban design) and they enrich the program with interdisciplinary offerings, but we need another faculty member who can teach landscape design and core landscape technology courses. However, while we would like to add a tenure track faculty member with the above qualifications, we do not currently have an open position to make such a hire.

2. Does the long-range plan describe how the program mission and objectives will be met and document the review and evaluation process.

Our goals and objectives must be measurable to ensure their achievement and our delivery of an exemplary professional program in landscape architecture and environmental planning. We have structured our mission, values, goals, and objectives with multiple measures to assess their achievement. Because they were only finalized in May 2021, we have not comprehensively measured these objectives; however, we plan to compile relevant data in the summer of 2022 and then discuss the outcomes at the August 2022 faculty retreat. Thereafter, we plan to evaluate the goals and objectives annually at a faculty retreat, one Professional Advisory Board meeting, and one Student Advisory Board meeting. We expect this evaluation process to result in continuing modifications to the goals, objectives and evaluation measures.

3. Describe how the long-range plan is reviewed and revised periodically and how it presents realistic and attainable methods for advancing the academic mission.

Our long-range planning initiatives are guided by the program mission, goals, and objectives. It is important to note that long-range planning for the department is a "living process" that is revisited multiple times annually, by multiple constituencies, in multiple venues. As above, long range planning is undertaken by the full faculty, the professional faculty, the *Student Advisory Council*, and the *Professional Advisory Board*.

Multiple departmental committees and administrators participate in long range planning activities. The Vision and Goals Committee (four tenured faculty members) is responsible for assessing evaluation measures and updating the goals and objectives. Our Curriculum Committee (two tenured and one tenure track faculty member) proposes long and short-term curricular modifications; and our Diversity, Equity, and Inclusion Committee proposes and executes initiatives related to recruitment of diverse students and faculty, and curriculum development related to DEI. The department head and the director

of the graduate program develop initiatives, both long and short term, related to student recruitment, advising, and out of classroom opportunities for our students.

4. Describe how the program has responded to recommendations and considerations for improvement from the previous accreditation review. Report on efforts to rectify identified weaknesses.

The NCSU LAAB ROVE Team Report of 2016 lists <u>NO Recommendations Affecting Accreditation</u> and four *Considerations for Improvement*:

Consideration 1.1 (from Standard 1: Program Mission and Objectives): The program should establish metrics and a process to measure and document progress toward meeting the educational goals.

From 2019-2021, as described at length above, the LAEP faculty engaged in a visioning and goal setting process over four faculty retreats that resulted in a revised mission statement, value statements, program goals, objectives, and both quantitative and qualitative evaluation metrics to measure achievement of the objectives. The goals and objectives were vetted with the *Department's Professional Advisory Board* and the *Student Advisory Committee*. Evaluation measures and metrics for the objectives are already informing our progress toward meeting our goals and are resulting in curricular modifications and adjustments.

The University requires an annual process of documenting and measuring curricular outcomes s based on overarching Program Objectives related specifically to each Department's curriculum. This Outcomes Assessment process allows us to quantify specific and detailed outcomes for two overarching objectives each year. Refer to the Standard 4 chapter for more information on the Outcomes Assessment content and process.

In 2019, the faculty developed an evaluation rubric for use during the Comprehensive Oral Examination. The rubric has helped to measure student preparedness for entry level practice.

Consideration 3.1 (from Standard 3: Professional Curriculum): Establish a mechanism for recording the discussions and rationales for curriculum review, adaptation and development.

The primary mechanisms for recording rationales for curriculum development are metrics for achievement of the goals and objectives, the outcomes of the Professional Advisory Board and the Student Advisory Committee, and the outcomes of the biannual Faculty retreats and biweekly faculty meetings. Detailed notes are recorded, and where appropriate, votes are taken at all meetings where the curriculum is reviewed, adapted and/or developed.

Comprehensive reporting of the measures and metrics for achievement of the program goals and objectives has not yet been undertaken because they were just approved in May 2021 by the faculty. We plan to engage in an annual review of their achievement as a way to inform further curricular modifications.

Consideration 3.2 (from Standard 3: Professional Curriculum): Establish a comprehensive assessment methodology for evaluating the effectiveness of the curriculum.

The primary assessment method for evaluating the effectiveness of our curriculum is the use of multiple Evaluation Measures related to the Program Goals and Objectives. Please refer to responses to Considerations 1.1 and 3.1 above for additional discussion.

To assess the curriculum, faculty meet in thematic cohorts (e.g. History/theory; technical sequence; digital communications; design studios; etc.) to discuss content coverage and sequencing. Additionally, examination of our peers schools' courses and curricula has informed our curriculum assessment and modifications.

Consideration 3.3 (from Standard 3: Professional Curriculum): Embrace the Learning Outcome Assessment process and create a clear consistent means of documenting the results.

We engage yearly in the Learning Outcomes Assessment process and the reports from this will directly assist with assessment of Evaluation Measures for our curriculum goals and objectives. Results of this process are documented and maintained in Department digital files. Reports from the Outcomes Assessment process inform curriculum modification and development.

E. Program Disclosure

1. Describe how program information is disseminated to the public. Provide a link to material on the internet and copies of other materials to the visiting team. Articulate how program literature and promotional media accurately describe the program's mission, objectives, goals, educational experiences, accreditation status, student achievement, estimated program costs for a full-time student for one academic year (including policies, initiatives and programs in place to reduce the cost of attendance), estimated housing costs per year, average costs of books and materials per year, student retention and graduation rates, number of degrees granted per year, percentage of students with timely graduation (master's students graduating within 4 years and/or bachelor's students graduating within 6 years), post-graduation employment rates and licensure requirements in accordance with the Higher Education Act.

Student work, achievement, and program metrics as required by the LAAB can be found linked on the main page of the department website, and can be found at this URL: https://design.ncsu.edu/landscape-architecture/accreditation/



STANDARD 2: The program shall have the authority and resources to achieve its mission, goals and objectives.

INTENT: Landscape architecture should be recognized as a discrete professional program with sufficient financial and institutional support and authority to enable achievement of the stated program mission, goals and objectives.

A. Program Administration

Describe the location of the program related to institutional academic structure and to other administratively related programs. Is the program a part of a Department of Landscape Architecture or is it a component of a multidisciplinary department or school? If it's a part of a complex academic unit, what are the other disciplines and degrees offered within the unit? What are the other units in the larger division and/or college?

If the landscape architecture program is a part of a multidisciplinary unit, describe the administrative structure of the unit, including a description of who is designated by the central administration as the person with primary authority for budget, faculty personnel review, and faculty instructional assignments. If these duties are held by more than one person, explain how the landscape architecture program administrator affects or influences those decisions. The SER author may choose to use an organizational chart or other graphic to illustrate these relationships.

1. Is the program seen as a discrete and identifiable program within the institution?

Yes. The Department of Landscape Architecture and Environmental Planning (LAEP) is a discrete and identifiable program and is one of four (4) units in the College of Design at NC State University. The other three units include the School of Architecture, the Department of Art and Design, and the Department of Graphic Design and Industrial Design. Please refer to the chart below for more information.




2. Does the program administrator hold a faculty appointment in landscape architecture? If not, where is he/she appointed?

The LAEP administrator is the Department Head who reports directly to the Dean of the College of Design. The Department Head holds a tenured faculty appointment as Professor in the Department of Landscape Architecture and Environmental Planning.

3. How does the program administrator exercise the leadership and management functions of the program? Describe the primary responsibilities and authority of the administrator.

The primary responsibilities of the Department Head include:

- Productively communicating with colleagues to promote a collaborative environment.
- Leading faculty and students in a shared vision, collaborating with other disciplines in the College, serving as the department representative to the College Administrative Council, and acting as conduit for flow of information between the department, college, and university.
- Serving as the senior faculty advisor to LAEP students, directing them in their studies and assisting them in forming appropriate committees.
- Fulfilling a part-time teaching responsibility of approximately six (6) credit hours per year.
- Overseeing faculty assignments related to departmental courses and service, and evaluation of faculty performance.
- Overseeing curricular matters related to the program, including course scheduling, and longrange planning.
- Leading the academic unit in procedures specific to accreditation.
- Managing the department budget.
- Advising the Dean on faculty appointment matters.
- Serving as the department representative to department-specific alumni and professional groups.
- Working in collaboration with the Dean on department and College-related fund development activities.

The Department Head and, by extension, the department exercise a high level of autonomy except in the areas of determining tenured and tenure track faculty positions, and fund-raising and development. In those instances, per College policies, the Department Head serves in an advisory role to the Dean.

B. Institutional Support

1. Is funding available to assist faculty and other instructional personnel with continued professional development including support in developing funded grants, attendance at conferences, computers and appropriate software, other types of equipment, and technical support?

Funding is available, but sometimes limited, to assist in development of faculty and other instructional personnel. Since the previous accreditation (2016), NC State University has changed its funding model. The University now allocates College funding based on the previous Academic Year's College enrollment. Since the previous accreditation, the State Government's portion of the University's budget has been cut every year up to 1%. These cuts have reduced College funding along with some unexpected expenses. Surprisingly, no significant budget cuts have resulted from the Pandemic.

The College has sought to offset these budget cuts through the institution of Premium Tuition for all graduate students, by expanding interdisciplinary certificate programs, and growing enrollment, as well as offering summer courses. Premium tuition is \$700 per semester, and the proceeds go to support a range of Departmental offerings including the hiring of professional faculty and to a lesser extent, the lecture series and faculty travel. Teaching assistants cannot be hired with these funds. At NC State University, the majority of summer course tuition goes directly to the Department.

Grant support. The College offers multiple resources to assist faculty in the identification, pursuit and administration of funded grants. The Office of Research Engagement and Extension has pre-Award specialists that assist the Principal Investigator (PI) with preparation of grant applications. There is also a Post-Award specialist who assists PI with grant administration and budgets. These specialists are at

times overwhelmed with the need to serve all faculty in the College they are occasionally unable to assist faculty. This has impacted the ability for some faculty to pursue funded research and has burdened others with extensive time spent monitoring grant budgets.

Research space in the College. The Natural Learning Initiative, Research in Ergonomics and Design (RED) Lab, BETLab, Health Centered Design Lab, Mixed Reality Lab and Coastal Dynamics Design Lab are the only entities with dedicated research space. While lack of space has not limited the capacity of faculty members to obtain funded research, two LAEP faculty members have requested dedicated group research space for their teams and it has not been granted. Instead, the College has created a shared research space that can be used for the duration of a project.

Information Technology. The College has a robust Information Technology (IT) infrastructure and support system. NC State University has a unique funding model that provides discretionary funding annually to Colleges for IT. The College IT Committee has a Department representative and the Committee has good communication with the Department on technology needs, including software and support. New computers and all software are purchased for tenure track faculty every three to four years.



Technology Access for Students. The laptop computer requirements for MLA students are posted on the website and sent to accepted students prior to matriculation. Some students choose to use the computer cluster in the studio and the College computer lab instead of purchasing a laptop, but this limits their digital work time to their time on campus. They do have access to the computer cluster in the studio twenty-four hours per day, seven days a week.

Challenges that have impacted student and research assistant productivity include a) the increased use of software by students on their personal laptops, b) decreased use of dedicated computer clusters and labs in the College, as well as c) the move of some software and platforms to annual subscription models. College IT staff uses the frequency of use of computer clusters and labs as a data point in determining the purchase of software by the College. Remote

learning, heightened during COVID, revealed that by lacking access to College computer resources, students had uneven access to the internet and necessary applications on their home computers. There are minimum computer and application requirements outlined in the Student Handbook and on the department website. However, the costs of annual subscriptions to software are cost-prohibitive to some students, and student reliance on shared computer resources remains an issue.

2. What are student/faculty ratios in studios? How are student faculty ratios influenced by the program? What is considered normal/typical within the institutional culture or practices?

The mandate to increase the size of the MLA Program to 75 students by the NCSU Graduate School and the College Dean has resulted in yearly cohorts of 26-30 students. The result of this is studio sections of <u>up to</u> 15 students per instructor, and enrollment of 26-30 students in required seminar courses in technology, digital applications, history, theory, and research.

LAEP studios have student/faculty ratios of less than 15:1. In cases where class size exceeds the ratio, two faculty are assigned to studios to enable effective class ratios. In these cases, instructional faculty collaborate on course content and delivery to provide an effective learning environment for all students. Studios are still not a well understood teaching and learning model in the University system. There are

numerous labs across the University that have higher ratios but lack the level of faculty/student engagement that is essential to effective studios. There is a need to continue to communicate the value and uniqueness of the studio model and therefore the need to control faculty/student ratios.

NC State University has shifted their funding model since the previous accreditation. The current model favors higher course enrollments and higher student FTEs. With the termination of the undergraduate BLA degree program in 2015, the Department has been challenged to meet the demand for higher enrollments in graduate courses, namely seminars.

3. Is funding adequate for student support, i.e., scholarships, work-study, etc?

For students already in the program and a few incoming students, the Department offers Graduate Student Support Program (GSSP) positions each year for teaching and some research assistantships. These GSSP positions cover student tuition (not fees), health insurance and offer a small stipend (\$3100-\$5000 per semester depending on hours worked). GSSP positions are assigned by the Department Head based on student applications. However, all of these opportunities are contingent upon the Department budget and do not meet overall demand from students. Faculty teaching buyouts are the primary source of funding for these positions.

Research entities like The Natural Learning Initiative and The Coastal Dynamics Design Lab offer Research Assistantships (RA), as do many faculty working on funded grants. These RA positions have also been used to attract prospective students. While these opportunities are significant, they too are inadequate to fully meet student demand.

Currently, scholarship funding is not adequate for student support and the Department struggles to compete with better endowed competing programs at other universities. The total amount of scholarships is \$26,530 annually. Inadequate funding support greatly impacts the Department's ability to attract Black and BIPOC students. Currently, the Graduate School awards one Diversity Scholarship awarding \$2000 annually and another awarding \$1000 annually.

4. Are adequate support personnel available to accomplish program mission and goals?

There are multiple support personnel available to accomplish the program's mission and goals. The Department shares one University Program Associate with the School of Architecture. In addition, there are HR, Communication, Student Services and Development personnel available to assist the Department Head, Faculty and Students.

For several years, Department faculty have voiced concerns about insufficient College support in the administration of grants received. There is one Post-award Specialist for the College, but they can't manage and track budgets on every grant. Many of these grants do not provide enough funding to retain a full-time grant manager, so that responsibility falls upon the Principal Investigator (PI). Balancing grant administration (a specialized skill set), research and scholarship, teaching and other responsibilities can be overwhelming, which can limit the capacity of some faculty to increase their funded research productivity.

C. Commitment To Diversity, Equity, and Inclusion

1. How does the program demonstrate its commitment to diversity, equity, and inclusion in the recruitment and retention of students, faculty and staff?

Faculty. Faculty demographics have shifted since the previous accreditation, specifically regarding gender. In 2016 no tenured faculty were women. In 2021, four women are tenured faculty including the Department Head. Overall, 40% of instructional faculty in the Department are women.

Faculty demographics based on race and ethnicity have not made as much progress as the gender balance. In 2016, two tenured faculty were People of Color (one Black, one Latino) and that number has been reduced with the July 2021 phased retirement of Fernando Magallanes. One recent tenure-track faculty hire adds a South Asian woman, Dr. Deepti Adlakha, to lead the Natural Learning Initiative.

The Department has attempted to incorporate the need for more inclusive representation through the process of hiring new faculty. Recent faculty searches have attracted more diverse candidate pools by articulating non-discriminatory practices in statements and sharing announcements in more inclusive job search venues and networks.

Students. Student demographics based on gender have shifted since the last accreditation. In 2016 women represented 66% of the student body. Women now make up 72% of the student body. In addition to informal mentoring, and the addition of female faculty role models, the Department has had an active *Women In Landscape Architecture* (WILA then WxLA) chapter since 2017.

Similar to faculty demographics based on race, however, the student population has not seen much change since 2016. At the time of the previous accreditation, 7% of students were People of Color, and more specifically 0% were Black and 4% were Latino. In 2020, 11% of students were People of Color. Efforts are being made to attract and fund students of color.

Student Recruitment Initiative. The Department has taken steps to increase outreach to diverse prospective students and increase the potential for a diverse student body. The Department applied for and received multiple grants totaling \$16,000 to market the program at HBCU's and invite diverse accepted students to campus to help them become oriented and familiar with the Department. This program brought twelve candidates to campus over a three-year period. However, the initiative only yielded three students who chose to join the program. The most cited reason for not attending was lack of funding compared to competing programs at other universities.



Engagement in diverse and vulnerable communities. Faculty and students in the Department have been engaged in a wide array of activities working with Diverse communities. National stories including those addressing disaster recovery and climate resilience have increasingly been shared in Department, College, and University media outlets.

Kofi Boone's work in Southeast Raleigh used mobile technology to empower oral histories in Black communities by putting site documentation tools directly in the hands of the people living there. Cellphone Diaries has since grown into a

community change method that directly contributed to the National Historic designation of Chavis Park, as well as \$12.5 million bond issue for a long overdue park renovation.

In partnership with the U.S. Department of Homeland Security Coastal Resilience Center of Excellence and NC Emergency Management, Andy Fox, Kofi Boone and the Coastal Dynamics Design Lab engaged vulnerable towns in the Coastal Plain to create landscape-based recovery and resilience plans post-Hurricanes Matthew and Florence. One of these communities, Princeville, NC, is the oldest town in the U.S. incorporated by formally enslaved African Americans. Their work improved flood resilience, social and community cohesion, equity, and quality of life in Princeville by fusing the community's rich history and culture with community development opportunities that span issues of infrastructure, housing, public facilities, and community open space.

Diversity Equity and Inclusion Statement

In 2020, the Department created and adopted a Diversity, Equity, and Inclusion (DEI) Statement. An excerpt of the statement reads:

The Department of Landscape Architecture and Environmental Planning (LAEP) recognizes that the profession of Landscape Architecture does not reflect the diversity of the communities it serves. Increasing diversity and cultural competency in the profession increases the creative potential needed to face the grand challenges of society.

The racial reckoning in the aftermath of the Summer of 2020 sparked reflection, review, and action addressing inequities in the built environment professions including landscape architecture; therefore, the LAEP proposes to execute a stronger role towards diversity, equity, and inclusion. Additionally, LAEP supports ongoing College of Design efforts increasingly to make accommodations for diversity, equity, and inclusion a key component for our teaching, scholarship, and engagement activities.

LAEP recognizes that as an Landscape Architecture Accreditation Board (LAAB) accredited program it plays a critical role in shaping the diversity and cultural competency of the profession. Faculty, staff, and students have agency in shaping the experiences that can increase diversity, equity, and inclusion throughout the educational process.

LAEP will commit to and be accountable for the following actions to advance diversity, equity, inclusion, and cultural competency through the academic experience.

The statement provides a vision and goals that address the need for DEI as well as cultural competency across Faculty, Students, and Staff in the Department. The statement provides measurable objectives impacting recruitment and retention across sectors. The statement aligns with College, and University policies. The faculty are currently working to implement the systems required to measure DEI objectives.

D. Faculty Participation

1. Does the faculty make recommendations on the allocation of resources, and do they have the responsibility to develop, implement, evaluate, and modify the program's curriculum and operating practices?

LAEP faculty participate in making recommendations on the allocation of resources and have responsibility to develop, implement, evaluate, and modify the program's curriculum and operating practices. LAEP faculty have engaged in a series of faculty retreats as well as faculty meetings to share perspectives on the content and quality of the overall curriculum. Curricular modifications are developed in small committees, decided by the full tenured/tenure track faculty, then implemented by the Department Head.

The Department Head consults with various advisory groups including one of alumni and professionals, as well as another of current students in the program. All of this feedback, in addition to student evaluations, provide data from which to assess curriculum and operating practices.

Recent examples of the influence of faculty recommendations include the development of advanced courses like The Coastal Design Dynamics Studio, the Design + Build Studio, the Landscape Performance seminar, the Social Environmental Equity and Design Seminar, as well as changes to the Landscape Architecture History seminar. Additionally, modifications to course sequences and assignments to specific years in the curriculum came from faculty recommendations.

2. Does the faculty participate, in accordance with institutional guidelines, in developing criteria and procedures for annual evaluation, promotion and tenure of faculty?

LAEP faculty participate in developing criteria and procedures for annual evaluation, reappointment, promotion, and tenure in accordance with <u>University policies</u> established by the Office of the Provost.

Tenured and tenure-track faculty members work with the Department Head to develop a <u>Statement of</u> <u>Faculty Responsibilities (SFR)</u>. The SFR documents the realms of faculty responsibility including teaching, scholarship, and service commitments. Additionally, the SFR documents specific goals for each faculty member in the next academic calendar year.

Each faculty member completes an annual report and the Department Head reviews the report in the context of the SFR. For each metric a faculty member can receive an evaluation of "exceeds expectations", "meets expectations" or "does not meet expectations". The Department Head meets with each faculty to review their annual report and performance, and works to develop goals for the next academic year. Multiple performance evaluations of "does not meet expectations" in one or more realms results in a faculty member engaging in a <u>Performance Development Plan and process</u>. Tenured LAEP faculty members have developed departmental policies in accordance with University policies linked above. The <u>College</u> and <u>Department Retention</u>, <u>Promotion and Tenure policies</u> are provided in these links.

For faculty promotion and tenure, candidates are required to engage in a process outlined in <u>University</u> <u>policies</u> established by the Office of the Provost. The promotion and tenure process takes an academic year. For tenure, faculty are required to submit a dossier in late summer for Department, College, and University Reappointment, Promotion, and Tenure (RPT) Committee reviews. The dossier includes an optional personal statement, a curriculum vitae, and reports of teaching evaluations, scholarship productivity, service and other accomplishments achieved in the review period. Additionally, faculty can submit an optional appendix with samples of work (reviewed in the Department and College levels only). The Department Head convenes a Departmental committee of all tenured faculty members of appropriate rank and charges them to meet, review the dossier, and provide a recommendation to the Department Head. The recommendation requires a vote by the Department Voting Faculty. If the committee recommends tenure and/or promotion, the Department Head prepares a letter of support for the candidate to the College RPT Committee.

The College committee is made up of representatives of each College department; the Department representative on this committee can serve as non-voting members of the Departmental committee. The College committee focuses on College standards and procedures associated with the desired rank. Upon review of the dossier and the letter provided by the Department Head, the College Committee votes on whether or not the candidate should be promoted and/or provided tenure.

The College Committee provides a letter of recommendation to the Dean for final College review. The Dean provides a letter of recommendation, and the entire package (Department and College) is forwarded to the University RPT Committee at the start of Spring term. The University RPT Committee convenes to review all contested cases, as well as a random sample of all other RPT cases for the year and forwards their recommendations to the Provost's office. Upon the Provost's recommendations, the

Board of Governors of the University of North Carolina system convenes and votes to confer promotion and/or tenure to the candidates by the end of the spring term.

3. Does the program or institution adequately communicate and mentor faculty regarding policies, expectations and procedures for annual evaluations, and for tenure and promotion to all ranks?

The Department Head works with each tenured and tenure-track faculty member to communicate and mentor in the context of University, College, and Departmental policies and guidelines from the Office of the Provost. The Statement of Faculty Responsibilities (SFR) process enables the Department Head and each faculty member to document their expectations annually and is the basis for annual review performance. For Reappointment Tenure and Promotion, guidelines and timelines are shared with faculty members.

Each tenure track faculty member works with the Department Head to select an assigned mentor who is usually a senior faculty member in the Department. In some cases, the mentor may be a faculty member outside the Department. The mentor and the Department Head both advise the faculty member on their teaching, scholarship and service work.

4. Does the faculty participate, in accordance with institutional guidelines, in developing and applying criteria and procedure for the appointment and assessment of program and academic unit leadership?

LAEP faculty participate in developing and applying criteria and procedure for the appointment and assessment of program and academic unit leadership. The Department Head search process is undertaken by a Committee consisting of departmental faculty, another Department Head in the College, a professional faculty member and a student. This Committee operates in an advisory capacity to the Dean (who makes the final selection).

The College requires the search committee to be chaired by a Department Head from a different College Department. The Committee develops the position description and works with College and University Human Resources staff to advertise the position and attract applicants. The Committee reviews applicants and selects a short list of candidates to invite to the College for public presentations. The Committee provides their feedback on candidates in writing to the Dean to advise with the selection of the final candidate. Although the Search Committee serves in an advisory role to the Dean, the Committee has substantial participation in selecting unit leadership.

The Department Head goes through a performance reviews every five years. This process is conducted by the Dean and other College administrators.

E. Faculty Numbers

1. Describe the faculty resources (as either full-time positions dedicated to the program, full-time positions split between programs with a percentage committed to the landscape architecture program or part-time positions within the program). Describe how the program meets the appropriate standards: a. An academic unit that offers a single first-professional degree program at the emerging or Initial Accreditation status has at least three FTE instructional faculty who hold professional degrees in landscape architecture, at least one of whom is full-time.

b. An academic unit that offers a first-professional degree program at both the bachelor's and master's levels at the emerging or Initial Accreditation status has at least six FTE instructional faculty, five of whom hold professional degrees in landscape architecture, at least two of whom are full-time.

c. An academic unit that offers a single first-professional degree program at the continuing full Accreditation status has an FTE of at least five instructional faculty. At least four of these faculty members hold a professional degree in landscape architecture and at least three of them are full-time. d. An academic unit that offers first-professional degree programs at both the bachelor's and master's levels with continuing full Accreditation status has an FTE of at least seven instructional faculty, at least five of whom hold professional degrees in landscape architecture and are full-time.

The Department of Landscape Architecture and Environmental Planning (LAEP) is an academic unit that offers a single Master of Landscape Architecture first-professional degree program at the continuing full Accreditation status. Currently, there are **14 instructional faculty with professional degrees in** Landscape Architecture (denoted with an asterisk in the list below).

Faculty in the Department of Landscape Architecture and Environmental Planning are listed below. Faculty members indicated with an asterisk hold a professional degree in Landscape Architecture. The phrase "full time" after faculty names indicates a full-time position in the program. "Part time" indicates a part-time position in the Program. "No teaching" is used for fully retired faculty members and those whose academic home is in the Department, but they do not teach any classes. The teaching assignments and percent of effort of the faculty members is detailed in Addendum E.

Tenured and Tenure Track Faculty

Deepti Adlakha, Ph.D., Associate Professor and Dir. of the Natural Learning Initiative (full time) *Kofi Boone, FASLA, Professor (full time)

*Meg Calkins, FASLA, Professor and Department Head (full time)

*Carla Delcambre, PLA, Associate Professor (full time)

*M. Elen Deming, DDes, FASLA, FCELA, Professor, Director of Doctor of Design Program (part time)

*Andrew Fox, FASLA, PLA, Professor, Co-Director of Coastal Dynamics Design Lab (full time)

*Mark Elison Hoversten, Ph.D., FASLA, FCELA, AICP, Dean and Professor (no teaching)

Celen Pasalar, Ph.D., Associate Professor (full time)

Gavin Smith, Ph.D., AICP, Professor (full time)

Professors of the Practice

*Charles A. Flink II, FASLA, Professor of the Practice (part time)

*Daniel Howe, FASLA, AICP, Assistant Professor of the Practice (part time)

*Emily McCoy, PLA, Associate Professor of Practice (part time)

*Benjamin Monette, PLA, Assistant Professor of Practice (part time)

*Rodney Swink, FASLA, PLA, Professor of the Practice (part time)

*Jesse Turner, PLA, Assistant Professor of the Practice (part time)

Emeritus Faculty

*Gene Bressler, FASLA, Professor Emeritus (no teaching)

*Fernando Magallanes, PLA, Associate Professor (part time)

Robin Moore, MCP, Professor (part time)

*Arthur Rice, FCELA, Professor (no teaching)

Lecturers and Associated Faculty

*Madalyn Baldwin, Research Associate and Lecturer (part time)

*Austin Bowman, Lecturer (part time)

Nilda Cosco, Ph.D., Research Associate Professor (part time)

*Travis Klondike, Research Assistant Professor (part time)

*Julieta Sherk, Associate Professor, Department of Horticulture (part time)

2. Are student/faculty ratios in studios typically not greater than 15:1?

Yes. Typically, LAEP studios have had student/faculty ratios less than 15:1 in the past six years. In cases where class size exceeds the ratio, two (2) faculty have been assigned to studios to enable effective class ratios. In these cases, instructional faculty have collaborated on course content and delivery to provide an effective learning environment for all students.

3. Does the strategic plan or long-range plan include action item(s) for addressing the adequacy of the number of faculty?

Yes. An action item in our long-range plan is to hire a tenure track faculty member with a professional degree in landscape architecture and professional practice experience. While a highly accomplished group of professional faculty members teach part-time in our program, our students would benefit from one more tenure track/tenured faculty member with a professional degree in landscape architecture and experience in professional practice. The last two tenure track hires have been faculty members with degrees related to landscape architecture (urban planning and architecture/urban design) and they enrich the program with interdisciplinary offerings, but we need another faculty member who can teach landscape architectural design studios and core landscape technology courses.

While we would like to add a tenure track faculty member with the above qualifications, we do not currently have an open position to make such a hire.

4. Is the number of faculty adequate to achieve the program's mission, goals, and objectives, as well as individual faculty development?

Yes. The number of faculty is adequate to achieve our program's mission, goals and objectives, although teaching loads for tenured and tenure track faculty are high for a R1 institution with the research expectations of the University and College. Some tenured faculty members use their research funds to "buy out" of a portion of their teaching responsibilities. This provides funds to pay part-time Professional Faculty members to teach classes. Our Professional Faculty members are very accomplished practitioners and this is a strength of our program.



PROFESSIONAL CURRICULUM

STANDARD 3: The first professional-degree curriculum shall include the core knowledge skills and applications of landscape architecture.

a. In addition to the professional curriculum, a first professional degree program at the bachelor's level shall provide an educational context enriched by other disciplines, including but not limited to: liberal and fine arts, natural sciences, and social sciences, as well as opportunities for students to develop other areas of interest.

b. In addition to the professional curriculum, a first professional degree at the master's level shall provide instruction in and application of research and or/scholarly methods.

c. A first professional degree at the master's level that does not require all students to have an undergraduate degree before receiving the MLA shall meet the requirements for both a and b.

INTENT: The purpose of the curriculum is to achieve the learning goals stated in the mission and objectives. Curriculum objectives should relate to the program's mission and specific learning objectives. The program's curriculum should encompass coursework and other opportunities intended to develop students' knowledge, skills, and abilities in landscape architecture.

State whether paragraphs a, b, or c (above) are relevant to this review. **Paragraph B is relevant to this review.**

A. Curricular Expression of the Mission and Objectives

(This criterion isn't directed towards the evaluation of the Mission and Objective, but rather on how the curriculum is developed and delivered in carrying out the expectations of the Mission and Objectives.)

1. How does the curriculum address the program's mission, goals, and objectives?

The LAEP mission, to investigate and advance landscape-focused solutions to social and environmental design imperatives, is strongly supported by the Master of Landscape Architecture (MLA) curriculum.

Our comprehensive MLA curriculum has been developed and is delivered to achieve the program mission, goals, and objectives discussed in Standard 1. The ways in which the curriculum supports the goals and objectives are detailed below.

Goal 1: Ensure all students have mastered the appropriate design and planning skills required to be a practicing professional, recognizing the aim of the department is to create transdisciplinary thought leaders and advocates, guided by a passion for lifelong learning.

The MLA program prepares students to enter the profession of landscape architecture in the broad range of practice settings. It prepares them through an emphasis on design thinking to engage and lead the profession into the future as it necessarily evolves in response to the needs and requirements of society.

MLA students are provided with learning experiences at multiple scales with an emphasis on intersecting systems and complexity. They are provided opportunities to engage regional design and community partners for professional currency and their work demonstrates impact and garners recognition from constituencies outside the department.

Faculty continually expand their expertise in relevant design and planning approaches, and methods and tools to provide students with a broad range of knowledge, skills and abilities. Students engage in transdisciplinary experiences through formal classroom collaborations, informal collaborative projects, and research opportunities.

Goal 2: Transfer theoretical and applied knowledge through engaged processes and problem types as appropriate for landscape architecture and planning.

Faculty provide opportunities for students to engage with theoretical and research frameworks, methods, literature, and critical evaluation in both studio and seminar courses. As faculty are continually developing, applying and disseminating new knowledge, they incorporate this into their courses.

Within the context of NC State University's land grant mission, the importance of engagement, collaboration and co-production of learning is recognized, and multiple opportunities to engage communities are provided in studios and seminars throughout the curriculum.

Goal 3: Advance diversity, equity, inclusion, and cultural competency through the academic experience.

Over the past two years, faculty have engaged in a review of the curriculum and content of courses to evaluate the level of discussion about diversity, equity, and inclusion issues. Areas of focus include authors and subjects of class readings, case studies, referenced, and invited guest critics and lecturers.

Multiple efforts have been made to increase the gender diversity of tenure track/tenured faculty. In 2019, only 8.5% of student credit hours were delivered by female tenure track faculty while the MLA student body was 72% female. The department head worked with the dean to request a targeted hire for a female faculty member. Associate Professor Carla Delcambre was awarded this position after fourteen years teaching as a full time Instructor in the department. Other DEI goals and objectives are discussed in Standards One and Two of this report.

Goal 4: Build upon the department's history of strong academic and practice-based leadership spanning environmental and social imperatives, emphasizing transformational actions and impacts.

The department has a long history of strong academic and practice-based leadership that is modeled by faculty for our students. We believe that it is important to train students to be leaders in the profession and/or the academy, therefore they are given multiple opportunities to practice leadership techniques, collaboration skills, visionary thinking and explore solutions to environmental and social imperatives while in our program. We emphasize development of skills for facilitation, advocacy, and leadership through experiences with presentations, written reports, data visualization and community workshop facilitation in studios and seminars.

Through service-learning experiences, students learn to engage, communicate, and empathize with real communities and real processes. For the past five years, Advanced Topic Studios and the LA Design Build Studio have offered projects that engaged real communities and their stakeholders.

Goal 5: Develop, nurture, and sustain internal and external partnerships that advance the department's vision, including a focus on preserving the department's climate of collegiality.

The program offers several opportunities in the formal curriculum and informal learning experiences that involve external faculty, students, and constituencies. This happens in studios that are co-taught with faculty outside of LAEP, MLA students taking elective courses outside the department, guest lecturers, and studio reviewers from allied departments and disciplines, and service-learning projects. An average of 66% of Advanced Topic Studios in the past five years have been interdisciplinary studios co-taught with faculty from allied departments (architecture and engineering) and 100% of Advanced Topic Studios have included architecture students. In co-taught interdisciplinary studios, the numbers of MLA and Architecture students are roughly even. When the studio is taught by an LAEP faculty member alone, 1-4 Architecture students regularly join the Advanced Topic Studio. These opportunities allow MLA students to have experience with collaboration and facilitation, which prepares them for professional practice.



Many LAEP seminar classes are open to students from other disciplines and even other universities. Upper-level undergraduate students pursuing the LA Minor join our graduate classes from majors such as environmental science, architecture, horticulture, geography, design studies, public administration, and business. Graduate students in these majors also take our seminar courses as electives. These students bring varied perspectives and issues to our seminar courses, enriching the discourse and exposing the MLA students to related disciplines.

Through an inter-institutional agreement with UNC

Chapel Hill and Duke University, students at these institutions can take our classes at no extra cost. We regularly attract students from the Department of City and Regional Planning at UNC Chapel Hill and are just beginning to attract students from the Nicholas School of the Environment at Duke University.

2. How does the program identify the knowledge, skills, abilities, and values it expects students to possess at graduation?

Our faculty collaboratively identify the knowledge, skills, and abilities that students are expected to possess upon graduation, and we evaluate and improve the curriculum annually. The MLA program has undergone several accreditation processes and reflective self-evaluation processes that have enhanced the program content and delivery methods.

The faculty, who as individuals studied at many schools at various times, bring their own sensibilities and views about landscape architectural education. As faculty and students come and go, so do ideas about what the program ought to require of students upon graduation. Everyone's perception of the growing body of knowledge and capability of the discipline and profession of landscape architecture requires the program to continually re-evaluate and modify the curriculum. The views of the faculty along with those of our students, alumni, local practitioners, our external professional advisory board, and other constituents, influence program content, delivery, and the lenses through which outcomes are assessed.

To accomplish this, three fundamental questions are asked:

- Has the student learned and developed competence in the theoretical, technical, and artistic bodies of knowledge required to enter professional practice as presently known?
- Are graduates imbued with the ideas, skills, and motivation necessary to successfully and responsively engage current and future landscape issues and challenges?

 Is the graduate motivated to continue learning in order to challenge current paradigms, advance the strategies, methods, and skills of the field, and engage emerging questions of and relationships between environment, landscape, and culture?

B. Program Curriculum

1. How is the program curriculum guided by coverage of: *History, theory, philosophy, principles and values* design history; design theory; criticism; sustainability, resiliency, stewardship; health, safety, welfare; diversity, equity, inclusion *Design processes and methodology* Critical, creative, and strategic thinking; analysis; ideation; synthesis; site program; iterative design development; interdisciplinary collaboration; design communication Systems and processes – natural and cultural (related to design, planning and management) plant, ecosystem, and climate sciences; built environment and infrastructure; human factors and social & community systems; human health and well-being *Communication and documentation* written communication; oral communication; visual and graphic modeling and communication; conceptual, design, and construction documents; numeracy, quantitative problem-solving and communication; community and/or client engagement Implementation construction technology and site engineering; site materials; use and management of plants and vegetation; integrated water management; policies and regulation *Computer applications and advanced technologies* visualization, and modeling; communication (conceptual and construction drawings); geospatial analysis Assessment and evaluation site assessment; pre-design analysis; landscape performance (may include ecological, climate, human *health, social, and economic factors); post-occupancy evaluation;* visual and scenic assessment *Professional practice* values; ethics; practice requirements, settings, and scales; construction administration *Research and/or scholarly methods (for masters' level degree programs)* quantitative & qualitative methods; framing research questions; literature/precedent review; research integrity and protection of human subjects; communication of research

Our outcomes-based MLA curriculum consists of sequential design studios, lecture and seminar courses, and research and elective opportunities. Core topics, theories, precedents, technologies, and skills of the profession delivered in the lecture and seminar courses are applied and developed in design studio venues having specific learning objectives and outcomes. Course sequencing is designed to effectively utilize faculty resources and budgets and facilitate student access and educational opportunities. Curriculum integration occurs because of deliberate internal coordination efforts by the program faculty.

The following sections discuss coverage of the curriculum topics listed above.

History and Theory



History, theory, criticism, and research are pervasive threads woven throughout the entire MLA curriculum. Not only are students exposed to history, theory and criticism at least once a year in the curriculum, but also they are central elements of all design studios and subject area courses. The history and theory sequence is coordinated among faculty teaching the four courses in this area. Each history or theory course is designed to build on the previous course with attention given to key literature, precedent projects, and social and environmental imperatives. Discussion is an important component of these courses and knowledge gained in these courses is applied in studios as well as

other seminar courses. LAR 545 Theory of Landscape Architecture has had a strong diversity, equity and inclusion overlay for the past several years that Kofi Boone has been teaching the course. Recently, Elen Deming substantially revised LAR 582.001 Landscape Architecture History to be more inclusive and diverse in the geographic and cultural range of historical consideration. The history and theory sequence is discussed in greater detail below.

Design Process and Methodology

Design processes and methods are taught in all design studios and some seminar classes as well. As so many of our Advanced Topic Studios are interdisciplinary and engage communities, students gain valuable experience in collaboration, facilitation, stakeholder communication and strategic thinking. The Landscape Architecture Immersion course introduces the design processes of multiple ideations and critiques to incoming first professional degree students. Programming is taught in multiple studios starting with LAR 502 Site Design and Environmental Planning.

Systems and Processes

Students are asked to consider the interrelated cultural and natural systems of landscapes from their first semester in the MLA program as sustainable and resilient design is a cornerstone of our curriculum. Cultural and natural systems and their processes are the basis of consideration for all studios, while some studios place greater emphasis on cultural and community systems, and others on integrating site development within functioning natural ecosystems. The seminar LAR 520 Environment and Culture examines an integrative approach to human and natural systems, specifically the dynamic social and ecological forces that act upon, modify, and give meaning to landscapes. This course is both an environmental systems course and a theory course. In the second semester, LAR 527 Landform, Grading and Environmental Site Systems continues the systemic approach to designing resilient infrastructure within ecosystems.

Communication and Documentation

Communication skills and documentation techniques are emphasized in all our courses, and equipping students with these skills is an important component of our program. In history and theory courses and other seminars, we emphasize written communication skills. Graphic and verbal communication are skills learned in design studio courses, and because we offer real world and interdisciplinary experiences, students learn team-based communication and facilitation techniques as well. Diagramming and data visualization are also key communication methods used in our studios and digital courses. Students learn Autocad in their first semester and apply it in the second semester in grading

plans and in the third semester Design Development and Construction Documentation (LAR 503) studio where they produce an entire set of design development level documents for a small landscape design.

Implementation

Design implementation is an important topic taught in our curriculum and is intricately tied to the studios. Two of our studios give students direct implementation and construction experience, *LAR 503 Design Development and Construction Documentation Studio* and *LAR 506 Landscape Architecture Design Build Studio*. Implementation courses are aligned with the appropriate studios. For instance, the construction and materials class is strongly coordinated with the design development studio where students are asked to design a small public space and then generate a design development-level document set for the space. The document set includes a layout plan, materials plan, planting plan, grading plan, and three to four sheets of construction details. In addition to materials and details, site construction processes, phasing and maintenance are also covered in the construction and materials class. Implementation is taught and practiced in our plant ID and planting design courses that are taught in the summer between the first and second year. A small design and installation project is implemented in the courses giving students experience with plant installation.

Computer Applications and Modeling

Our computer applications and modeling instruction begins in the first semester with three one credit hour courses that cover the Adobe suite, AutoCAD, and introduction to 3-D modeling with Sketch Up and Rhino. Like the implementation sequence, computer applications and modeling are applied in both the studio and the technology/construction courses. For instance, the introductory studio, LAR 501, coordinates with the first three digital communications courses requiring graphics in the studio that are being taught at the same time in the digital classes. In the second semester, students in LAR 527 Environmental Site Systems, are required to do their final grading plan in AutoCAD as a way to prepare for work in the third semester Design Development studio. Three types of modeling are taught in our program. The GIS course is required in the third semester for Track III students and first semester for Track II students who already have digital graphic experience. A computational design and parametric modeling course is offered as an elective to second and third-year students. Lastly, students engage in performance modeling in our *Landscape Performance and Metrics* course (LAR 543). During the pandemic, Design studios utilized online visual collaboration platforms such as MIRO, Google Workspace, Flipgrid, and Slack to encourage conversation and interaction in a virtual space.

Landscape Assessment and Evaluation

Site and regional assessment is an integral part of every studio in our program with an intensive multiweek assessment component in *LAR 502 Site Design and Environmental Planning*. Students engage in regional, local and site level assessment processes with a strong and explicit connection being made between the assessment results and the design proposal. Landscape performance and evaluation is taught in one required class, LAR 540 Research Methods for Landscape Architecture and Environmental Planning, and far more extensively in a popular elective that the majority of our students take, *LAR 543 Landscape Performance and Metrics*.

Professional Practice and Internships

Techniques of professional practice are woven into our studios and implementation courses, culminating in *LAR 550 Professional Practice*, taken in the final semester of the program for Track II students and the second semester, second year for Track III students. Because so many of our advanced topic studios engage real-world stakeholders and communities, students gain valuable experience in

techniques of professional practice. In our implementation classes, students interface with practicing landscape architects and allied professionals on their projects. Students in the *LAR 506 LA Design Build studio* engage in a project delivery process from programming through construction within a semester. Parallels are drawn with project delivery in a professional setting in this course. Lastly, our professional practice course is taught by Rodney Swink, past president of ASLA. In the professional practice course, students are exposed to the broad array of professional practice settings that landscape architects engage in. While an internship is not required, eighty-five percent of our students engage in an internship at some point while they're in the program. Internship settings include private practices, multidisciplinary practices, public practices, and nonprofit organizations.

Research Methods

Research methods and techniques are taught in studios and seminars from the first semester. In the second year, our research methods course, *LAR 540 Research Methods in Landscape Architecture and Environmental Design*, focuses on both academic and professional practice research methods. The skills that students learn in this course are reinforced in studios and seminar courses. Additionally, students engage in literature reviews and communication of research during the Oral Exam process their final semester in the program.

2. How does the curriculum address the designated subject matter in a sequence that supports its goals and objectives? If the unit offers two degrees or two tracks within its MLA offering (such as a first-professional MLA and a post-professional MLA; referred to by some institutions as MLA-I and an MLA-II), it should identify how they differ and how decisions are made relative to the curricular program of individual students within each track.

CURRICULUM TRACKS

There are two curriculum tracks in the first professional degree MLA Program. In the current year (2020-21), seventy-five percent of the student body is following Track III and twenty-five percent are following Track II. We also offer a Track I MLA which is a non-accredited post-professional degree for students who hold LAAB Accredited undergraduate degrees in Landscape Architecture.

MLA Track III Curriculum, First Professional Degree Program, 81 credit hours

The Track III curriculum is intended for graduate students with undergraduate degrees in fields other than landscape architecture, architecture or related design fields. This curriculum consists of 72 credit hours of LAR courses and 9 credit hours of free electives.

MLA Track II Curriculum, First Professional Degree Program with Advanced Standing, 60-66 credit hours

The Track II curriculum is the first professional degree program with Advanced Standing. It is designed for graduate students with prior degrees in landscape architecture, architecture, or related design programs that are not LAAB accredited. A small number of these students are concurrently pursuing degrees in Architecture, Urban Design or Urban Planning. The required courses and number of studios (either 4 or 5) are determined based on evidence of work from the individual student's undergraduate degree, professional practice experience, and a portfolio review after completion of the first semester in the NCSU MLA program. This curriculum consists of 57-63 credit hours of LAR courses and 6 credit hours of free electives.

It is important to note that not all students matriculate in exactly the same way depending on when they enter the program and if prior coursework qualifies them for advanced standing. Therefore, we provide students with **individualized advising** to inform each student's matriculation strategy within the context of the program's curriculum. All MLA students receive individual and group advising <u>at least</u> <u>twice annually</u> throughout their tenure in the program.



MLA Track III Curriculum

First Professional LAAB Accredited Degree

81 credit hours

The LAAB Accredited Track III curriculum is intended for graduate students with undergraduate degrees in fields other than landscape architecture, architecture or related design fields.

	Summer		Fall		Spring
First year					
		LAR 501 (6)	Landscape Architecture Introduction Design Studio	LAR 502 (6)	Site Design and Environmental Planning Studio
		LAR 520 (3)	Environment and Culture	LAR 527 (3)	Landform, Grading and Environmental Site Systems
		LAR 582.017 (1) LAR 582.018 (1) LAR 582.019 (1)	Adobe Suite Autocad 3D Modeling	LAR 582.001 (3)	LA History Graduate Seminar
		LAR 582 012 (2)	Landscape Architecture Immersion		
		14 credit hours		12 credit hours	
Second year					
LAR 523 (2)	Landscape Architecture Plant Identification	LAR 503 (6)	Design Development Studio	LAR 506 LAR 507 (6) LAR 508 (6)	Design + Build Studio <u>or</u> Advanced Topics Studio In Land. Arch + Env. Planning <u>or</u> Independent Project
LAR 524 (2)	Landscape Architecture Planting Design	LAR 528 (3)	LA Construction Materials and Methods	LAR 550 (3)	Landscape Architecture Professional Practice
		LAR 517 (3)	GIS Applications in Landscape Architecture + Env. Planning	LAR 540 (3)	Research Methods in Environmental Design + Landscape Architectur
		Varies (3)	Free Elective(s)		
4 credit hours		12 credit hours + 3 free electives		12 credit hours	
Thind was					
Third year Open for free electives		LAR 507 (6)	Advanced Topics Studio In Landscape Architecture + Env. Planning	LAR 506 LAR 507 (6) LAR 508 (6)	Design + Build Studio <u>or</u> Advanced Topics Studio In Land. Arch + Env. Planning <u>or</u> Independent Project
		LAR 534 (3)	Landscape Architecture Theory and Criticism	LAR 545 (3)	City Planning and Design
		Varies (3)	Free Elective(s)	Varies (3)	Free Elective(s)
		9 credit hours + 3 free electives		9 credit hours + 3 free electives	

Bold denotes a design studio. LAR 501 and 502 must be taken in sequence and are prerequisites for all other studios.

MLA Track II Curriculum

First Professional LAAB Accredited Degree, Advanced Placement Track

63-69 credit hours*

This curriculum is designed for:

1. Graduate students with prior degrees in landscape architecture, architecture, or related design programs that are <u>not</u> LAAB accredited.

2. Graduate students obtaining concurrent degrees in Architecture, Urban Design or Urban Planning.

*IMPORTANT NOTE: <u>This is a sample curriculum</u>. The actual required courses, number of studio courses (either 4 or 5), and credit hours will be determined based on evidence of work from the individual student's undergraduate degree, and a portfolio review after completion of the first semester in the NCSU MLA program.

	Summer		Fall		Spring
First year					
		LAR 501 (6) LAR 507 (6)	Landscape Architecture Introduction Design Studio <u>or</u> Advanced Topics Studio in Land. Arch + Env.Plng	LAR 502 (6)	Site Design and Environmental Planning Studio
		LAR 520 (3)	Environment and Culture	LAR 527 (3)	Landform, Grading and Environmental Site Systems
		LAR 517 (3)	GIS Applications in Landscape Architecture + Env. Planning	LAR 582.001 (3)	LA History Graduate Seminar
		LAR 582 012 (2)	Land. Arch. Immersion		
		14 credit hours		12 credit hours	
6		4		and second a se	
Second year LAR 523 (2)	Landscape Architecture	LAR 503 (6)	Design Development	LAR 506 (6)	Design + Build Studio or
LAN 323 (2)	Plant Identification	LAK 303 (8)	Studio	LAR 507 (6)	Advanced Topics Studio In Land. Arch + Env. Planning <u>or</u> Independent Project
LAR 524 (2)	Landscape Architecture Planting Design	LAR 528 (3)	LA Construction Materials and Methods		Landscape Architecture Professional Practice
		Varies (3)	Free Elective(s)	LAR 545 (3)	City Planning and Design
1	21			LAR 540 (3)	Research Methods in Environmental Design + Landscape Architecture
4 credit hours		9 credit hours +	3 free electives	15 credit hours	
Third year					
Open for free electives		LAR 507 (6)	Advanced Topics Studio in Landscape Architecture + Env. Planning		
		LAR 534 (3)	Landscape Architecture Theory and Criticism		T
		Varies (3)	Free Elective(s)		
		9 credit hours +	3 free electives		

Bold denotes a design studio.

CURRICULUM AREAS AND COURSE SEQUENCES

This section describes the MLA curriculum areas and the required and elective courses within each area:

- Design Studios
- Representation and Modeling
- History, Theory, and Research
- Technology and Ecology
- Professional Practice Methods

1 The Design Studio Sequence – 36 credit hours required for Track III and 24-30 credit hours

required for Track II students.

As design studios are the cornerstone of the curriculum, students take a studio during every semester in the first professional MLA program. The first three design studios must be taken by Track III students in the sequence of LAR 501, LAR 502, and LAR 503 as they build upon each other. Some advanced Track II students substitute an Advanced Topic Studio for LAR 501 then take LAR 502 and LAR 503 with their cohort. Then students can choose from *LAR 506 LA Design Build Studio* and *LAR 507 Advanced Topic in Landscape Architecture and Environmental Planning* Studios their remaining semesters in the program. Topics vary by semester for LAR 507 studios. Topics in recent years have included: Coastal Dynamics, Urban Design and Smart Cities, Community Food Systems, the Green New Deal Superstudio, and a Cultural Landscape Studio.

Design studios introduce, deliver, and require the student to build understanding of and skills in specific content and application areas of design thinking, design theory, and design methods. Particular emphasis is on discovery and developing the ways and means associated with understanding landscape situations, the imperatives or problems to be addressed, the strategies for engaging these imperatives, and generating and evaluating alternative solutions. Content and methods developed within the subject area courses pertaining to media, history and theory, site works, research and professional practice are integrated within all studio venues at levels appropriate to specific studios.

Track III required studios are:

- LAR 501 Landscape Architecture Introduction Studio (6 credit hours)
- LAR 502 Site Design and Environmental Planning Studio (6 credit hours)
- LAR 503 Design Development Studio (6 credit hours)
- LAR 507 LA Advanced Topics Design Studio (topics vary each semester) (6 credit hours)

The fifth and sixth studio can be selected from the following options:

- A second and possibly third LAR 507 LA Advanced Topics Design Studio (topics vary each semester) (6 credit hours)
- LAR 506 LA Design Build Studio (6 credit hours)
- LAR 504 International Urban Design Studio (6 credit hours)
- LAR 508 Design Research Project (6 credit hours)
- Swing Studio (6 credit hours): A studio offered by another discipline in the College with department head approval

Track II required studios are:

- LAR 502 Site Design and Environmental Planning Studio (6 credit hours)
- LAR 503 Design Development Studio (6 credit hours)
- LAR 507 LA Advanced Topics Design Studio (topics vary each semester) (6 credit hours)

The fourth and possibly fifth studio can be selected from the following options:

• A second and possibly third LAR 507 LA Advanced Topics Design Studio (topics vary each semester) (6 credit hours)

- LAR 506 LA Design Build Studio (6 credit hours)
- LAR 504 International Urban Design Studio (6 credit hours)
- LAR 508 Design Research Project (6 credit hours)
- Swing Studio (6 credit hours): A studio offered by another discipline in the College with department head approval

Core Studios:

LAR 501 Landscape Architecture Introduction Studio, 6 credit hours, first year, fall semester.

In this first landscape architecture studio, students discover and explore ideas of landscape architectural design. Several studio projects serve as vehicles to learn concepts and methods associated with design thinking, place making, and representation. Various representational methods including drawing, and physical and computer modeling which are learned and applied to explore site conditions, program relationships, scale, and place making. The studio introduces students to landscape architectural design by focusing on fundamental problem solving, and graphic concepts, methods, and skills that set the stage for more advanced studies.

Upon completion of this course students will be able to:

- Study, describe, and evaluate how people use landscapes;
- Identify and describe design issues, affected constituents, and situations/problems to be addressed in the planning and design of landscapes;
- Analyze, site specific, and contextual landscape conditions in terms of opportunities and constraints to accommodate development;
- Design, apply, and evaluate various design thinking methods to develop alternative site plans at various scales of resolution. (These plans should accommodate diverse program elements on sites and considers sustainable and resilient design practices, and strategies for site development including grading, drainage, planting and landscape dynamics); and
- Apply various communication and representational methods including written, oral, drawing, physical and digital modeling and representation to explore, test, develop, and communicate design ideas.

The instructors provide a supportive environment for students to experiment with many alternative ways to solve a problem, evaluate their ideas, learn from their successes and errors, and evolve their own approaches to design. Students are strongly urged to work in the studio. "Design is something you cannot do in isolation."



LAR 502 Site Design and Environmental Planning Studio, 6 credit hours: First year, Spring semester.

The LAR 502 Site Design and Environmental Planning Studio expands upon the ideas, practices, and complexity associated with creating landscapes responsive to the needs of people, site, and context. Upon completion of this course students apply concepts and methods associated with site assessment, programming, and site planning and design. A balance between rational and intuitive thinking is integral to the studio structure and project assignments. Central to studio investigations are questions that pertain to how landscapes are understood, represented, revealed, and transformed. This studio is delivered in tandem with LAR 527, Landform, Grading, and Environmental Site Systems. The final design project in the studio includes detailed landform, grading and infrastructure plans.

Site planning processes taught include basic parameters for understanding a site, site analysis and its relationship to building program and site concept, and preparation of site plans. Synthesis of ecological, functional and aesthetic considerations through landscape suitability/opportunities/constraints modeling are applied. Students taking this class will be able to approach site planning and design, the opportunities and limitations presented by a site, and program development as an expression of the needs of a variety of land use types. Functional, market, and aesthetic considerations characteristic of specific land uses are reviewed. Assigned projects increase the student's understanding of site planning issues and problems at a variety of scales and programmatic complexity. Field trips and guest lectures are an integral part of the course.

The studio expects students to utilize and expand upon ideas of landscape ecology, landscape architecture history, site development (grading, drainage, stormwater design and management) and hand and digital graphic media covered in the current and previous semesters.

LAR 503 Design Development and Construction Documentation Studio, 6 credits: Second year, fall semester.

In this intensive studio, students develop knowledge of landscape architectural construction materials, methods, documentation, and implementation practices through direct application in a landscape architecture design project. The format and scope of this studio provides an integrated approach to the delivery of various phases of the design process with specific focus up to and through what is typically considered levels of detail shown in Design Development ("DD") phases of work in professional practice. This course represents a high-level culmination of previous courses in the graduate studio sequence where abstract, rational, and intuitive design principles must meet the concrete realities of dynamic and contemporary landscape architecture best practices to ready a project for construction. Synthesizing aspects of landscape materiality, construction methodologies, professional practices, and industry standards covered in this course forms a strong understanding of applied design and construction knowledge that is critical for pursuit of excellence in built work. Students generate grading, layout, and planting plans, and an array of construction details in Autocad.

Practitioners are invited into the studio on multiple occasions to critique the students' work. In one of these sessions, known affectionately as the "Red Pen Crit," practitioners review a preliminary set of drawings with the students, "redlining" areas needing correction and/or further refinement.

LAR 528 Landscape Architecture Construction Materials and Methods is taught concurrently with the Design Development Studio. LAR 528 learning content is scheduled to support work in the studio and final deliverables for both courses are coordinated to maximize the end product of the studio, a design development level construction document set.

Advanced Studio Options:

In their fourth semester (typically) MLA students have a choice of design studios:

- LAR 507 LA Advanced Topics Design Studio, 6 credit hours, (As mentioned above, students may elect to take a second and even third LAR 507 studio)
- LAR 506 LA Design + Build Studio, 6 credit hours
- LAR 508 Design Research Project, 6 credit hours
- LAR 504 International Urban Design Studio, 6 credit hours
- Swing Studios: Students may elect to take an approved studio offered by another unit in the College or another institution with approval by the department head.

LAR 507 LA Advanced Topics in Landscape Architecture and Environmental Planning Studio, 6 credit hours, Second year

LAR 507 Advanced Topics Design Studios are inquiry focused. Upon completion of this course students will be able to apply important professional practices, venture into emerging areas, test and evaluate known practices, and literally experiment with evolving design theories or technologies that advance knowledge and capability of the profession. The *LA Advanced Topics Design Studio* requires rigorous thinking to identify, clearly define, and engage more complex sets of questions or issues that influence or become influenced by situations of increasing complexity at multiple scales of resolution.

These studios often reflect the specific research interests of the faculty delivering the studio. Recent topics addressed in the advanced studios include: community planning and design, coastal dynamics, brownfield redevelopment, sustainable design, community food systems, campus planning, large area resource planning, design competitions, and city design. Integration, application, and reinforcement of subject area course material including history and theory, landscape technologies, plants, media, and professional practice courses is expected.



LAR 506 LA Design + Build Studio, 6 credit hours, spring semester

The Design + Build Studio enhances students' understanding of sustainable site strategies through exposure to the design---build sequence having a comprehensive scope, content, and depth of inquiry. Students design, produce construction documents and construct a project on a small site. Upon completion of this course students will be able to apply current and emerging design/build concepts that bridge disciplines while promoting a healthy environment through the development of sustainable construction practices that are transferable nationally and globally. These integrated skills are

essential to the practice of landscape architecture and specifically tied to current professional licensure and continuing education requirements.

LAR 508 Design Research Project (DRP), 6 credit hours, any semester

LAR 508 Design Research Project (DRP) is intended for students wanting to pursue self-directed, independent design research projects. Research is expected to be integrated and applied within the context of a landscape architectural design application. Students who pursue this option are motivated by a research question requiring research and a design application, an extension-based project situation requiring research and a design application at a PhD level or possibly pursue a career as a university instructor often pursue this option. The work derived from the DRP should be of the quality suitable for scholarly publication, dissemination at a scholarly/professional conference, or submission to an awards competition venue.

The Design Research Project requires 3 courses over 3 semesters consisting of:

- LAR 540 (3), Research Methods in Environmental Design and Landscape Architecture, required of all students, typically taken in the spring of second year.
- LAR 697 (3), DRP Independent Study typically taken immediately preceding the planned undertaking of LAR 508: Design Research Project.
- LAR 508 (6), Design Research Project typically taken in the last semester of MLA matriculation.

LAR 504 International Urban Design Studio, 6 credit hours, third year, summer or fall

Students can choose from multiple international studio experiences with approval by the DGP or department head. Most students who chose this studio option engage in the semester-long Prague Program. In 2005, the College of Design Prague Institute in the Czech Republic was founded. It has since become the NC State Prague Institute, open to other academic units. During this 90-day intensive experience, MLA students join architecture students to explore the historic and complex urban environments of Prague, to examine how contemporary interventions become part of the urban cultural fabric and the natural systems of the city. Students observe the urban structure of the city and develop urban design proposals to visualize, interpret and improve urban spaces.

2| The Representation and Modeling Sequence: 6 credit hours required

Instruction in digital and manual graphic communications is woven throughout the MLA curriculum. All design studios and seminar courses teach and apply written, verbal, and graphic (both hand drawn and computer generated) communication skills.

Required courses include:

- Intro to Digital Media:
 - LAR 582.017 Introduction to Adobe Suite, 1 credit
 - LAR 582.018 Introduction to Autocad, 1 credit
 - LAR 582.019 Introduction to 3D Modeling, 1 credit
- LAR 517 GIS Applications in Landscape Architecture, 3 credits

Elective courses include:

- LAR 582.011 Computational Design and Parametric Modeling, 3 credits
- LAR 582.020 Autocad and Drafting Fundamentals, 1 credit
- LAR 582.016 Drawing, Walking and Seeing, 3 credits
- LAR 582.006 Advanced Digital Media, 3 credits

Representation and modeling courses delivered by other academic units (architecture, graphic design, industrial design) in the College are also available to MLA students.

Required Courses: LAR 582.017, 018 and 019 Intro to Digital Media, 3 credit hours

In 2020, the Digital Communications course was divided into three discrete one credit hour courses: *Introduction to Adobe Suite, Introduction to Autocad and Introduction to 3D Modeling*. These courses are six weeks each with one following another across the fall semester. The reason for this change is to allow for varying experiences of incoming students. Some students already knew the Adobe Suite, but not Autocad or 3D modeling programs, etc. The three courses are linked to LAR 501 Landscape Architecture Introduction Studio. Applications currently utilized in the course include Adobe Creative Suite (Photoshop, InDesign, Illustrator, and Acrobat Professional), Sketch Up, Autocad and Rhino. The following digital media techniques are explored:

- Data gathering / base map creation
- Site analysis / diagramming
- Design rendering techniques
- Photo simulation/montage techniques/digital sketching using mixed media approaches
- Virtual reality
- Site modeling techniques
- Computational design and parametric modeling
- Design communication for presentation and/or marketing

LAR 517, 3 credits, GIS Applications in Landscape Architecture: Geographic Information Systems (GIS) are powerful tools for analyzing natural and built environments. Despite its roots in landscape architecture, the role of GIS has largely been relegated to analysis rather than design. Upon completion of this course students will be able to apply GIS technology as an integral part of the creative design process. Terrain, hydrological, and overlay modeling and analysis in two and three dimensions are explored. With visual programming, students will learn how conceptual and logical models can structure and generate designs, linking creative abstraction, computational exploration, structured decision-making, and expression. As part of an iterative design process students will learn workflows linking 3D GIS, 3D modeling, and rapid prototyping (3D printing, CNC fabrication, and laser cutting).

3| The History, Theory, and Research Sequence – 6 credit hours required

The history and theory sequence is coordinated among the faculty teaching courses in this area. The history/theory sequence is designed to build on the previous history/theory course with attention given to key literature, precedent projects, and social and environmental imperatives.

Required courses include:

- LAR 582.001 History of Landscape Architecture, 3 credit hours
- LAR 540 Research Methods in Environmental Design and Landscape Architecture, 3 credit hours
- LAR 534 Landscape Architecture Theory and Criticism, 3 credit hours

Elective courses include:

- LAR 535 Environmental and Social Equity and Design, 3 credit hours
- LAR 582.003 Smart and Healthy Cities, 3 credit hours
- LAR 582.019 Biophilic Design, 3 credit hours
- LAR 582.601 Sustainable Development, 3 credit hours
- LAR 634 Contemporary Issues in Landscape Preservation, 3 credit hours

Students are encouraged to seek history, theory and criticism courses offered in other academic units in the College, the University, and from other universities in the area (UNC Chapel Hill and Duke University).

Required courses:

LAR 582.001, 3 credits, History of Landscape Architecture: first year, spring semester.

The History of Landscape Architecture presents a global survey of landscape philosophy and design practices as integral parts of human history and urbanism. It analyzes designed and constructed landscapes in the context of environmental and cultural influences—principally in Europe and the global North and West. Historic places ranging from domestic gardens to vast public landscapes, are considered within a framework of four (4) basic historical dimensions: History of ideas; design typology; socio-political structures; and environmental technology. Upon completion of this course, students are able to diagram a broad historical framework for designed landscapes; identify major interdisciplinary intellectual movements; recognize basic formal typologies; describe canonical design precedents; interpret landscape meaning; and critique the uses and abuses of historical forms in social formation and the exercise of power.

LAR 540, 3 credits, Research Methods in Environmental Design and Landscape Architecture: second year, spring semester.

In this course, students learn how to: engage in basic research methods and tools in design situations; select, synthesize and use environmentally critical information; and understand and appreciate the importance and value of research-based design. Upon completion of this course, students will be able to apply the techniques and skills necessary to develop project proposals and scopes of design work, as well as to learn problem-solving approaches.

LAR 534, 3 credits, Landscape Architecture Theory and Criticism: second year, spring semester. This lecture course is an introduction to the pervasive principles, concepts, movements, and applications influencing landscape architectural planning and design. Design and planning strategies can be formulated to test hypotheses and create "arguments" that can be tested through discourse and the evaluation of implementation. These "arguments" can range from determining the best way to protect an ecological system, grow food and generate energy, or make a place where children want to play. Similarly, criticism can be thought of as a robust process of interrogating the "argument", challenging its references, premises, processes, and results. Criticism is an essential component of the design process, and the most effective criticism is grounded in an understanding of ideas, practitioners, and places that provide support for a particular design "argument".

With these assumptions in mind, the goal of this course is to expose students to a range of theories, bodies of knowledge, and places informing the practice of landscape architecture and environmental planning, as well as provide a forum for students to increase their experience with formulating and interrogating design "arguments".

4| The Technology and Ecology Sequence: 13 hours required

The Technology and Ecology sequence includes an array of courses in the areas of environment and ecology, grading and drainage, construction materials and methods, plants, and planting design. Many of these courses are strategically placed within the first half of the curriculum to provide students with knowledge and capability in the core aspects of landscape architectural practice. In the second half of the curriculum, students may take courses and studios that build upon and extend in greater depth the material covered in the first half. Content in the Technology and Ecology sequence is explicitly applied and reinforced in the design studios at all levels.

<u>Required courses</u> in the Technology and Ecology sequence include:

- LAR 520 Environment and Culture, 3 credits
- LAR 527 Landform, Grading, and Environmental Site Systems, 3 credits
- LAR 523 LA Plant Identification, 2 credits

- LAR 524 LA Planting Design, 2 credits
- LAR 528 LA Construction Materials and Methods, 3 credits

Elective courses include:

- LAR 543 Landscape Performance and Metrics, 3 credits
- LAR 582.005 Natural Hazards, Disasters and Climate Change Adaptation, 3 credits

Required courses

LAR 520, 3 credits, Environment and Culture: first year, fall semester.

The dynamics of ecological function, system structure, temporal and spatial scales, and human--ecosystem interactions is examined through lectures, field trips, case studies, readings, and group discussion. Course activities link the role of landscape dynamics to both contemporary and historical design and planning principles and promote innovative design thinking via an enhanced understanding of practical applications. Subject matter may include, but is not limited to: ecosystem services, ecosystem ecology, conservation biology, landscape ecology, urban ecology, human ecology, and relevant local, national and/or global case studies. Upon completion of this course students will be able to explain the integrative approaches to human and natural systems with the dynamic processes that influence natural processes, including the human interpretation of and reliance upon healthy functioning ecosystems.

LAR 527, 3 credits, Landform, Grading and Environmental Site Systems: first year, spring semester.

Upon completion of this course, students will be able to perform landform and slope analyses, and develop, apply, and evaluate grading and hydrologic strategies for the design of resilient landscapes. The course is structured around projects and assignments ranging from short to long term exercises. Emphasized are the vocabulary, methods, principles, and calculations landscape architects used to make critical design decisions in the preparation of technical documents as an integral part of the site planning and design process. Immediate and longer-term issues, practices, and consequences associated with balancing land use and functionality needs with landforms, soils, and surface water hydrologic conditions are discussed as critical factors affecting the long---term resilience of a site design.



LAR 528, 3 credits, LA Construction Materials and Methods: fall, second year.

Upon completion of this course students will be able to utilize knowledge and best practices in the use of landscape construction materials and technologies, implementation strategies, applications, and performance. This course examines materials used in landscape construction, construction techniques and details, and methods of construction documentation. Particular attention in lectures and projects is given to the appropriate use of these materials with respect to aesthetic, functional, and environmental and human health concerns. The course addresses materials and details for steps and ramps, railings, paving, walls, fences, decks, overhead structures, stormwater and erosion control structures, lighting, irrigation, and water features. It also covers basic structural considerations of these landscape structures. Processes of project delivery, construction and maintenance

are discussed. Principles and practices of sustainable landscape construction are integrated into all course lectures and projects. LAR 528 is taught concurrently with LAR 503, Design Development and NC State University LAAB Self-Evaluation Report, December 2021 page

Construction Documentation Studio and content and assignments are aligned. Together, these two corequisite courses cover three major areas including an introduction to the artful craft of construction detailing and material selection; the application of construction details in integrated systems within the built environment; and the process of preparing landscape architecture construction documents.

LAR 523, 2 credits, LA Plant Identification: summer following first year.

Upon completion of this course students will have working knowledge of commercially available plant materials including trees, shrubs, groundcovers, and grasses and their use as design elements in landscape design. Perennials and native plant communities are briefly examined. Emphasis is given to design matters rather than on horticultural detail, to enable students to begin developing individual philosophies of design, particularly as they relate to the use of plants. Students are introduced to approximately 150 species and cultivars, most of which are within walking distance of the College of Design, either on campus or nearby. Several off-campus field trips are taken to local nurseries to provide information concerning plant production and delivery to the market, and to landscape contractors' shops and construction sites to observe the process of installing new plant material.

LAR 524, 2 credits, LA Planting Design: summer following first year.

Planting Design explores plants and plant communities as design elements that are complex and continuously changing, and how they are used strategically in designing landscapes that are sensitive to the environment, expressive of the place and aesthetically valuable. Upon completion of this course students will have knowledge of the theories, practices, and implications associated with the diverse uses of plants in landscape architectural design applications considering diverse factors such as functional requirements, ecological processes, aesthetic values, cost, maintenance, health, safety, and welfare. Planting design provides landscape architects an opportunity to hold a direct role in the creation of the human/natural landscapes that make our outdoor spaces safe, comfortable, ecologically healthy, visually clear, attractive, and functional on many levels.

Electives:

LAR 543, 3 credits, Landscape Performance and Metrics.

Upon completion of this course students have knowledge of the concepts of and tools and methods used to measure and integrate considerations of landscape performance including environmental, economic, life cycle cost, management, social, and aesthetic factors in landscape architectural applications.

LAR 582.005, 3 credits, Natural Hazards, Disasters and Climate Change Adaptation Lecture Series, Spring semester

Panels comprising practitioners and scholars will discuss a range of pertinent topics tied to natural hazards, disasters, and climate change adaptation, including research findings, experience in practice, and the translation of knowledge to action. This semester, emphasis will be placed on the acquisition of hazard-prone housing, to include those acquired before and after disasters as part of an approach to natural hazard risk reduction and an emerging climate change adaptation strategy often referred to as managed retreat or resettlement.

Speakers are drawn from federal, state, and local jurisdictions; scholars from pertinent fields of study, including physical and social scientists; private sector representatives, including corporations, insurance officials, developers, and consultants; members of the media; politicians; environmental and social justice advocates; community leaders; members of various professional associations; and others as identified.

5| The Professional Practice Sequence: 6 hours required

Required courses in the Professional Practice sequence include:

- LAR 550 Professional Practice, 3 credit hours
- LAR 545 City Planning, Landscape Architecture and the Public Realm, 3 credit hours

<u>Elective courses</u> in the Professional Practice Sequence include:

- LAR 546 The Landscape Imperative, 3 credit hours
- LAR 582.002 now LAR 554 Disaster Resilient Policy, Engineering and Design, 3 credit hours
- LAR 582.008 now LAR 552 Survey of Natural Hazards and Disasters, 3 credit hours
- LAR 650 Landscape Architecture Internship, 3 credit hours

Required courses:

LAR 550, 3 credits, Landscape Architecture Professional Practice: second year, spring

Upon completion of this course students will be conversant in the full range of practice opportunities open to landscape architects with an overview of career opportunities in the public and private sectors as well as in non--traditional roles. They will be introduced to contemporary landscape architectural practice in the United States, discuss ethics as applied to professional practice, and learn about professional licensure. They will be exposed to practitioners from the various sectors and will have the opportunity to discuss office management and business practices. Students will learn how work is generated, ideas for job creation, and other professional development concepts. The course format includes lectures, discussion, student presentations, guest speakers, office visits and topical site visits. Students will write short papers and deliver short oral presentations as a means to reinforce, and practice written and verbal communication skills.

LAR 545, 3 credits, Landscape Architecture and City Planning in the Public Realm: third year, spring.

This class provides understanding of the common genesis of both professions and the ebbs and flows of the two parallel evolutionary paths in the Twentieth Century. The course emphasizes the shared and complementary skills of professionals of either discipline, and the common core of professional practice centered on the public realm and the design of cities and public spaces. Upon completion of this course, the student will be able to:

- Identify the historical context within which the professions of landscape architecture and city planning were created and evolved through the Twentieth Century.
- Distinguish the specific skills that are both unique to each profession and shared between the practitioners of each.
- Explain the American philosophical, legal and procedural framework that governs the use of land in urban environments, how it has changed and altered in growing urban areas, and how professional expertise is brought to bear on these changes by both landscape architects and planners.
- Apply the same concepts used by Olmsted and others by developing physical solutions in public space that address not just the aesthetic and functional, but also broader urban social, legal, political and symbolic goals as planners do.
- Understand the tools of planning, how they are applied and how landscape architects interact with the regulatory structure in communities, in order to create spaces that respond to the interests of the community as well as the interests of the client.
- Have a working knowledge of the process of selecting professional expertise to assist communities with transformational projects in the public realm, and how to position landscape architects as the right professionals in the right situations to lead these efforts.

Elective courses:

LAR 543, 3 credits, The Landscape Imperative, offered spring semester

This course is predicated on the facts that the North Carolina landscape will transform dramatically in the next twenty--five years, primarily from a steady growth in population and there are many imperatives due to this increase that landscape architects can address. Upon completion of this course students will be able to discuss complex interrelationships of population growth, resource stewardship and land development in terms of the issues, questions, challenges and opportunities for landscape architects and urban designers. The course format will consist of lectures, discussion, class (student) presentations, and guest lectures. Students will be expected to conduct research, author brief white papers on key subjects, discuss and debate findings, generate digital presentations, make oral presentations and work in a team-oriented environment.

Considerations of professional practice weave through the entire curriculum by virtue of the participation of landscape architect practitioners in all studio and seminar courses. Practitioners from the both the private consulting and public realms serve as critics, present lectures, deliver several core and elective courses, and meet with students and faculty in many informal contexts. This course provides a graduate level introduction to the study of natural hazards and disasters. Emphasis is placed on gaining an understanding of the defining characteristics of natural hazards and how their effects on human settlements can lead to a series of outcomes and processes that help us understand what defines a disaster. This course introduces students to a range of topics including meteorology, geology, hydrology, engineering and building performance, policy making, planning, and sociology, among other disciplines.

LAR 582.002 now 554 Disaster Resilient Policy, Engineering and Design, fall semester

This course will address the interdisciplinary (policy, engineering, and design) study and practice of disaster resilience. Emphasis will be placed on the critical review of existing policies, programs, and approaches taken that have led to increased levels of exposure to natural hazards, growing levels of social vulnerability, and exponentially rising disaster losses. In an era of climate change, these issues are explored relative to the need to enhance adaptive capacity through sound policy, engineering, and design. Class lectures, readings, and student/faculty discussions will help to advance each student's knowledge of the subject matter and provide relevant background information to inform interdisciplinary class projects. This class aligns with a 1 credit speaker series class focused on the acquisition of hazard-prone housing and resettlement. Students are not required to take the 1 credit-hour course and video of each lecture will be made available via the class site. The nature of the final class projects will depend, in part, on the make-up of the students enrolled in the class.

LAR 582.008 now LAR 552, 3 credits, Survey of Natural Hazards and Disasters, spring semester

This course provides a graduate level introduction to the study of natural hazards and disasters. Emphasis is placed on gaining an understanding of the defining characteristics of natural hazards and how their effects on human settlements can lead to a series of outcomes and processes that help us understand what defines a disaster. This course introduces students to a range of topics including meteorology, geology, hydrology, engineering and building performance, policy making, planning, and sociology, among other disciplines.

The course is framed using the aspirational concepts of sustainable development and disaster resilience, including those pre- and post-disaster conditions and actions that enhance or hinder these goals. Emphasis is placed on the use of disaster-based case studies to help students understand the physical characteristics of natural hazards (i.e., intensity, size, duration, speed of onset, and timing) and how individual, community, state, regional, national, and international actions (or inaction) led to the event becoming a disaster.

LAR 650, 3 credits, Landscape Architecture Internship, any semester

The department encourages students to complete an internship within a professional landscape architectural, architectural, or civil engineering public or private organization. Upon completion of the internship students will have knowledge of and appreciation for the practices of landscape architecture. Students seeking an internship experience are instructed to initiate a relationship with a potential (landscape architectural) practice. The student and the prospective employer discuss the potential internship experience with the goal of identifying and defining the work to be undertaken and performance expectations.

Internships may be paid or unpaid. An internship earning 3 credit hours in one semester requires a minimum of 112 hours of work. The student is required to maintain a log sheet documenting hours worked. Upon completion of the internship and before the last day of the semester, the employer is required to verify the student's attendance, describe the work assigned, and evaluate the student's performance. The student is required to submit a report that documents the work undertaken during the internship, evaluates the quality of the experience in terms of what was learned, and provide examples of work generated during the experience.

AECOM	Raleigh, NC		
Alta Greenways	Raleigh, NC		
Andropogon Associates	Raleigh, NC		
Arrowhead Design + Build	Durham, NC		
Biohabitats	Alexandria, VA		
Bloc Design	Charlotte, NC		
Bohler Engineering	Raleigh, NC		
The Coastal Dynamics Design Lab	Raleigh, North Carolina		
Cibola National Forest Engineering & Recreation	Albuquerque, NM		
Cicada Design	Raleigh, NC		
CLH Designs	Apex, NC		
Urban Design Center, City of Raleigh	Raleigh, NC		
Cline Design Associates	Raleigh, NC		
Cole, Jenest & Stone	Raleigh, NC		
Design Workshop	Raleigh, NC		
EDSA	Orlando, FL		
Hykes Design, LLLC	Durham, NC		
The James Rose Center for Landscape Architectural Research	Ridgewood, New Jersey		
and Design			
Kiefer Landscaping	Durham, NC		
Kittelson and Associates, Inc.	Raleigh, NC		
McAdams Engineering	Raleigh and Durham, NC		
The Natural Learning Initiative	Raleigh, NC		
National Park Service	Various locations		

Selected Student Internships from the past five years

New City Design Group	Raleigh, NC		
Olin	Philadelphia, PA		
Rialto Studio, Inc	San Antonio, Texas		
Sasaki	Boston, MA		
Stewart	Raleigh, Durham, Charlotte, NC		
Summit Design and Engineering	Raleigh, NC		
Surface 678	Durham, NC		
Timmons Group	Raleigh, NC		
Toole Design	Raleigh, NC		
Town of Apex Parks & Greenways	Apex, NC		
Town of Cary	Cary, NC		
Tributary Land Design + Build	Durham, NC		
Urban Design Partners	Raleigh, NC		
Vacationer Supported Agriculture Project (USDA AMS, TTFC)	Washington, DC		
Vanasse Hangen Brustlin	Raleigh, NC		
Withers and Ravenal	Cary, NC		

CURRICULUM SEQUENCE

The curriculum sequence is divided into two parts.

- The <u>first year and a half</u> is highly structured to ensure that all students are grounded in the **fundamentals** of landscape design, ecology, site works, history, and design communications.
- The <u>second half</u> of the curriculum provides opportunities for **advanced study and research** in the core areas that include: landscape architectural theory and criticism, research and strategic thinking, planning, professional practice and ethics, international study, advanced topic faculty-directed inquiry based design studios or a self-directed inquiry based design project, design studios and/or courses offered by other academic units in the College and University, and free elective courses. Additionally, all MLA students are required to sit for a faculty-managed formal *MLA Oral Examination* in their last semester of study.

FIRST YEAR CURRICULUM

First year courses introduce landscape architectural design, site planning and design, history and theory, and technical site works. Instructors work together to ensure deliberate and thoughtful coordination and integration of material delivered, project assignments, pin up reviews, and assignments. Landscape architecture practitioners actively and frequently participate in the delivery of these courses by providing criticism and mentoring, delivering lectures, leading field trips to project sites, and attending reviews.

In the fall semester of the first year, students take:

- LAR 501 Landscape Architecture Introduction Studio, 6 credit hours
- LAR 520 Environment and Culture, 3 credit hours
- Intro to Digital Media (Track II Students take LAR 517 GIS Applications in Landscape Architecture and Environmental Planning, 3 credit hours)
 - LAR 582.017 Introduction to Adobe Suite, 1 credit hour
 - LAR 582.018 Introduction to Autocad, 1 credit hour
 - LAR 582.019 Introduction to 3D Modeling, 1 credit hour
- LAR 582.012 Landscape Architecture Immersion, 2 credit hours (taught for the two weeks before fall semester begins)

In <u>spring semester</u> of the first year, students take:

- LAR 502 Site Design and Environmental Planning Studio, 6 credit hours
- LAR 527 Landform, Grading and Environmental Site Systems, 3 credit hours
- LAR 582.001 Landscape Architecture History, 3 credit hours

During the <u>summer</u> following the first year, rising second year students take:

- LAR 523 Landscape Architecture Plant ID, 2 credit hours
- LAR 524 Plants and Design, 2 credit hours

By the end of the first year of study (fall, spring, and summer) students will have learned the material that will enable them to apply their knowledge of site planning and design and site works in the forthcoming *LAR 503 Design Development and Construction Documentation (DD) studio* in the fall semester of second year.

SECOND YEAR CURRICULUM

Second year courses build depth upon the content and lessons learned during the previous semesters, and deliberately position students for advanced studies and research.

In the <u>fall semester</u> of the second year, students take:

- LAR 503 Design Development and Construction Documentation Studio, 6 credit hours
- LAR 517 GIS Applications in Landscape Architecture and Environmental Planning, 3 credit hours (Track II students take LAR 534 LA Theory and Criticism, 3 credit hours)
- LAR 528 Landscape Architecture Construction Materials and Methods, 3 credit hours
- Free elective, 3 credit hours

By the end of second year, fall semester the students will have completed the fundamental landscape architectural practice "compulsories" that would enable one to seek and obtain part--time employment or an internship with many professional firms and launch into the second half of the curriculum for advanced coursework and research.

In the <u>spring semester</u> of the second year, students take:

Choice of:

- LAR 506 LA Design + Build Studio, 6 credit hours
- LAR 507 Advanced Topics in Landscape Architecture and Environmental Planning Studio, 6 credit hours
- LAR 508 Design Research Project (only in their final year), 6 credit hours
- Swing Studio, 6 credit hours

And:

- LAR 540 Research Methods in Environmental Design and Landscape Architecture, 3 credits
- LAR 550 Professional Practice, 3 credit hours

Second year spring semester is typically the final semester in the 60-66 credit hour First Professional <u>MLA Track II program</u>. In March of the final semester in the program, students are required to take and pass the MLA Oral Exam. See below for more information on the process and content of the exam.

During the summer following second year, rising Track III third year students may take available free elective courses, and/or undertake professional practice opportunities including internships, travel, or pursue other opportunities.

THIRD YEAR CURRICULUM

In the third year, students take advanced design studios offered by the department or other departments, pursue independent scholarly design research, take free electives and study abroad.

In the <u>fall semester</u> of the third year, students take:

Choice of:

- LAR 506 LA Design + Build Studio, 6 credit hours
- LAR 507 Advanced Topics in Landscape Architecture and Environmental Planning Studio, 6 credit hours
- LAR 504 International Urban Design Studio, 6 credit hours
- LAR 508 Design Research Project (only in their final year), 6 credit hours
- Swing Studio, 6 credit hours

And:

• LAR 534 LA Theory and Criticism, 3 credit hours

• Free elective, 3 credit hours

The College of Design offers the International Design Studio in Prague which is delivered annually each fall semester. While in Prague students typically take 6 credits of studio and up to 6 credits of free elective courses which may include seminars delivered by the School of Architecture. The School of Architecture also delivers 2--3 design studios in Prague during the fall semester. One interdisciplinary landscape architecture/architecture design studio is open to students from both departments and involves an urban design project.

In the spring semester of the third year, students take:

Choice of:

- LAR 506 LA Design + Build Studio, 6 credit hours
- LAR 507 Advanced Topics in Landscape Architecture and Environmental Planning Studio, 6 credit hours
- LAR 508 Design Research Project (only in their final year), 6 credit hours
- Swing Studio, 6 credit hours

And:

- LAR 545 City Planning, Landscape Architecture and the Public Realm, 3 credits
- Free elective, 3 credit hours

<u>Third year spring semester is typically the final semester in the 81 credit hour First Professional MLA</u> <u>Track III program</u>. In March of the final semester in the program, students are required to take and pass the MLA Oral Exam. See below for more information on the process and content of the exam.

The MLA Oral Examination:

All MLA students in their final semester take the MLA Oral Examination in accordance with the policies of the Graduate School. The objective of the Master of Landscape Architecture (MLA) Oral Examination is to validate the students' understanding and competence in applicable situations requiring critical design thinking processes. Graduating MLA students are required to make a verbal presentation to their faculty committee, and other faculty and students answering two broad questions and summarizing how their work reflects mastery of inquiry, landscape architecture theory, history, and practice through responses to faculty-derived questions.

The MLA Oral Examination consists of two parts: Presentation and Defense. The exam presentation is formal in the sense that the student is expected to give a verbal and graphic presentation that responds to specific questions. The questions expect students to reflect upon, apply, and communicate a significant body of knowledge and skills learned during their tenure as graduate students in the MLA program. Following this presentation, students are given time to respond to questions and comments delivered by the LAR faculty and others attending the examination. Upon conclusion of the question-and-answer period, the LAR faculty convenes to discuss and grade the examination. The LAR department head and DGP then inform the student about their exam performance and completes and transmits all required documentation and forms to the NCSU Graduate School for processing.

Following are the two MLA Oral Questions that were asked last year:

Question #1: What is Your Landscape Imperative?
Successful MLA Oral Exams clearly communicate a landscape architecture imperative that drives the student's project work. Imperatives are fundamental drivers of change in society. A successful student presentation will describe: a) that imperative, b) how landscape architecture relates to that imperative, and c) how their work reflects a commitment to the future pursuit of that imperative. This emphasizes the student's work to date, but also anticipates work to be completed in the future.

Successfully articulating a landscape architecture imperative reflects how the student can frame inquiry, "take a position", and clearly describe their role in advancing an imperative through their own project design work.

Question #2 What is Your Landscape Architecture Design Strategy?

Successful MLA Oral Exams clearly communicate landscape architecture design strategies and processes that will result in competently executed landscape architecture and serve to showcase the unique roles landscape architecture can play in solving complex problems, particularly those dealing with societal and environmental health, safety, and wellbeing. There are many design processes and many different professions engaged in design of the land. However, this objective asks students to assume the position of a professional landscape architect and present design processes that support their imperative and result in effective landscape architecture-led strategies present in their own project design work.

Successfully articulating landscape architecture design strategies reflects the student's ability to effectively describe how they think a problem should be defined, analyzed, and solved through landscape architecture design processes.

3. How does the program identify and engage in contemporary environmental, public policy, social justice, and design issues that landscape architects are positioned to address?

Our program is well known for addressing contemporary environmental resilience and social justice issues in design studios, seminar classes and faculty scholarship and engagement work. Public policy to support these imperatives is always a key consideration in any work in these areas. Faculty in Advanced Topic Studios engage vulnerable communities and organizations in studio projects that offer students experience addressing these issues. Students engage the community stakeholders in meetings, charettes and visioning exercises to address issues in the community, then propose design and planning solutions. Students engage with a different community each year in Professor Andy Fox's annual Coastal Dynamics studio.

Faculty in the program also cultivate long term relationships with some vulnerable communities such as Princeville North Carolina, the first town incorporated in the US by freed slaves. Andy Fox, Kofi Boone and Carla Delcambre have engaged in multiple projects for both classes and research in Princeville over several years. Last spring, Carla Delcambre's Design Build Studio designed and built mobile furnishings for an outdoor space at Princeville Elementary school.

4. How does student work and other accomplishments demonstrate that the curriculum is providing students with the appropriate content to enter the profession and are prepared to meet licensure requirements?

Student work, faculty scholarship, and other co-curricular activities demonstrate that the curriculum is providing students with the appropriate content to enter the profession and become licensed through the following indicators:

Feedback from Practitioners: Student work is reviewed in multiple venues by practitioners including members of the *LAEP Professional Advisory Board* whose participants represent diverse areas of private and public, large to small landscape architectural practices. It is department policy to invite practitioners to participate in mid semester and end of semester design studio and seminar reviews where they can see student work and interact directly with students and faculty providing constructive criticism. Practitioners give formal written and informal conversational feedback about student outcomes.

Seventy-four practicing landscape architects act as mentors for our MLA students in the *LAEP Mentor Program.* Upon matriculation, individual students are paired with a practitioner providing opportunities for general mentoring, internship application advice, and review of the student's work. The practitioners advise the department head or a faculty member about the work of the student s/he is mentoring.

Award winning student projects: Student work is subject to professional review in various award competitions, and recent submissions have been very successful indicating strong studio instruction. Celen Pasalar's 2016 Advanced Topic Studio won a National Student Honor Award for Student Community Service for their project Growing Change Prison Flip: Reclaiming an Abandoned Prison Site. A student from the Coastal Dynamics studio won a national Student ASLA award in 2019, and three students won national Student ASLA awards for two projects in 2020. In 2019, our students swept the Southeast Tri-State Student ASLA Awards over entries from other landscape architecture programs in the Southeast.

Professional job offers: NC State Landscape Architecture students and graduates are sought after and hired by local, regional and national, private and public employers for both internships and entry level positions.

5. How does the curriculum and other program opportunities enable students to pursue academic interests consistent with institutional requirements and entry into the profession and are prepared to meet licensure requirements?

Our students have many opportunities to develop and pursue scholarly interests and specialty expertise in courses, as research assistants, through field trips, evening lectures, and in other out-of-classroom experiences.

Research and scholarly inquiry are pervasive threads throughout the MLA program. Every course delivered by the program has at its core, questions that ignite various forms of inquiry and scholarship. This, coupled with one-on-one mentoring from faculty, practitioners, and colleagues from other academic units, and the broader external practitioner community, affords students many diverse opportunities to explore, collaborate with, participate in, and engage topics and projects within and beyond the landscape architecture department.

Our professional curriculum, including nine hours of free electives, provides opportunities for independent studies and engagement of a self-directed design research project. While students are required to take three elective courses, most take 5-6 as many pursue graduate certificates. Graduate certificates offered by LAEP are the City Design Certificate and the Graduate Certificate in Disaster

Resilient Policy, Engineering and Design. Students pursue graduate certificates outside the department in Public Interest Design (School of Architecture), Geographic Information Systems (College of Natural Resources) and Horticulture. Certificates are discussed in detail in section *F. Augmentation of Formal Educational Experiences*.

To prepare students for practice and licensure, the MLA program is deliberately connected to the imperatives, standards and techniques that motivate professional practice by virtue of the department's active engagement with the professional community both locally and nationally. As most of our students participate in internships, they also become connected to practice and gain experience that can prepare them for practice and licensure. Practitioners actively participate in the life of the program as demonstrated in their involvement in the external *LAEP Professional Advisory Board* and the *Mentor Program*.

C. Syllabi

1. How do syllabi include educational objectives, course content, and the criteria and methods that will be used to evaluate student performance?

The Graduate School of NC State University requires <u>all courses</u> to have an accompanying *Standard Course Syllabus Form* that contains the following detail:

- Course title, instructor information and contact hours, class meeting times
- Catalog description
- Course prerequisites if any
- Student learning outcomes
- Course structure
- Grade determination information and relative percentages of effort for the grade
- Course schedule
- List of major topics and time allocated to each
- Projected schedule of readings, assignments, quizzes, and tests
- Textbooks and learning materials
- Required expenses
- Instructor's policy on late assignments and attendance
- Statement for students with disabilities
- Academic Integrity Statement
- Transportation Statement
- Statement on safety and risk assumption
- General university polices, regulations and rules pertaining to equal opportunity and nondiscrimination, code of student conduct, and grading.

Instructors build on the *Standard Course Syllabus* with information specific to their class each semester to generate a comprehensive syllabus that is distributed to students on the first day of class. Each course syllabus provides descriptive detail about course context and content, course delivery and project/homework assignment schedules, reading assignments, field trips, and relationships with other courses.

2. How do syllabi identify the various levels of accomplishment students shall achieve to successfully complete the course and advance in the curriculum?

The course syllabi described above articulate course learning outcomes and how students will be evaluated in order to advance in the course and achieve the learning outcomes. Project statements and course assignments offer detailed learning objectives that directly support the course learning outcomes.

In addition, because we are a relatively small program, our faculty and teaching assistants mentor and advise students about their academic performance and longer term career goals.

D. Curriculum Evaluation

1. How does the program evaluate how effectively the curriculum is helping students achieve the program's learning objectives in a timely way at the course and curriculum levels?

We continually improve the quality, currency, and integrity of our courses, curriculum, and program. Program goals, objectives and evaluation criteria are measured in the multiple tools discussed below.

Internal Faculty Review process: The Program faculty critically discuss the quality of each course and design studio considering learning objectives and outcomes, course requirements, delivery methods, and student performance. Our intent is to recognize positive and negative aspects of the course, the way the course supports the overall curriculum and resultant learning outcomes, and proposed recommendations for future course modifications.

Peer Review of Teaching process: The College of Design maintains a *Peer Review of Teaching Policy* that is designed to make sure that courses are being delivered effectively and are supporting the overall curricular goals. Peer review of Teaching is required at periodic intervals during the Tenure Track and Post Tenure Review processes.

Mid-term and end of semester reviews: Project reviews are formal occasions wherein students present their studio work at least two times during the semester. They receive criticism and comments from faculty, fellow students, practitioners, studio sponsors, and guests.

LAAB Accreditation review and self-study: The LAAB re-accreditation process informs the Program's curriculum through the Team Report and the Self Evaluation Report process. As part of the LAAB accreditation process, the Department surveys students, faculty, alumni and practitioners about the quality of the curriculum, facilities, and courses. Results of this study inform our course and curriculum refinements. Additionally, comments from the Team Report can identify areas of the curriculum where modification is needed.

External LAEP Professional Advisory Board: The LAEP Professional Advisory Board (PAB) comprises alumni and friends of the department from a broad range of practice settings and geographies. The PAB meets with the department head and sometimes faculty four times each academic year to discuss a range of issues pertaining to the curriculum, specific course content, lecture and exhibit venues, environmental and other professional issues, faculty needs, funding, scholarships, and student performance. In addition, in conjunction with the College's Annual Leader's Council Retreat in the fall, students and faculty meet with nationally recognized practitioners to discuss our program's achievements, and current national trends and issues in practice and education.

Outcomes Assessment Process: Formal curriculum evaluation also occurs at the university level through the Outcomes Assessment process with an annual review of the program's effectiveness. This is an extensive self-evaluation that takes place in April every year. The following objectives and outcomes are evaluated in detailed reports during this annual assessment process:

Objective: To learn, apply, and evaluate research and design thinking strategies and methods that enable the student to engage independent and collaborative research and design investigations

Outcome: Graduates will utilize their design thinking capabilities to research, synthesize, generate and evaluate design interventions and precedents that address "landscape imperatives" associated with environmental and cultural factors and relationships shaping urban, suburban, and rural landscapes resident within the public and private realms.

Objective: To learn the ways and means enabling one to challenge and offer alternative approaches, methods, or skills to existing methods or norms of landscape architectural practices to enhance project outcomes and the knowledge and capability of the profession

Outcome 1: Graduates will be able to extend service-learning coursework, research and experiences in contemporary practice situations.

Outcome 2: Graduates will be able to verbally and graphically generate, describe, qualitatively and quantitatively evaluate and compare, and facilitate discussions with affected stakeholders about alternate design strategies and specific design interventions.

2. How does the program demonstrate and document ways of:

a.assessing students' achievements of course and program objectives in the length of time to graduation stated by the program?

b.reviewing and improving the effectiveness of instructional methods in curriculum delivery? c.maintaining currency with evolving technologies, methodologies, theories and values of the profession?

Assessment of student achievements, review and improvement of instructional methods, and maintenance of theoretical and practical currency is an on-going process as described in the proceeding sections. The program demonstrates and documents assessment progress by making course and curriculum revisions, preparing annual reports to college and university administration, and engaging with program stakeholders including students, external constituents, and the professional community.

3. How do students participate in evaluation of the program, courses, and curriculum? Students actively participate in the evaluation of the MLA program, courses and curriculum as follows:

Student Course Evaluation Reports: At the end of each semester, students are expected to evaluate courses in which they are enrolled using a standard questionnaire accessible on the University's web page. The questionnaire asks a number of questions about the course and the instructor and provides the opportunities for numerical evaluation. Students are also asked to provide open-ended comments to questions about the course and instructor. Numerical responses and open-ended comments are tabulated and delivered to the department head. The department head also reviews and considers the evaluations when mentoring and evaluating faculty performance at annual reviews.

Student Advisory Council: The nine-member Student Advisory Council is a diverse group of MLA students who meet three times per semester with the Department Head and Director of the Graduate Program (DGP). The group is composed of a minimum of two students from every year of the MLA program, international students, students of color, and students from both Track III and Track II. Students on the council bring concerns and suggestions to the meetings. In addition, the Department Head and the DGP query the students about specific curricular issues and modifications, course content, and other topics of consideration.

Individual faculty and student meetings with the department head: The department head and faculty meet regularly throughout the year with students and other faculty individually, separately, or in groups to discuss issues related to course syllabi, delivery, sequence in the program, resources, staffing, etc., and the operation of the program.

E. Academic Integrity

1. How does the institution affirm that the student who takes an examination or submits project work is the same person who enrolled in the professional program and that the examination or project results reflect the student's own knowledge and competence in accordance with stated learning outcomes?

NC State's Academic Integrity Policy is detailed in the <u>Code of Student Conduct</u> and summarized in the Office of Student Conduct's Academic Integrity <u>Overview</u> page. Four types of academic misconduct are addressed in the policy:

- Cheating
- Plagiarism
- Aiding and abetting another to Cheat or Plagiarize
- Destruction or Removal of Academic Materials

At the Department level, instructors have multiple meetings and/or reviews with a student during the semester. Aside from the learning value of these activities, this allows the instructor to get to know the skills, knowledge and abilities of the student, and helps verify that the work of the student is their own.

F. Augmentation of Formal Educational Experience

1. How does the program provide opportunities for students to participate in co-curricular activities (*e.g.*, professional activities, institutional and community service, *etc.*), internships, off campus studies, research assistantships, or practicum experiences?

The MLA program provides several venues for students to augment their formal educational experience as follows:

Internships: An average of 85% of MLA students undertake at least one internship during their tenure in our program. They engage in a broad range of practice settings across the country and even sometimes in their home countries. The College Advising and Career Services office assists students in conducting internship searches and job applications. Internship sites are expected to have a supervisor with related education and experience to provide hands-on training and feedback to an intern. The work completed by an intern is an extension of the learning experience in a classroom as applied in a practical, real-life setting. Students can receive three credit hours of course credit for the internship if they follow the procedures detailed in Section B of this chapter.

Teaching Assistantships: Teaching assistantships are awarded to qualified MLA students. An average of thirty-two positions are available each year. Teaching assistants are involved in the process of developing course materials, course delivery, project and assignment evaluation and other tasks assigned by the instructor. Students interested in pursuing teaching assistantships are required to complete and submit an application form. Decisions are made by the department head on the basis of the applicant's past academic performance in the program, recommendations by the instructors of record, available funding and budget resources.

Research Assistantships: Research Assistantships are awarded to students whose interests and skills align with an individual faculty member's scholarship and research needs. In 2020-21, 12 students held research assistantships. Faculty involve research assistants in literature reviews, surveys, graphic support, data gathering, data interpretation, article writing, conference presentations, conference posters and many more tasks. Hiring decisions for research assistants are made by the faculty member employing them.

DesignWeek: DesignWeek is the Department of Landscape Architecture and Environmental Planning's annual interdisciplinary education initiative with a focus on:

- Creating healthier and resilient communities, while providing the opportunity to live healthy lifestyles;
- Improving development patterns to reduce environmental harm;
- Increasing awareness of the need for strategic design solutions to environmental and social challenges in the Piedmont and Coastal region of North Carolina.

The objectives and learning outcomes of DesignWeek were to give students experience facilitating conversations about developing innovative design strategies for community and ecological health and learning how to work within interdisciplinary teams, delegate tasks, and communicate with other constituents involved in the process.

DesignWeek began in 2017 and continued in 2018 and 2019 providing MLA students an experience with interdisciplinary design charettes. Each year the projects and formats differed, but they all provided students the opportunity to collaborate with students from other departments on campus, UNC Chapel Hill and Duke on complex projects with the above aims.

The inaugural **2017 DesignWeek** event, focused on the three eastern North Carolina communities flooded during the aftermath of Hurricane Matthew in October 2016.



DesignWeek 2018 Envisioning the Neuse River Watershed: Systemic Design Solutions for Healthy & Resilient Communities focused on the Neuse River Watershed, addressing the issues distinctive to each of the three subbasins identified within the watershed: Upper, Middle, and Lower. The future of the Neuse River Watershed and the development of new environmental design strategies for creating healthier and resilient communities was envisioned.

In 2019, the charette was shortened to four days and was

called **Design Sprint: The Language of Climate Change**. The event had a dual focus on rapid creative visualization and generation of landscape and planning-based approaches to mitigation and adaptation of climate change.

Independent Studies: The Department offers two independent study opportunities to students:

- LAR 630 Independent Study is available as a free elective to students who want to pursue inquiry-based and scholarly activities in landscape architecture. The student proposes a research project to an instructor who advises them on the project during the semester.
- LAR 697 Design Research Project Independent Study is a prerequisite for students electing to undertake the LAR 508 Design Research Project. The student proposes a research project to an instructor who advises them on the LAR 508 project research question, project proposal, literature review, project programming, site and regional analysis and other pre-design tasks.

Professional Development Programming: Professional development programming includes the Student ASLA (SASLA), the Mentor Program, Student Advisory Council, the LAEP Lecture Series, Women in Landscape Architecture, and professional and academic conferences.



• Student ASLA (SASLA): SASLA's mission is to: facilitate student interactions with the professional design community; promote greater understanding of landscape architecture and its historic, current, and potential responsibilities to society; develop leadership skills; support student activities such as lectures, workshops, field trips and social events; and provide criticism and ideas that enhance the quality of the educational experience. Events produced by SASLA include portfolio workshops, participation in national Park(ing) Day, beginning of semester meetings that

establish program goals, the Peer to Peer Buddy Program linking new with incumbent students, the Mentor Program, and end of semester meetings to recognize student and faculty achievements.

- Student/Practitioner Mentor Program: Initiated in 2007 the Landscape Architecture Mentor Program, pairs individual students with professional landscape architects. It provides students invaluable exposure to the practice of landscape architecture. The Mentor Program requires the student to invite their respective mentor into their studio at least once during the semester for a detailed discussion about the student's work. Mentors are also invited to attend their student's interim and final reviews. The students, in turn, are expected to visit with their respective mentor at the mentor's place of work. This enables students to have exposure to the workings of a professional office, see work currently "on the boards," and to ask questions of their mentors concerning the practice of landscape architecture. A number of students have been invited to "shadow" their mentors as they go to meetings with clients, attend hearings, and meet with other consultants. In 2020-21 there were 65 students and 58 practitioners participating in the Mentor Program. Members of the SASLA Student Advisory Council and the External Landscape Architecture Advisory Council jointly manage the Mentor Program.
- LAR Lecture Series: The Landscape Architecture Lecture Series exposes students, faculty, alumni, practitioners and the public to the breadth of designers, ideas, situations, issues, challenges, technologies and methods, collaborations, and achievements related to the profession. We have 6-7 evening lectures per academic year. Speakers this past year include:
 - o Kotchakorn Voraakhom, Founder of Landprocess and Porous City Network, *Porous Landscape and Water Resilient City*, September 18, 2020
 - o Kongjian Yu, Founder of Turenscape, *Sponge City and Nature Based Solutions*, October 23, 2020
 - o Julian Agyeman, Tufts University, *Just Sustainabilities in Policy, Planning and Practice*, November 12, 2020
 - o Debra Guenther, Mithun, *Return to Community: Designing for Community Wealth Building,* February 24, 2021
 - o Nina-Marie Lister, Ryerson University, *Challenging Lawn Order: Barriers, Bylaws and the Biophilic City*, March 10, 2021
 - o Pamela Conrad, CMG Landscape Architects, *Climate Positive Design: Going Beyond Neutral,* March 31, 2021
 - o Jose Alfredo Ramirez, Architectural Association and GroundWorks, *Envisioning the Planetary*, April 14, 2021
- Professional and Academic Conferences: With some departmental funding, students attend national and state professional and to a lesser extent academic conferences. While they primarily attend ASLA conferences, some students have presented with faculty at CELA and EDRA conferences. The North Carolina ASLA professional chapter produces one educational

conference each year, typically in May or early June. Faculty and students from our program give presentations on the work developed in our academic, research, and service/extension areas. Students are encouraged to attend, and receive special registration discounted rates if they are also members of the SASLA.

 Women in Landscape Architecture (WxLA): Women in Landscape Architecture (WxLA) is a student group in association with SASLA that reaches out to the professional community to strengthen networking opportunities for women in the profession. WxLA hosts networking events regularly throughout the school year attended by NCSU students and faculty, and local professionals.

Certificate Programs: Many students complete one certificate while in the MLA program and a few complete two certificates. Graduate certificates offered by LAEP are: the City Design Certificate and the Graduate Certificate in Disaster Resilient Policy, Engineering and Design. Additionally, students pursue graduate certificates outside the department in <u>Public Interest Design</u> (School of Architecture), <u>Geographic Information Systems</u> (College of Natural Resources) and <u>Horticulture</u>.

The *Graduate Certificate in City Design* was approved in Spring 2012. It is a joint certificate program between the School of Architecture and the Department of Landscape Architecture and Environmental Planning in the College of Design. The aim of this certificate program is to certify that students undertaking the program have had extensive exposure to the knowledge base and practice of design in an urban setting. This is accomplished through a 15 credit hour sequence of courses centrally focused on the design of cities, history and theories of urbanism, and city design methodologies, including a minimum of one advanced city design/urban design studio. The certificate program is intended to promote design inquiry and application at the scale of the city, for students and practitioners of architecture, landscape architecture, and city and regional planning.

The *Graduate Certificate in Disaster Resilient Policy, Engineering and Design* is an interdisciplinary certificate between LAEP, the College of Engineering and the Department of Public Administration that was approved in May 2020. The imperative motivating the certificate is to educate the next generation of practitioners and scholars to apply knowledge gained in the classroom and in the field to reduce the rise in disaster losses and assist communities in adapting to a changing climate. The Disaster Resilient Policy, Engineering and Design Certificate is comprised of thirteen credits, including three core courses (7 credit hours listed below) and one of three optional tracks - 1) Policy, 2) Design and 3) Construction, Civil and Environmental Engineering.

- LAR 582.005 Natural Hazards, Disasters and Climate Change Adaptation Lecture Series, 1 credit
- LAR 582.002 Disaster Resilient Policy, Engineering and Design, 3 credit hours
- LAR 582.008 Survey of Natural Hazards and Disasters, 3 credit hours

Study Abroad: Study abroad opportunities are described earlier in this chapter in the discussion of the International Studio class, LAR 504. While the number of MLA students studying abroad has declined in recent years, efforts are currently being made to encourage greater participation and advise students to arrange their courses to allow for study abroad in the fall semester of their third year.

Competitions/Award Submissions: Students and faculty have opportunities to participate in design competitions and award submissions both in and outside of studios. Recently, MLA students received regional and national recognition for their entries to the Tri State Regional ASLA and National ASLA Awards Programs. Some MLA students team up annually with NCSU Architecture and UNC City and Regional Planning students to submit entries in the *Annual ULI Hines Urban Design Competition*.

2. How does the program identify the objectives and evaluate the effectiveness of these opportunities?

Program faculty, students, and members of the professional community invest considerable time and resources in defining and evaluating the various educational experiences described above with the **overall objective being to offer experiences to students that will enrich their education and prepare them for professional practice**. The students, for example, tend to "vote" as they choose to attend lectures, student sponsored activities and enrollment in SASLA. This year over 65 students became student members of ASLA and NC ASLA. The *Professional Mentor Program* this year has 70 participating students and 65 practitioner mentors. Additionally, at the end of each academic year, the department head asks students to reflect on the merits, strengths, and areas needing improvement. The process is transparent and revelatory.

3. Do students report on these experiences to their peers? If so, how?

Yes. Student ASLA leadership and students on the *Student Advisory Council* convene regularly scheduled meetings with student peers to discuss all aspects of the program. Specific activities include convening informational exchange presentations, brown bag lunches and workshops. Additionally, SASLA maintains an Instagram page where experiences are shared beyond the Department.

4. What opportunities do students have to participate in institutional/college organizations, community initiatives, or other activities? How do students take advantage of these opportunities?

Students elect to participate in many community initiatives in North Carolina and organizations across the campus. Within the College, MLA students participate in the *Student Design Council*, the student chapter of *Emerging Green Builders* and the *National Organization of Minority Architects (NOMA)*. Some MLA students participate on interdisciplinary teams for the Urban Land Institute competition. They collaborate with Architecture, Business and City and Regional Planning students. Students are employed during the school year and in summers working on community initiatives with the Natural Learning Initiative, the Coastal Dynamic Design Lab and Celen Pasalar's extension and engagement projects within communities. In 2018, some MLA students worked with Horticulture faculty member Anne Spafford on the construction of a rooftop garden at the Talley Student Center. Recently, MLA students have volunteered to maintain the food producing garden there.

5. To what degree do students participate in events such as LaBash, ASLA Annual Meetings, local



ASLA chapter events, and the activities of other professional societies or special interest groups?

Students are encouraged to attend and even present at conferences for learning outside the classroom, engagement with practitioners and networking. The Department regularly pays registration fees for interested students to attend the annual NCASLA conference and in 2020 funded 20 students to attend the virtual national ASLA Conference. In 2019, MLA Student Kathleen Armstrong presented her independent *Design Research Project* at the Council of Educators in Landscape Architecture Conference.

G. Coursework: (Bachelor's Level, if responding to Standard 3a or 3c, above)

1. Do students take courses in the humanities, natural sciences, social sciences or other disciplines?

H. Areas of Interest: (Bachelor's Level, if responding to Standard 3a or 3c, above)

1. How does the program provide opportunities for students to pursue independent projects, focused electives, optional studios, certificates, minors, etc.?

2. How does student work incorporate academic experiences reflecting a variety of pursuits beyond the basic curriculum?

I. Research/Scholarly Methods: (*Master's Level,* if responding to Standard 3b or 3c, above)

1. How does the curriculum provide an introduction to research and scholarly methods and their relation to the profession of landscape architecture?

Students and faculty in our program engage in inquiry, both individually and collectively, as the means to propose, inform, and evaluate design ideas, processes, artifacts, and outcomes. The program prepares students to enter the profession with a thorough understanding of its precepts and the capabilities to make judgments through an evaluative design process. It further prepares its graduates to conduct research and invent new and appropriate processes and artifacts as required to meet the challenges of a changing landscape in a changing society.

Research, inquiry, and scholarly methods are integral components of the curriculum. Expectations of and requirements for research are woven into the fabric of our studio and seminar courses. While the instructors' individual research methods vary, most courses require students to:

- Undertake research projects or papers that reinforce and/or enhance course work
- Delve into emerging theoretical questions or technological methods

LAR 540 Research Methods in Landscape Architecture and Environmental Design introduces and expands students' knowledge, application of, and appreciation for the role of research in Landscape Architecture. In this class students learn various "classic" approaches to research centered on problem definition, data requirements, and methodological strategies. Students are required to apply this information in several research-oriented case study assignments. Landscape architecture and College faculty present their past and current research activities/projects and engage students in critical discussion about the methods used, project outcomes, and lessons learned. This class is delivered during the second year in the spring semester.

In addition, each of the advanced design studios (*LAR 507 Advanced Topics Studio in Landscape Architecture and Environmental Planning* and *LAR 508 Design Research Project Studio*), and several required and elective courses are research-based and incorporate research activities in course delivery and assignments. These courses include:

- LAR 582.001 History of Landscape Architecture
- LAR 520 Environment and Culture
- LAR 534 LA Theory and Criticism
- LAR 535 Environmental, Social Equity and Design
- LAR 543 Landscape Performance and Metrics
- LAR 545 City Planning, Landscape Architecture and the Public Realm
- LAR 517 GIS Applications in Landscape Architecture and Environmental Planning

- LAR 546 The Landscape Imperative
- LAR 550 LA Professional Practice
- LAR 630 Independent Study
- LAR 697 Design Research Project Independent Study

The College of Design, as stated in the *Strategic Plan*, is committed to building a demonstrable research ethic. In recent years LAEP faculty have made significant progress, as individuals and as a collective entity, in developing bodies of research and producing tangible products. As a result, faculty momentum to enhance research activity in the College is at an all-time high. Faculty in LAEP lead the College in research productivity and funding. Students directly benefit from this in research assistantships and in classroom projects.

2. How does the program demonstrate that theses or terminal projects exhibit creative and independent thinking and contain a significant research/scholarly component?

The **MLA Oral Examination** provides an opportunity for students to engage in research and scholarship on an imperative of their choice. The process allows for faculty to measure the student's ability to frame an environmental or cultural issue, discuss literature supporting their imperative and propose methods and processes to implement a project supporting the imperative. The purpose of the Master of Landscape Architecture (MLA) Oral Examination is intended to validate the students' understanding and competence in applicable situations requiring critical design thinking processes. Following are the two MLA Oral Questions that have been asked the last three years: *Question #1: What is Your Landscape Imperative?*

Question #2 What is Your Landscape Architecture Design Strategy?

Working with a three-member faculty committee, students engaging in the *LAR 508 Design Research Project studio*, the self-directed final project option, define a topic of their choice and develop the scope, schedule, and processes of their independent project. This is accomplished through a threecourse sequence that includes LAR 540 *Research Methods for Landscape Architecture and Environmental Planning*, LAR 697 *Design Research Project Independent Study* and the 6--credit studio *LAR 508 Design Research Project*.

Rigor and quality of the projects are evaluated by the faculty committee, which includes at least two departmental faculty members and one faculty and/or outside professional on the student's project advisory group. Student work is also assessed more broadly via midterm and end-of--semester final project presentations. Presentations are open to the public and are held within the same timeframe as other studio projects.

These projects usually engage communities or organizations. A *Design Research Project* from Spring 2020 entitled <u>"Peat/Land: Strategies for Restoration, Design, and Planning of North Carolina Peatlands</u>" won a national ASLA award. Another project from Spring 2019 entitled <u>"The Coastal Crescent Trail:</u> <u>Regional Analysis and Design for the Holly Shelter Game Land</u>" resulted in design and construction of one of the final sections of the Mountains to Sea Trail.

4 STUDENT and PROGRAM OUTCOMES.

STANDARD 4: The program shall prepare students to pursue careers in landscape architecture.

INTENT: Students should be prepared – through educational programs, advising, and other academic and professional opportunities – to pursue a career in landscape architecture upon graduation. Students should have demonstrated knowledge and skills in creative problem solving, critical thinking, communications, design, and organization to allow them to enter the profession of landscape architecture.

A. Student Learning Outcomes

Upon completion of the program, students are qualified to pursue a career in landscape architecture.

1. Does student work demonstrate the competency required for entry-level positions in the profession of landscape architecture?

Student work demonstrates the competency required for entry into the profession as evidenced by the very high rate of job placement and sustained employment for our recent graduates; feedback from alumni and professionals in our community, the mentor program and studio reviews; feedback from the LAEP Professional Advisory Council; and recent survey results from students, faculty and alumni and friends (see Addendum G).

The alignment of our first three design studio courses with technology courses means that students gain experience with design implementation and documentation. In the advanced topics studios, students engage project stakeholders where they learn and practice project management, collaboration skills and project delivery processes.

By the time they have reached their final year in the program, 85-95% percent of MLA students have engaged in at least one <u>internship</u> or professional work experience in landscape architecture. The list of firms where recent students have held internships is in the Standard 3 chapter of this report.

Our graduates find <u>entry level jobs</u> relatively easily and many have job offers prior to graduation. Our graduates are employed at leading firms in the US and abroad such as: Design Workshop, Olin, EDSA, Sasaki Associates, AECOM, Turenscape, and Andropogon Associates.

2. How does the program assess student work and how it demonstrates students are competent to obtain entry-level positions in the profession?

As students move through the program, student performance is continually evaluated using multiple methods. Course learning outcomes are measured by faculty in learning assessments which result in student grades. In cases where multiple grades are low, faculty make adjustments by modifying learning content and/or teaching techniques.

Traditional letter grades (A-F) are used in all courses and students must maintain a 3.0 GPA (B average) to remain in the program. For two semesters during the Pandemic, the university allowed students to choose to receive *satisfactory/unsatisfactory* grades instead of letter grades. Student performance and learning assessments are graded both during and at the end of each semester. In addition, students are

given verbal and qualitative feedback on their work. Grades reflect a student's individual growth and ability to conceive and develop design ideas and, within this effort, to properly gather information, analyze it, and synthesize their understanding of the problem. The student's ability to utilize criticism, as well as presentation skills and overall performance at reviews, is taken into consideration. The faculty stresses that each of these areas is essential to the students' success in developing their ideas and communicating their vision and work.

In addition to course grades, <u>other methods of assessing student performance and demonstration of</u> <u>competency to enter the profession</u> are:



Design review and criticism: As students move through the program they are required to take six design studios (4-5 for Track II students). Each studio is structured to ensure that students address problem identification, information collection, analysis, synthesis, implementation, and the effective communication of their design proposal. The curriculum is integrated, ensuring that the critical technical courses are covered as soon as possible so that students are able to test and build on their technical knowledge in the studio environment. Student progress in the studio is

reviewed at interim and major critiques by the faculty members in charge, by outside critics from the profession, faculty from other educational institutions, and clients/community stakeholders.

Students receive feedback covering aspects of the design process as appropriate to the nature of the class and studio assignment. At the end of a presentation, the reviewers typically offer their own views of the students' work covering the array of things done well to those done poorly, along with their ideas and suggestions for improvement. Members of the professional community who participate in these reviews provide students with feedback emphasizing the connections to and expectations of professional practice. A few days following the review, the students and instructors meet to discuss lessons learned, areas needing improvement, next steps, and project successes.

Desk crits and pin ups: During design studio time, instructors meet with individual and small groups of students to discuss and critique their projects. Faculty ask students about what they are trying to achieve, the methods employed, and the results or dilemmas that surface during their inquiry. Instructors monitor each student's progress and offer appropriate feedback.

Faculty/Student meetings: In addition to having their work discussed in the context of public forums, the faculty invite and respond to the students' request for private one-on-one discussions. This provides students with additional opportunities to ask questions, receive personalized instruction and feedback. LAEP faculty are committed to our students' education and will assist all students who make efforts to enhance their performance.

MLA Oral Examination: In accordance with policies of the NCSU Graduate School, all MLA students are required to undertake the MLA Oral Examination in the final semester of their matriculation. The exam requires students to reflect on and communicate the significant body of knowledge, skills and abilities learned during their tenure as graduate students in the MLA program. The exam's questions are written and administered by the faculty of the Department. This exam is intended to test the students' competence in defining a landscape imperative; application of research, precedents and strategies to address the imperative; and design processes to support a project approach to the imperative. Responsibility for implementation and compliance of the MLA Oral Examination with the NCSU Graduate School resides with the Department Head and Director of the Graduate Program (DGP).

Evaluation criteria for the MLA Oral Exam are:

- Clarity of Imperative and application to contemporary landscape issues
- Mastery of relevant theory from literature and relevant project precedents
- Ability to professionally apply core principles and design processes
- Consideration for users and stakeholders evident in principles of diversity, equity, and inclusion
- Understanding of landscape performance based on imperative and/or studio work

External Reviews: The professional community plays an active role in evaluating student work. Local practitioners, particularly those who have attended studio sessions, welcome students to their offices to discuss their projects. Practitioners, including members of NCASLA, the Professional Advisory Board, and the NC Board of Landscape Architects, attend and participate in studio and class project reviews and presentations. Student work that reflects program deficiencies is identified and discussed.

NCASLA members have an increasingly greater presence and role in the program. Annually, NCASLA representatives review student work to determine deserving ASLA Honor and Merit Award recipients. The Chapter has given awards to the maximum extent allowed and has acknowledged the program in public venues for the demonstrated quality of work generated by the field of award candidates and recipients.

The Internship and Job Market: The job market for our students and graduates has been very strong in the past decade and has not slowed during the Pandemic. All recent graduates seeking a position in landscape architecture have found employment in private, public, NGO, or higher education venues. A new mechanism to track graduates was implemented in 2019 with the formation of the NCSU LAEP Alumni and Students LinkedIn Group. This has allowed us to maintain a strong relationship with our Alumni, track where they are working and their job titles. Tracking graduates was a noted weakness of the program in the 2016 LAAB review but the LinkedIn group has allowed us to keep in touch and even celebrate our Alum's professional achievements post-graduation. Recent survey and anecdotal feedback offered by employers and prospective employers about our students and graduates has been overwhelmingly positive and our graduates are actively being recruited by firms across the country.

Internship Reviews: As part of their internship for credit (LAR 650), students are evaluated by the employer in areas pertaining to the student's performance, engagement, attendance, and potential for success. Items cited as deficiencies are reviewed and addressed by the department head and faculty. Internships often lead to full time employment for our graduates.



Awards: Student performance is evaluated through external measures including national, regional and state level design award programs. Recent notable student awards include:

USGS Southeast Climate Adaptation Science Center
Global Change Fellow, Stephanie Kelly, 2020-2021

 2020 National ASLA Student Honor Award: Research and Analysis: PeatLand: Strategies for Restoration, Design, and Planning of North Carolina Peatlands (Madalyn Baldwin, MLA; Faculty Advisor: Andy Fox, FASLA)

2020 National ASLA Student Honor Award: General

Design: Sound Design: Reconnecting the Coastal Edge (Xinyu Li, MLA and Xinyi Liu, MLA; Faculty Advisor: Andy Fox, FASLA)

 The Landscape Architecture Foundation Olmsted Scholar Program, Finalist: Madalyn Baldwin, 2020-2021

- USGS Southeast Climate Adaptation Science Center Global Change Fellow, Rebecca Asser 2019-2020
- 2019 Southeast Regional ASLA Conference Student Awards:
 - Honor Award: General Design The Loving, The Loved (Dong Jae Yi, MLA)
 - Honor Award: General Design Freedom Hill Park (Hongsheng Geng, MLA)
 - Merit Award: General Design Primrose Hall Hearth (Dong Jae Yi, MLA)
 - Merit Award: Student Communications A Place for Community Health + Well Being (Rifat Sharmin, MLA)
 - Recognition Award: General Design The Coastal Crescent Trail (Benjamin Jones, MLA
- 2016 National ASLA Student Honor Award: Student Community Service: Growing Change Prison Flip: Reclaiming an Abandoned Prison Site (Juana Gibson, MLA; Kyle Semon, MLA; Josh Leab, MLA; Beth Faragan, MLA; Pei Chi Huang, MLA; Sarah Walters, MLA; Manpreet Kaur, MLA; Yushan Ji, MLA, Faculty Advisor: Celen Pasalar, Ph.D.)

3. How do students demonstrate their achievement of the program's learning objectives, including critical and creative thinking and their ability to understand, apply and communicate the subject matter of the professional curriculum as evidenced through project definition, problem identification, information collection, analysis, synthesis, conceptualization and implementation?

Program learning objectives directly related to students' critical and creative thinking and their ability to understand, apply and communicate the subject matter of the professional curriculum are listed below. Students demonstrate their achievement of these objectives in multiple areas within the curriculum. Critical and creative thinking is integrated into the experiences discussed below, as is understanding, application and communication of professional subject matter. Students demonstrate their understanding of project delivery processes in these learning experiences as well.

- Provide students with interdisciplinary/transdisciplinary learning experiences
- Provide students with learning experiences at multiple scales, with emphasis on intersecting systems and complexity
- Provide students with learning experiences in techniques and technologies for the practice of landscape architecture
- Provide students with learning experiences in project design and planning processes such as problem identification, programming, site assessment, synthesis, conceptualization and implementation
- Provide students with learning experiences in theoretical and research frameworks, methods, literature, and critical evaluation.
- Prepare students for leadership positions in the profession and the academy
- Engage regional design and community partners in student learning opportunities for professional currency and experiences with project delivery processes.
- Create interdisciplinary curricular opportunities involving students, faculty and/or stakeholders from other disciplines.

Assessment of the above learning objectives is undertaken with the evaluation measure listed in the table in the Standard One chapter.

Oral Exam: The second question of the MLA Oral Exam is directly related to project delivery processes.

<u>Question #2 What is Your Landscape Architecture Design Strategy?</u> Communicate the process/strategy by which you pursue a design project. Consider addressing the following items, as

appropriate: Values informing the process; programming and user needs; site analysis; ideation and conceptual design; advanced design development, evaluation, and visualization. Consider your response in the context of question #1: <u>How has the body of knowledge of landscape architecture informed your strategy?</u> Explain how your process reflects a defensible approach to the design situation, issues, and mission addressed.

With their answer to this Oral Exam question, students must demonstrate a thorough understanding of the processes and feedback loops to pass the exam. A key test of their understanding is the ability to adapt the process to a unique situation or type of project.



Advanced Topic Studio Projects: Advanced Topic Studios engage students in real projects with real stakeholders. This offers students the opportunity to engage in programming, project definition, community engagement, in-depth site or region assessment, and design proposals. Students have led community groups in design charrettes and worked with school administrators on public school grounds. These experiences working with diverse stakeholders give students experience with complex project constraints and planning for implementation such as phasing plans, codes and regulations, costs, and project delivery schedules.

Independent Studio Projects: Students demonstrate critical and creative problem solving and in-depth engagement in multiple phases of a project in the *LAR 508: Design Research Project (DRP)*studio. LAR 508 is intended for students wanting to pursue independent research in a specific area of design. Individual or a team of students (up to 4 people) engages independent inquiry leading to the completion of a self-directed definitive scholarly, research-oriented landscape architectural design project. The research is expected to be integrated and applied within the context of a landscape architectural design application. Students eager to continue their education at a PhD level or possibly pursue a career as a university instructor often pursue this option. The work derived from the DRP should be of the quality suitable for scholarly publication, dissemination at a scholarly/professional conference, or submission to an awards competition venue.

Students who pursue this option are motivated by a research question requiring research and a design application, an extension-based project situation requiring research and a design application, or another project situation requiring research and a design application. In 2019 for example, a student worked with the Friends of the Mountains to Sea Trail to plan, design and implement a key section of the trail near the North Carolina coast. In 2020, another student proposed specific strategies for peatland restoration in eastern North Carolina's vulnerable agricultural communities that are inundated with annual flooding. She worked closely with landowners and municipalities to identify key sites and performed research on best practices for paludiculture. This project won a National Student ASLA Award and the student was also named a National Olmsted Scholar Finalist.

DesignWeek events: In annual DesignWeek events, students demonstrate achievement of our program's learning objectives related to interdisciplinary collaboration, engagement of projects with intersecting systems and complexity, and experiences with project definition and programming. As discussed in Standard 3, DesignWeek is the Department of Landscape Architecture and Environmental Planning's interdisciplinary design charrette that provides MLA students the opportunity to collaborate with students from other departments on campus (Architecture, Civil Engineering, Business, Climate

Change and Society, Public Administration), UNC Chapel Hill (City and Regional Planning) and Duke (Ecology and Society) on projects with the above aims.



The objectives and learning outcomes of these events are to give students experience defining, visualizing, and developing innovative design and planning approaches to complex environmental and social design problems. Students gain experience working within interdisciplinary teams, delegating tasks, and communicating with other constituents involved in the process.

DesignWeek frames a dialogue in a creative problemsolving model and includes research, reflection, and speculation by all participants. It enables this process by

hosting a weeklong event that brings together designers, planners, engineers, policy experts, and community members to begin the design dialogue necessary to frame our directions, and to engage the creativity of our students in the interest of visualizing solutions and strategies.

4. How does the program assess the preparation of students in the above areas?

Multiple evaluation measures are used to quantify achievement of the program objectives listed above. Refer to the table in the Standard 1 chapter for a comprehensive listing of the evaluation measures for each of the program goals and objectives. These evaluation measures will be assessed annually in May just after the university Outcomes Assessment process, and during the faculty and department annual reporting period.

Throughout the academic year, the faculty, as a regular part of faculty meeting and retreat agendas, discuss and review the performance of the students in the program, responses to changing student needs, the success or failure of attempts to integrate subject matter, and issues impacting the content or delivery of course offerings in the future. Students believed to need additional advising are notified and invited to meet with the department head, the director of the Graduate Program and/or other appropriate faculty or staff in the department, college, or university. Notes from these meetings are kept on file in the departmental office.

B. Student Advising

The program provides students with effective advising and mentoring throughout their educational careers.

1. How does the student academic advising and career mentoring function?

Student growth and success is important, and we consider advising and mentoring activities a key part of an MLA education. Many graduating students say that one of the truly special things about our program is the attention and mentoring from the faculty members in both formal and informal settings.

Students are advised and mentored in multiple ways within the MLA program and even beyond. Student advising and mentoring begins within the student recruitment process. Either the DGP or the department head meets individually with every prospective student and advises them about their curriculum track, their path through the program, classroom opportunities, and their career prospects. Prospective students also meet with select faculty they are interested in working with during their time in the program. Once accepted to the program, students are sent the seventy-three-page MLA

Handbook containing information about the curriculum, course sequences, individual courses, employment opportunities, and the many resources available to them as students at NC State.

While students are in the program they continue to be advised and mentored by the head, the DGP, LAEP faculty, and both professional and student mentors. Mentoring activities include career advice, mentoring on scholarship and research activities, and mentoring on classes and out-of-classroom opportunities. We maintain relationships with students beyond graduation through the LinkedIn Alumni Group, office visits, the lecture series, and invitations to return to campus as mentors, guest lecturers and studio reviewers.

Advising Bulletins: Every semester, the department head publishes a student advising bulletin at least four weeks prior to the opening of class registration for the coming semester. The bulletin contains the schedule of all classes that will be offered in the coming semester, elective descriptions, curriculum paths for the two tracks, and dates of the face-to-face advising sessions.

Course and curriculum advising: Student advising sessions are held twice a year with groups of students to discuss common issues and upcoming classes for each cohort year in the program. This is also a time when students can ask questions about changes to their curriculum path, specific classes or waiving a class. Having multiple students in an advising session allows them to learn from each other and discuss common issues. It also reinforces relationships within the cohort.

Additionally, students are always offered the opportunity for a one-on-one meeting with the department head or the DGP at any time during the semester about advising, or any other questions and concerns. Course advising meetings also happen with certificate coordinators to ensure that students can complete a certificate, or sometimes even two, within their MLA curriculum.

Scholarly mentoring by faculty: Scholarly mentoring dealing with subject matter pertaining to course work, research, and professional development is provided by the faculty and practitioners to individuals and groups of students.

Student to student mentoring: The student ASLA group organizes a Peer Mentoring Program for all first year students in the Department. First year students are matched with second- and third-year student mentors who check in with the first-year students regularly advising them on skills in digital graphics or design, time management, elective courses, and internships. Students value this opportunity to learn from their peers.

Oral exam advising: At the start of their final semester, MLA students are required to meet as a group with the department head and DGP to discuss procedures and policies for the required MLA Oral Examinations. They are encouraged to meet with their faculty committee chair multiple times as they prepare for their Oral Exam.

Professional mentor program: Seventy-four practicing landscape architects act as mentors for our MLA students in the *LAEP Mentor Program.* Individual students are paired with a practitioner providing opportunities for both parties to ask questions, discuss the profession, and review student work. The practitioners advise the department head or a faculty member about the work of the student they are mentoring. Mentors are also invited to attend their student's interim and final reviews. The students, in turn, are expected to visit with their respective mentor at the mentor's place of work. This enables students to have exposure to the workings of a professional office, see work currently "on the boards," and to ask questions of their mentors concerning the practice of landscape architecture. Several

students have been invited to "shadow" their mentors as they go to meetings with clients, attend hearings, and meet with other consultants.

Professional mentoring during internships: MLA students receive mentoring and advising during their internships. While we don't require internships of our students, most engage in an internship with at least one firm while in the program. Experiencing different types of professional settings and speaking with multiple practitioners' benefits students tremendously.

2. How does the program assess the effectiveness of the student advising and mentoring program?

The program assesses the effectiveness of student advising and mentoring in the following ways:

- We ask the students directly using surveys and conversations.
- The Student ASLA leadership and the LAEP Student Advisory Council meet with the department head to discuss student concerns, suggestions for improvement and to disseminate information.
- Our student's success in employment after graduation indicates that they have been successfully mentored and introduced to prospective employers through the mentorship program and the many other opportunities to meet professionals.
- 3. Are students effectively advised and mentored regarding academic and career development?

Students are advised and mentored by the department head, LAEP faculty, and advisors in the College of Design Career Resources Office while they are in the MLA program and for a full year after graduation. These services include, but are not limited to, academic advising, career counseling, career services, registration assistance and general information sharing.

College of Design Career Resources Office: The Department is served by a Career Resources Office that reports directly to the Assistant Dean for Student and Academic services and is dedicated to specifically supporting design students, recent alumni, and employer partners. Advisors provide students with effective career advising and mentoring through career exploration, professional development programming, and assistance in navigating their next steps into internships and full-time employment.

Career Services is coordinated through individual career advising appointments, group workshops, and special events involving alumni and employers. Topics include exploring careers, advancing professional readiness, resume and cover letter writing, interviewing techniques, conducting an internship and job search, networking in-person and through social media, negotiating compensation, and much more. The largest annual event is the Design Career Expo featuring 40-50 employer partners and approximately 100 students for individual conversations, group meetings, and interviews. In 2020, the event featured over 430 meetings between employers and students/recent graduates.

Design career services is led by a Director of Career and Academic Advising who has over 10 years of post-graduate experience in higher education having earned a Master of Education in Student Personnel Administration that focuses on student development theory. The office has also utilized a graduate intern to provide additional support. Students receive a weekly career newsletter that promotes events, programs and career development resources created specifically for the College of Design community.

Alumni from LAEP are invited to participate in an annual Fall panel to discuss career progression and advice they have for current students. In Fall 2020, this panel was expanded to discuss how students can manage their careers during the COVID-19 Pandemic.

Career Services collaborates with the LAEP student leaders each year to discuss student interests and goals in planning unique programming opportunities. Assessment of participation in career-preparation activities and engagement in employment, graduate/professional school attendance is also conducted by the Office of Institutional Strategy and Analysis invites feedback from graduating students in the Graduate Future Plans Survey at approximately the time of graduation in May and December. In September, a follow-up survey is conducted for those who had not yet responded to the initial survey.

Career development support is provided by close mentorship by both faculty in the LAEP department and the Design Career Services Office. Students are encouraged to present, learn, and network at professional development opportunities including conferences such as ASLA.

Career services are offered to students in a number of ways. The director of Career Services for the College of Design provides the following services to students:

- Recruiting programs, such as an annual career fair and on--campus interviews with employers looking to hire interns and full--time employees.
- Strategic employer partnerships to increase student job and internship postings which are available through an online database and emailed to students in an email newsletter.
- Numerous networking events, workshops, career panels and other career development events on topics including resume writing, interview skills, networking, and using LinkedIn.
- Individual career counseling on job/internship search strategies, resume/cover letter writing, interview techniques and other career needs.
- Additional career development initiatives including the Professional Development Certificate.

Additionally, students have full access to the resources available through the <u>NC State Career</u> <u>Development Center</u>. Lastly, students receive mentoring on career--related issues from LAEP faculty and the department head both inside and outside of the classroom.

4. Are students aware of professional opportunities, licensure, professional development, advanced educational opportunities and continuing education requirements associated with professional practice?

The department and college provide several venues to inform students of professional opportunities throughout curriculum delivery, events and activities hosted by the Student ASLA, the LAEP Professional Advisory Board, and the LAR Lecture Series. Design studios, particularly LAR 503 Design Development and Construction Documentation, and LAR 550 Landscape Architecture Professional Practice deliberately expose and emphasize these topics.

Each year the Student ASLA works with the department head to produce a number of professional development activities such as the Professional Mentor Program, a Portfolio Design and Criticism Workshop, and brown bag lunch sessions with lecture series speakers and other visiting design practitioners. We also convene meetings with a representative from the NC Board of Landscape Architects to discuss licensure requirements, procedures, and expectations.

In addition, the College of Design's Office of Student and Academic Services offers topical workshops throughout the academic year. Following, for example, are the workshops delivered during the 2020-2021 academic year:

FALL 2020 Resume Writing Sept. 17, 2pm

Learn how to write a resume that highlights skills, experience, projects, education, and accomplishments relevant to design internships and career opportunities.

Conducting a Search - Internships & Jobs Oct. 1, 2pm

Learn how to navigate an internship or job search to move forward in your next steps.

LinkedIn Best Practices Oct. 8, 2pm

Discuss and build a LinkedIn profile to establish a professional online brand through social media, expand your network to reach more alumni and hiring managers, join groups, and apply for internships and career opportunities.

Video Interviews Oct. 22, 2pm

Discover tips for interviewing and gain insight on how to best prepare for virtual interviews involving video interaction.

ARC/LAR Managing your career during COVID-19: Panel managers & alumni Oct 28th, 12pm Engage with alumni and hiring managers as they provide insight into navigating career transitions and how to manage your career during covid-19.

Summer State Government Internship Info Session Nov. 9 th , 12pm Meet Candace Dudley, Internship Coordinator, and learn about the NC State Government internship program.

SPRING 2021

Writing the Resume January 22nd, 11am and January 25th 6pm

How to Thrive at a Virtual Career Fair January 29th 11am, Feb. 1st 6pm, Feb. 5th at 11am, Feb. 8th at 6pm

Learn how to advance your introduction known as your elevator pitch to make the most of the initial impression in meeting a hiring manager. Discuss strategies for following up with hiring managers to keep moving along in selection processes for internships and career opportunities.

WIX Presentation Feb. 3rd, 12pm

Design Career Expo Spring 2021, Feb. 11 th , 11am-3pm The largest annual recruiting event for the College of Design including over 40 employers, 108 students/recent graduates and over 430 meetings.

Conducting a Job Search March 26 th , 11am

Utilizing LinkedIn April 2, 11am

Video Interviews April 9th,11am

5. How satisfied are students with academic experiences and their preparation for the landscape architecture profession?

Evidence gathered from student and alumni surveys, exit interviews with graduates, members of the Student Advisory Council, and from outside sources such as *Design Intelligence* indicates students are

satisfied with the quality of landscape architectural education they received at NC State. The results of these assessments influence revisions made to the program curriculum and courses, the development of the *Landscape Architecture Lecture Series*, the external financial support donated to enroll students in the ASLA (prior to free membership), and the support provided to underwrite the costs associated with student competitions and attendance at NCASLA and ASLA conferences.

As discussed in the Introduction chapter of this report and more extensively in Addendum G, students cited the following positive academic experiences and qualities that prepare them for landscape architecture practice:

- Design studios and opportunities for community engagement
- Faculty expertise and diversity of research
- The interdisciplinary focus of studios, seminar courses and research and engagement opportunities
- Student-faculty relationships
- Strong, "well-rounded" curriculum
- Diversity of research and scholarship opportunities
- Professors of the Practice who bring current professional issues into their classes
- Faculty ability to transition to online teaching during the COVID-19 Pandemic
- The Graduate Students Support Plan (GSSP) benefits for Teaching and Research Assistantships
- Affordable tuition and the opportunity to become a North Carolina Resident after 12 months residence in NC
- Prioritization of imperatives such as climate change and environmental and social equity in many courses
- Career Services support
- Access to technology such as 3D printers and laser cutters
- Preparation for internships and professional practice work



STANDARD 5: The qualifications, academic position, and professional activities and individual development of faculty and instructional personnel shall promote and enhance the academic mission and objectives of the program.

INTENT: The program should have qualified experienced faculty and other instructional personnel to instill the knowledge, skills, and abilities that students will need to pursue a career in landscape architecture. Faculty workloads, compensation, and overall support received for career development contribute to the success of the program.

A. Credentials

1. Is the faculty's balance of professional practice and academic experience appropriate to the program mission?

The credentials of the faculty reflect the department's emphasis on the value of design thinking applied to current and future practices. The faculty members represent the broad range of research, practice, and engagement expertise to teach students the theories, tools, and techniques needed to pursue professional practice and leadership in the profession. The Department includes a range of faculty members suited to combine the strengths of evidenced-based research coming from both the academic and professional realms.

Faculty Hires and Appointments since the last LAAB review:

- Meg Calkins, FASLA, SITES AP, joined the Department in August 2018 as Department Head and Professor.
- In 2016, Mark Hoversten, FASLA, FCELA, joined the College of Design as Dean. Dr. Hoversten's academic home is in LAEP.
- In 2017, Elen Deming, FASLA, FCELA, joined the College of Design as Director of the new Doctor of Design program. Dr. Deming's academic home is also in LAEP.
- In January 2019, Gavin Smith, PhD, AICP was hired with tenure at the rank of Professor.
- In August 2019, Carla Delcambre was awarded a tenure track position as Associate Professor. She previously taught as an Assistant Professor of Practice since 2005.
- **Deepti Adlakha** was hired as an Associate Professor and Director of the Natural Learning Initiative in August 2021.

Faculty Retirements since the last LAAB review:

- In 2018, Department Head and Professor Gene Bressler, FASLA, stepped down and transitioned to phased retirement. He retired fully in December 2020.
- In 2018, Art Rice transitioned from his position as Associate Dean in the College of Design back to full time teaching in the Department. He retired fully in July 2020; he continues to teach parttime in the Doctor of Design program
- **Robin Moore** stepped down as Director of the Natural Learning Initiative and Professor of LAEP and entered phased retirement in July 2021. He teaches half time in the program.

• **Fernando Magallanes** entered phased retirement in July 2021. He teaches half time in the program.

Faculty Promotions since the last LAAB review:

- Andy Fox was tenured and promoted to Associate Professor in 2016. He was promoted to Professor in 2019.
- Kofi Boone was promoted to Professor in 2019.
- Celen Pasalar was tenured and promoted to Associate Professor in July 2020.

In memory:

Lewis James Clarke, FASLA (1927-2021)

In the fall of 1952, Henry L. Kamphoefner, founding dean of the North Carolina State College School of Design (SOD), hired Clarke to teach architecture and landscape architecture. He remained a faculty member until 1968. In addition to teaching at the SOD, Clarke taught at the University of Virginia, University of Pennsylvania, Harvard, University of Toronto, Michigan State University, Louisiana State University, and the University of California at Berkeley. His signature works include Palmetto Dunes, Hilton Head Island; Carolina Trace, Sanford, North Carolina; and Ford's Colony, Williamsburg, Virginia. In 1980, Clarke was elected a Fellow of the American Society of Landscape Architects (FASLA). He was an associate member of the Royal Institute of British Architects (ARIBA). Clarke passed away in summer 2021.

Following is a concise list of MLA program faculty and their respective areas of expertise. Full faculty bios are in Addendum E.

Full-Time Tenured and Tenure Track Faculty:

Meg Calkins, FASLA, SITES AP is Department Head, a member of the Dean's Administrative Council, the Campus Design Review Panel, and the Executive Board of the NCASLA. Meg brings a long career in academic leadership, scholarship, and service to the profession to her administration of the LAEP Department at NC State. She is the author of the book <u>Materials for Sustainable Sites</u> and the editor of the <u>Sustainable Sites Handbook</u>. Meg has taken an active leadership role in development and implementation of the Sustainable Sites Initiative (SITES) since 2003. She was recently appointed to the Editorial Advisory Board of *Landscape Architecture* Magazine where she is a frequent Contributing Editor writing over thirty articles on site construction materials and exemplary designed works over the last two decades.

Kofi Boone, FASLA offers students expertise in community engagement and design, environmental justice, and social equity. Kofi's research focuses on the integration of technology and new media into participatory design, and on social and environmental justice in design. Kofi is an *Institute of Emerging Issues Faculty Fellow* and co-director of the *Ghana International Design Studio*. Kofi's teaching and research brings environmental justice and social equity into the curriculum. He has and continues to develop new courses that focus on direct engagement with affected communities. He is an active member of the Landscape Architecture Foundation (LAF), serving as President-Elect in 2020-2021, and is a member of the *Academy of Outstanding Teachers* and the *Academic Liaison for ASLA's Environmental Justice Professional Practice Network*.

Gene Bressler, FASLA (retired December, 2020) brought a career of academic leadership to his thirteen year position as department head symbolized by his 2006 *Outstanding Administrator of the Year Award*

from CELA. He is responsible for leading a wide array of curriculum innovations in the department namely the sweeping curriculum changes modeled from national best practices that have increased professional practice community interaction with students, topical advanced courses rooted in regional and national trends, and unique partnerships enabling faculty and students to address critical landscape issues facing NC communities.

Andrew Fox, FASLA, PLA is the founder of the Landscape Architecture Design + Build Studio as well as co-creator and co-director of the *Coastal Dynamics Design Laboratory (CDDL)*. His research through CDDL positions students to lead in the areas of resiliency and climate adaptation facing North Carolina's coastline. Andy is an expert in multi-disciplinary design inquiry, design implementation, and emerging design and construction issues associated with the urbanizing landscape. He is a nationally recognized leader for excellence in teaching having been named a member of the *Academy of Outstanding Teachers*, and a *University Park Faculty Scholar Mentor*. Andy combines the expertise as a leading practitioner with scholarly rigor and is responsible for a paradigm shift towards applied teaching and learning in the department.

Fernando Magallanes, ASLA, PLA (entered phased retirement in July 2021) is a nationally recognized educator and a recipient of the CELA *Outstanding Educator Award*. Fernando specializes in teaching design fundamentals. He mentors MLA students and freshman undergraduate students in four design disciplines (Industrial Design, Graphic Design, Architecture, and Art & Design) into the traditional formal language of design as well as the evolving thinking about design practices. Fernando has presented and written on experiential learning, drawing, and contemporary and emerging trends in landscape architecture practices. He served on the *2015 National ASLA Student Awards Jury*.

Celen Pasalar, PhD served as the Assistant Dean for Research and Extension until July 2021. She is currently the College Extension specialist and Associate Professor in Landscape Architecture and Environmental Planning. As a faculty with Extension appointment, she has led research, community-based extension and engagement projects that built on each effort's success resulting in national recognitions, peer-reviewed publications, and impactful partnerships with scholars within and outside of NC State University. Celen developed the department's *Research and Strategic Thinking* course; she is a key leader in the department's strategy to the increase the rigor of student design research efforts and leads a topical advanced design studio focusing on urban design and smart cities in various urban settings within North Carolina.

Carla Radoslovich Delcambre, ASLA, PLA is the Director Graduate Program (DGP) and an Associate Professor in the Department of Landscape Architecture and Environmental Planning at North Carolina State University. Carla's teaching is focused on environmental and ecological issues particularly those related to sustainable design, storm water management and brown field redevelopment. She has taught graduate design studios and seminars in digital media, urban design, site development, design build and construction. Carla teaches a series of classes that brings advanced modeling, visualization, and other contemporary tools into the MLA program. Carla is currently pursuing her Doctorate in Design at the University, researching tactical, computer visualization tools which create immersive environments and identify best practices in sustainable design.

Robin Moore, Honorary ASLA, (entered phased retirement in July 2021) is a co-founder of the *Natural Learning Initiative (NLI)* and an international leader in the design of natural play environments for families and children. Robin's research focuses on innovative methods for community engagement that provides students with opportunities to develop their expertise in evidence-based design practices. His leadership in urban design informs his *Human Use of the Built Environment* seminar as well as the

Growing In Place Symposium, NLI Institutes, and annual events that bring students in contact with international leaders in practice.

Gavin Smith, PhD, AICP is an internationally recognized expert on natural hazards, disasters, and climate change adaptation and as such regularly speaks at national and international conferences, conducts media interviews with US and international newspapers, radio and television outlets. He has served as an advisor to three US Governors, multiple states, more than 100 local governments, and several nations. He teaches courses focused on natural hazards, disasters and climate change adaptation as part of a new certificate program he developed entitled *Disaster Resilient Policy, Engineering and Design*.

Research Associate Faculty

Nilda Cosco, PhD is a Research Associate Professor in LAEP and co-founder of the Natural Learning Initiative (NLI). She is an international leader in the design of natural play environments for families and children. Nilda's research focuses on the impact of designed outdoor environments on children's health outcomes. Nilda's work with the National Institutes of Health (NIH) and the National Science Foundation (NSF) provides students with experience learning from rigorous research and supports evidence-based design approaches. She is also a pioneer in the development of distance-learning approaches and online teaching techniques.

Travis Klondike, ASLA is an Assistant Research Professor in the NC State University Coastal Dynamics Design Lab and the Department of Landscape Architecture and Environmental Planning. His work blends hazard mitigation assistance and conservation planning by leveraging contemporary methods of geospatial analysis, community engagement, visual narration, and grant-writing as catalysts for public good. Travis teaches the *Design Development and Construction Documentation* studio and the *Site Design and Environmental Planning* studio in LAEP.

College Administrators with Academic Homes in LAEP

Mark Hoversten, PhD, ASLA, FCELA, AICP serves as Dean of College of Design. Mark has received seventeen national and regional planning and design awards, and has published and lectured widely. He served as president of the Council of Educators in Landscape Architecture and as chair and member of committees, and review teams for the Urban Land Institute, the Landscape Architecture Accreditation Board, the Southern Nevada Interpretive Association, and the Nevada Statewide Transportation Advisory Committee. Mark's research focuses on interpretive planning in desert climates, context sensitive highway design, and alternative futures landscape planning.

M. Elen Deming, DDes, FASLA is a design research methodologist and a landscape historian. Elen fulfills two distinct functions at the College of Design. She is the Founding Director of the Doctor of Design (DDes) program, which offers doctoral-level training for industry leaders working on practice-based design research problems. She also teaches topics in design history and theory, and examines cultural history, values, and meaning in landscape representation. Currently, in LAEP, she teaches the graduate-level survey course: *LAR 582.001 History of Landscape Architecure*.

Adjunct Professors of the Practice

Charles A. Flink, FASLA, PLA is Director of the College of Design Initiative for Community Growth and Development, teaches in the Department and continues to operate his consulting practice as President of Greenways Incorporated, a national and international greenway and open space consulting firm based in Durham, North Carolina. Chuck is widely regarded as a national and international authority on greenway planning and design, having completed comprehensive greenway and open space plans for

more than 250 communities within 37 States. Chuck has authored or co-authored three books: <u>The</u> <u>Greenway Imperative: Connecting Communities and Landscapes for a Sustainable Future; Greenways. A</u> <u>Guide to Planning, Design and Development</u>, and <u>Trails for the Twenty First Century</u>. Chuck teaches the *Landscape Imperative* seminar and two recently developed real estate development seminars.

Daniel A. Howe, FASLA, AICP is a Fellow of ASLA and a former Assistant City Manager for the City of Raleigh. In that capacity, Dan used his design and planning expertise to lead multidisciplinary efforts to revitalize downtown, including the development of Raleigh's City Plaza, the Convention Center, and Fayetteville Street. He teaches courses demonstrating the overlap between landscape architecture and urban planning, challenging students to embrace a multi-scalar view of professional practice in cities and regions.

Emily McCoy, ASLA, PLA is a Principal at Design Workshop in Raleigh and teaches courses in GIS and Landscape Performance in the Department. Her professional practice and research interests are focused on projects which seek to blur the line between infrastructure and landscape to create immersive, equitable and just spaces for all that tell stories of place. Her joy and passion for working with teams and communities to create socially, economically, and environmentally high-performance landscapes are reflected in such award-winning work and research on the US Coast Guard Headquarters in Washington, DC; Shield Ranch in Austin, Texas; and Shoemaker Green, Philadelphia, PA. Emily is the author of the Landscape Architecture Technical Information Series (LATIS) publication <u>A Landscape Performance +</u> Metrics Primer for Landscape Architects: Measuring Landscape Performance on the Ground.

Ben Monette, ASLA, PLA is the founder of Mud Landscape Architecture, Planning, and Urban Design studio. His career has focused primarily on high profile public projects of various scales where he has had the opportunity to work with many world-renowned planners, architects, and designers. He has led intense site scale urban design efforts as well as city-scale green infrastructure planning. He has had the good fortune to participate in many artist collaborations, the most meaningful of which have generated a unique and invigorating design perspective that informs his work. Ben is an Assistant Professor of Practice in LAEP at NC State and has lectured at the University of North Carolina at Chapel Hill, the University of Pennsylvania, and Thomas Jefferson University.

Rodney Swink, FASLA, PLA is a past President of ASLA, former director of North Carolina's Main Street Program, a winner of the ASLA President's Medal and the LaGasse Medal. Rodney was a member of the NCSU Landscape Architecture Advisory Board, helped develop the human health and well-being component of SITES, and serves on the College of Design's Leaders Council. He provides students with real world examples of professional leadership especially in the areas of historic preservation, public landscapes, and urban design. His professional practice course introduces students to the requirements of licensure and ethical professional conduct and challenges them to develop a broad view of potential impact on the future of landscape architecture.

Faculty Research Productivity

Landscape Architecture faculty generated the following funding to support research and scholarly endeavors during the accreditation period of Fiscal Year (FY) 2016 – FY 2020:

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Total/Faculty
Nilda Cosco	\$1,208,485	\$1,168,643	\$78,049	\$179,871	\$183,506	\$2,818,554
Robin Moore	\$277,691	\$86,848	\$99,705	\$578,610	\$121,172	\$1,164,026

Andrew Fox		\$82,000	\$164,492	\$208,098	\$339,712	\$794,302
Celen Pasalar	\$9,000	\$179,505	\$60,197	\$49,901	\$260,806	\$559,409
Gavin Smith				\$161,982	\$154,000	\$315,982
Kofi Boone		\$10,000		\$18,134		\$28,134
Carla Delcambre		\$13,850	\$8,000	\$46,092		\$67,942
OVERALL TOTAL	\$1,495,176	\$1,540,846	\$410,443	\$1,242,688	\$1,059,196	<u>\$5,748,349</u>

2. Are faculty assignments appropriate to the course content, delivery methodology, and program mission?

The department head, in formal and informal consultation with the faculty, regularly reviews faculty assignments to advance the department's mission and the curriculum goals and objectives. Teaching assignments are directly related to the expertise of the faculty member, and effort is made to align teaching and research interests.

This evaluation of faculty assignments happens through the *Statement of Faculty Responsibilities (SFR)* and the *Annual Review* processes. It also happens collectively and transparently with the faculty during retreats and faculty meetings. The external *LAEP Professional Advisory Board* and other points of contact with the practitioner community provide additional input on the curriculum and teaching assignments as they share their views of student work, and the immediate and long-term needs of professional practice.

3. How are adjunct and/or part-time faculty integrated into the program's administration and curriculum evaluation/development in a coordinated and organized manner?

Professional (adjunct) faculty members, together with tenured/tenure track faculty are asked to offer constructive criticism and suggestions to improve any and all aspects of program content and delivery, comment on administrative decisions, and respond to matters concerning department governance such as: faculty scholarship, curriculum and courses, the lecture series, program sponsored exhibitions, alumni and practitioner relations, student recruitment, student conduct, facilities and equipment, student activities, and faculty travel. All faculty can comment on administrative decisions although formal departmental decisions are determined by the Department Voting Faculty (DVF).

Due to their leadership roles in professional practice, professional faculty collaborate and participate in the development of innovative courses to address emerging issues. These include design workshops and special topics courses in areas such as: landscape performance and metrics, digital modeling and representation, planning, and landscape imperatives.

The department head reviews student-generated course evaluations of all faculty and provides ongoing mentoring to enhance performance and assess curricular fit. The department head meets formally at least once a year with each adjunct faculty member to discuss their professional achievements and performance, suggestions, and interests in teaching.

B. Faculty Development

1. How are faculty activities – such as scholarly inquiry, research, professional practice and service to the profession, university and community – documented and disseminated through appropriate media, such as journals, professional magazines, community, college and university media?

The department head meets with faculty regularly to strategize scholarship dissemination strategies to both print and online journals, and professional magazines. The department provides resources to support award submittals, conference attendance, and publications.

LAEP faculty discuss research interests regularly and share potential dissemination outlets and feedback on in-progress publications. Many are members of academic and professional organizations that offer conferences and publication opportunities such as CELA, EDRA, ASLA, ACSA and APA.

Faculty activities are formally detailed and documented in the faculty member's *Annual Report* that is prepared and filed each May. This report is used, in part, to inform annual faculty performance appraisals and the College of Design's *Annual Report* to the Provost and Chancellor's offices.

University Level

The Provost and Chancellor identify scholarly efforts for inclusion in University media including the publication, <u>Results</u>. University forums and inter-collegiate gatherings offer faculty opportunities to share research findings with peer groups. *Faculty Research and Professional Development (FRPD)* grants are issued annually by the University and require dissemination as a part of the grant requirements. NCSU also offers other <u>internal funding opportunities</u> for faculty.

College Level

The College's website and magazine, *DesignLife*, regularly solicits and shares faculty research efforts. Faculty are invited to present to the College of Design's *Leaders Council* in their annual visits. The *Leaders Council* is an external group made up of practitioners and thought leaders from across the nation. Informal connections facilitate dissemination of faculty work through professional networks.

The College has an active social media presence that announces faculty achievements, honors, awards, publications, and more to followers on LinkedIn, Facebook, Twitter, and Instagram. The College also uses its website (<u>https://design.ncsu.edu</u>) for promotion, in addition to giving each faculty member - both tenured and adjunct - a personal profile page to share his or her own achievements.

The College frequently sends email announcements to internal faculty, staff, and students and periodically sends email announcements and press releases, externally, to alumni and the general public. It features all faculty achievements in its *Annual Report* to the University Chancellor. The College's *Office of External Relations* maintains close communication with NC State University's *Department of University Communications* and the *NC State Alumni Association*, both of which publish articles on websites or in magazines about faculty achievements. In addition, the College participates in the University's *Digital Billboard System* that displays announcement slides on digital screens across campus.

Department Level

The Department of Landscape Architecture and Environmental Planning has several avenues through which it promotes events and achievements related to faculty. The Department posts regularly about faculty achievements, honors, awards, publications, and news to departmental social media pages on LinkedIn, Instagram, Facebook and Twitter. These posts are often shared on individual faculty, student and alumni social media pages, amplifying their presence.

Faculty and their projects have also been featured in national magazines, such as *Landscape Architecture* Magazine and *Places Journal*. The Department of Landscape Architecture actively works with organizations such as the *Council of Educators in Landscape Architecture (CELA)* and the *North Carolina Chapter of the American Society of Landscape Architects (NCASLA)* to send information via email and social media. Landscape Architecture students also maintain a strong and active chapter of the Student ASLA (SASLA) on campus and on social media.

2. How do faculty teaching and administrative assignments allow sufficient opportunity to pursue advancement and professional development, as well as improvements in course content and delivery methodologies? Are faculty duties, workload, and opportunities similar to other faculty in related disciplines or academic units?

Faculty development at the department level is handled on an individual basis, with the Department Head mentoring individuals, allocating resources, and release time to meet the needs of the Department and individual faculty members.

Per University policy, all faculty are required to prepare a **Statement of Faculty Responsibilities (SFR)** in collaboration with the Department Head:

The Statement of Faculty Responsibilities (SFR) is a statement of the approximate percent effort expected of the individual faculty member in each realm of responsibility and general description of the activities to be undertaken in each realm.

The SFR serves three purposes. First, the SFR should reflect the plans for faculty members' work efforts. Second, the SFR can be used by the relevant department head(s) (or other appropriate supervisor in special cases) to ensure that the effort of each faculty member contributes appropriately to the mission and goals of NC State as well as the mission and goals of the faculty member's academic unit(s) (e.g. department, interdisciplinary cluster, college). Third, the SFR should be used in reviews of faculty to provide context for their accomplishments in different realms of responsibility.

The six realms of responsibility outlined by the university are Teaching and Mentoring of Undergraduate and Graduate Students, Discovery of Knowledge through Discipline-Guided Inquiry, Extension and Engagement with Constituencies Outside the University, Creative Artistry and Literature, Technological and Managerial Innovation, and Service in Professional Societies and within the University; these realms are defined in Section 2, below. Any realm to which 0% effort is expected should not be included in a faculty member's SFR; any realm to which more than 0% effort is expected must be included in the SFR.

The SFR is used in conjunction with the annual faculty Activity Report in the Annual Review of the faculty member and in post-tenure reviews of tenured faculty members (REG 05.20.03 Annual Reviews of Faculty Members; REG 05.20.04 Post Tenure Review of Faculty). For reviews related to reappointment, promotion, and tenure, the SFR provides a framework for understanding the relevant realms of responsibility and percent effort in each realm for the individual faculty member.

Per the College Workload Policy, full-time tenure track/tenured faculty are typically expected to allocate 60% of their effort to teaching. This translates to 18 credit hours per academic year. Typically this includes a studio and seminar course each semester. Faculty work with the department head to use research funds for teaching release in order to reduce their teaching load as needed for research and scholarship. Research, engagement, and service loads vary by faculty and are established in collaboration with the department head.

Further, the department head conducts an annual review with each faculty member. The department head solicits an Annual Report and updated Curriculum Vitae (CV). Faculty identify future development opportunities in research, teaching, and engagement with the support of the department head.

Some faculty members have administrative appointments in the department or college. Most administrative appointments involve a release from teaching. The department head is required to teach 6 credit hours per year, the Director of the Graduate Program is allowed a three-credit hour course release with an annual stipend, and the College Director of Extension and Engagement is allowed a six credit hour course release and stipend. These course releases for administrative work are consistent with releases in other College departments.

Teaching workloads of departmental faculty are consistent with other faculty in the College of Design, but are generally higher than teaching loads of faculty in other colleges at NC State University.

3. How are the development and teaching effectiveness of faculty and instructional personnel systematically evaluated?

The department head works with each faculty member to develop the **Statement of Faculty Responsibilities (SFR)**. This document summarizes targets for faculty productivity. The department head conducts an annual review with each faculty member based on the SFR and yearly goals for teaching, research, engagement (where applicable) and service.

The **Annual Review process** includes a conversation and written appraisal of the faculty member's performance and achievements in the areas of teaching, research, and service structured around the following criteria:

- How has the faculty member performed as an instructor in the classroom and as a mentor with individuals or groups of students?
- How has the faculty member performed as an advisor to students?
- How has the faculty member performed as a scholar as demonstrated in their writings, publications, external lectures, or other notable achievements?
- (where applicable) How has the faculty member engaged with communities/organizations to support their design and planning needs?
- How has the faculty member contributed to the operations of the department, college, and university as demonstrated in their attendance and participation in faculty meetings, committees, fulfillment of assignments, or other such activities?

The department head's written assessment is based upon a review of all student-generated course evaluations, personal observation, and by seeking consultation with members of the faculty and students. Any recommendations or suggestions for improvement are included in the written appraisal. The faculty member signs the appraisal document that signifies that s/he has read it. Faculty members have the right to submit in writing additional information or evidence counter to, in correction thereof, or in support of the appraisal made by the department head. This annual review letter is posted in the faculty member's employment file and in the electronic repository *RPT (Reappointment, Promotion and Tenure) Online.*

Peer review of teaching occurs at regular intervals per College policy in support of standards established by the Office of Provost. Peer reviews of teaching can include recommendations for improvement and the identification of development resources to support teaching.

The goal of in-class peer review of teaching is to provide consistent and thoughtful input that contributes to teaching effectiveness. It will ensure that all faculty members have a teaching peer review completed as specified by University regulations. Finally, peer review will foster broader understanding of courses and teaching approaches taking place in the College.

Consistent with university regulations, College of Design assistant professors must have one course reviewed each academic year, with a minimum of three reviews before going up for tenure. Associate Professors and Professors must have one course reviewed every five years, aligned with their post tenure review schedule. Non-tenure track faculty with .75% positions or greater must have at least one course reviewed annually for the first three years of employment. After that they must have one course reviewed every three years. More frequent reviews can be required by the unit head / director. Refer to <u>REG 05.20.10 Evaluation of Teaching</u> for additional information on peer review scheduling related to RPT and PTR processes.

Student evaluations of teaching are included in annual reviews and trends are communicated by the department head to the faculty. Incentives are used to encourage excellence in teaching including nomination for department, college, university and external award programs.

4. How are the results of these evaluations used for individual and program improvement?

Results of annual reviews, peer evaluation of teaching, and course evaluations reveal areas for both individual and program improvements.

Program improvements are developed by the department head and faculty in multiple settings. The departmental curriculum committee regularly addresses program improvements. All faculty develop program improvements at bi-weekly faculty meetings, committees of faculty related to area of improvement, and bi-annual faculty retreats. For example, improvements were made to the History/Theory sequence in 2020-21 through a series of meetings with faculty teaching history and theory courses. These improvements were then vetted by the full faculty at multiple faculty meetings and one faculty retreat.

Individual faculty development is a critically important factor leading to the Department, College, and University achieving their stated mission, goals and plans as presented in SER Section 1.

At the University level: The University's <u>Office for Faculty Excellence</u> provides a wide array of tools to improve teaching. Its mission is to serve faculty in groups and to individualize services whenever necessary. Service areas provided by the Office for Faculty Excellence include:

- Consultation, individualized or group
- Teaching and learning workshops
- Teaching and learning with technology
- Mentoring pertaining to research, scholarship, and grants
- Service learning and engagement
- Leadership
- Work-life integration
- International opportunities/campus diversity
- The campus community
- Teaching awards
- New faculty orientation

In the area of **Professional Development** the University offers the following additional resources:

<u>McKimmon Center – Office of Professional Development</u> : The McKimmon Center offers an array of professional development workshops, seminars, and conferences. The website provides current links to upcoming events as well as registration information.

<u>Office of Outreach and Engagement</u>: The Office of Outreach and Engagement has a number of resources for faculty who wish to become more involved in extension and engagement and interdisciplinary activities.

Distance Education and Learning Technology Applications (DELTA)

DELTA fosters the integration and support of learning technologies in NC State's academic programs, both on the campus and at a distance. They coordinate the funding and production of all distance-based credit programs and courses for the university. DELTA offers workshops, seminars, and support for teaching and learning using technology in face-to-face and distance education environments.

At the College level: Faculty development at the College level is currently informal. Each faculty person, whether tenured, tenure-track, or adjunct, is invited to meet with the dean, the associate dean, and faculty members resident in other departments to discuss their personal development strategies. In addition, the College's <u>Retention, Promotion and Tenure Policy</u> describes the performance criteria and processes associated with these actions.

At the Department Level: Tenure track faculty work with the department head to identify a faculty mentor to advise them about their teaching, scholarship and service activities. Faculty are encouraged to attend the Council of Educators in Landscape Architecture (CELA) conferences, and other academic and professional conferences related to their areas of teaching and scholarship in order to improve their performance.

5. How do faculty seek and make effective use of available funding for conference attendance, equipment and technical support, etc?

Many of the faculty are active in professional and academic organizations that host conferences and invite peer-reviewed presentations. These include ASLA, CELA, EDRA, IFLA and regional venues including the *North Carolina ASLA Conference, Natural Learning Initiative Conference* and the *Urban Design Conference.* Faculty are encouraged to attend professional conferences related to their specific area(s) of teaching and scholarship. The department provides at least partial, if not full, support for their conference attendance expenses if faculty have conference presentations and papers accepted. Absent such a presentation, department financial support is dependent upon available resources.

The department head solicits requests for equipment and software from the faculty during the year. These requests are delivered to the Dean's office and the College's *Information Technology Committee* for prioritization and budgeting. Virtually all requests within the past 6 years have been fulfilled.

6. How are the activities of faculty reviewed and recognized by faculty peers?

Faculty activities are reviewed and recognized by peers in several ways:

The **College Awards Committee** nominates faculty for excellence in teaching, research, and mentoring. Department heads work with the dean to identify faculty for applicable fellowships and endowed awards.

The **LAEP faculty nominate** each other for excellence in teaching, research and service awards with outside organizations such as CELA and ASLA.

Peer review of teaching occurs at regular intervals per College policy in support of standards established by the Office of Provost. Peer reviews of teaching can include recommendations for improvement and the identification of development resources to support teaching.

Tenure track faculty work with the department head to identify a **faculty mentor** to advise them about their teaching, scholarship, and service activities. The department head mentors all faculty as well. In the past six years there have been two successful promotion cases and two successful promotion and tenure cases.

7. How do faculty participate in university and professional service, student advising and other activities that enhance the effectiveness of the program?

Department, College and University Service All faculty choose and/or are delegated department, college, and in some cases university service responsibilities ranging from committee assignments to advisory groups. They have influenced policies, curriculum, and governance at all three levels of the institution. They serve as Chairs and members of committees such as: University Reappointment, Promotion and Tenure Committee; University Courses, Curricula and Academic Standards Committee; the College Reappointment, Promotion and Tenure Committee; the College Facilities and Technologies Committee; the College Diversity, Equity and Inclusion Committee; the College Honors and Awards Committee; the College Library Committee; the Department Diversity, Equity and Inclusion Committee; the Department Diversity, Equity and Inclusion Committee; the College Committee; and many more.

Professional Service LAEP Faculty serve beyond NCSU on advisory boards, technical committees and contributors to regional, national and international organizations. Faculty have served as Chairs, trustees and executive board members at the: Landscape Architecture Foundation (LAF), American Society of Landscape Architects, American Planning Association, Council of Educators in Landscape Architecture, Environmental Design Research Association, Green Business Certification Institute (GBCI), Sustainable Sites Initiative (SITES), US Green Building Council (USGBC), National Academy of Sciences, Engineering, and Medicine, Southeast and Caribbean Disaster Recovery Partnership, Children and Nature Network (C&NN), International Association for People-Environment Studies (IAPS) and International Play Association (IPA, Honorary Member).

Student Advising The department head and the Director of the Graduate Program (DGP) are the official student advisors for academic and curricular issues. However, all faculty serve as informal advisors and mentors assisting students with defining and achieving their academic goals. Additionally, faculty members serve as Chairs of MLA student Oral Exam Committee, advising them on research and framing of their Oral Exam presentations.

8. How does the program's resources for faculty compare to that of other programs and departments at the institution?

Resources for faculty instruction, travel and professional development are comparable to other departments in the college and generally adequate.

Faculty salaries in LAEP are comparable to salaries in Architecture, Art and Design and Graphic Design, but are on average lower than those in Industrial Design. Faculty salaries outside the College range widely within the university.

C. Faculty Retention

1. Are faculty salaries, academic and professional recognition evaluated to promote faculty retention and productivity? Are they comparable to related disciplines within the institution?

University and College budget cuts over the past 6 years have severely diminished the capacity of the department to offer substantial increases in faculty salaries. However, the department head has positioned high performing faculty to compete for university resources and supported increased research capacity to offset salaries with research grants. Additionally, the department head has the discretion to petition the college and university to make discretionary funds available to retain high performing faculty. The annual University Faculty Scholar Award offers an opportunity for faculty to be recognized for teaching, research and service excellence with \$10,000 each year for five years. Both Andy Fox and Kofi Boone are University Faculty Scholars.

2. What is the rate of faculty turnover?

The rate of faculty turnover has been high over the past six years due primarily to retirements. In 2018, Gene Bressler transitioned to phased retirement and stepped down as Department Head after serving the department for twelve years. Gene continued teaching and service to the department at 50% time until December 2020. Art Rice retired in July 2019. Robin Moore and Fernando Magallanes transitioned to phased retirement in July 2021 and will continue at 50% time for up to three years.

New faculty members who have joined the Department in full-time tenured/tenure track positions are: Meg Calkins, Department Head and Professor (August 2018), Gavin Smith, Professor (January 2019), Carla Delcambre, Associate Professor (an instructor since 2005 but hired as a tenure track faculty member in August 2019), and Deepti Adlakha, Associate Professor and Director of the Natural Learning Initiative (starting August 2021). M. Elen Deming joined the College as an administrator (September 2017) and teaches part-time in the department.


STANDARD 6: The program shall have a plan and a record of achievement for interacting with the professional community, its alumni, the institution, community, and the public at large.

INTENT: The program should establish an effective relationship with the institution, communities, alumni, practitioners and the public at large in order to provide a source of service learning opportunities for students, scholarly development for faculty, and professional guidance and financial support. Documentation and dissemination of successful outreach efforts should enhance the image of the program and educate its constituencies regarding the program and the profession of landscape architecture.

A. Interaction with the Institution, and Public

The program represents and advocates for the profession by interacting with the professional community, the institution, community, and the public at large.

1. How are service-learning activities incorporated into the curriculum?

As part of a land-grant institution, the College of Design and the Department of Landscape Architecture and Environmental Planning support and provide opportunities for its faculty and students to participate in significant community-based engagement and professional service activities. Students are engaged in faculty-led community engagement efforts that often translate into research assistantships and selfdirected scholarly efforts.

The department also offers an array of curricular activities including seminars, studios, and independent study focusing on service-learning and community engagement. For example, advanced design studios including *LAR 506 Design + Build, LAR 507 Urban Design, LAR 507 Green New Deal Superstudio*, and *LAR 507 Coastal Dynamics Design Studio* offer students opportunities to work with communities to identify desirable goals and outcomes, engage in collaborative work, develop evidence-based design proposals and evaluate outcomes.

LAR 506 Design + Build Studio integrates a full range of planning, site design, and construction strategies to serve the campus community and, recently, vulnerable communities outside the university. Built on an overall ethic of community engagement, the program's efforts advocate for sustainability and artistry in the creation of enduring designs that are socially, environmentally, and contextually appropriate. In the last five years, the studio partnered with University Housing. During the COVID-19 pandemic, the studio worked on a Design Build project in an underserved community, Princeville, North Carolina.

LAR students enrolled in *LAR 507 Advanced Topics Design Studio* with the focus on Urban Design, work on a collaborative urban design project including students from the College of Design's School of Architecture. This studio provides opportunities for students to collaborate with local stakeholders from around the city of Raleigh and NC State campus, including numerous professional design firms. Students work on projects and experience designing at the scale of the city and creating buildings and urban landscapes of walking and gathering, while improving the quality and performance of the built and natural environment. Another Advanced Topics Design Studio, Coastal Dynamics Design, an interdisciplinary studio open to advanced master's students in both Department of Landscape Architecture and School of Architecture, focuses on critical ecological and community development challenges in vulnerable coastal regions. Students work in teams and individually develop innovative, sustainable, adaptable, and resilient design solutions that address the environmental and human needs of coastal communities. The studio collaborates with engineers, scientists, local community stakeholders, and professional design firms.

LAR 507 The Green New Deal Superstudio, an LA Advanced Topics Design Studio, is an interdisciplinary studio focused on communities with a range of densities that also provide varying opportunities to study public transportation, food systems, etc. The studio looks at varying topics, including the potential for an equitable transit-oriented development that also works to reduce greenhouse gas emissions. Three projects from the studio were selected for a curated exhibit of fifty-five projects from 670 entries.

From 2017 to 2019, *DesignWeek/DesignSprint*, a series of interdisciplinary education events in workshop/charrette formats were offered aiming a) to raise awareness and interest in creating healthier and resilient communities; b) to improve development patterns to reduce environmental harm; and c) to develop strategic design solutions to environmental and social challenges in our communities. Students from landscape architecture, architecture, environmental sciences, horticulture, bio-agricultural engineering at NC State University, including planning students from UNC Chapel Hill were engaged in multi-disciplinary dialogues and creative problem-solving, including research, reflection and speculation by all participants. These weeklong educational events and workshops brought together designers, planners, engineers, policy experts, and community members to begin the design dialogue necessary to frame our directions, and to engage the creativity of our students in the interest of visualizing solutions and strategies.

In addition to advanced design studios, new and ongoing seminars including LAR 607 Natural Hazards, Disasters and Climate Change Adaptation Lecture Series, LAR 554, Disaster Resilient Policy, Engineering and Design, LAR 550 Professional Practice, LAR 546 The Landscape Imperative, LAR 542 Human Use of the Urban Landscape, and LAR 535 Environmental and Social Equity in Design offer students exposure to best practices from leading practitioners and agencies in service and community work. Finally, faculty regularly incorporate service-learning into core curriculum courses including extensive community engagement in the design development course sequence.

LAR 607 Natural Hazards, Disasters and Climate Change Adaptation Lecture Series offers students exposure to practitioners and scholars who present a range of contemporary topics tied to natural hazards, disasters, and climate change adaptation, including research findings, experience in practice, and the translation of knowledge to action. Speakers are drawn from federal, state, and local jurisdictions; scholars from pertinent fields of study, including physical and social scientists; private sector representatives, including corporations, insurance officials, developers, and consultants; members of the media; politicians; environmental and social justice advocates; community leaders; members of various professional associations; and others as identified. Emphasis is placed on the role of design, broadly defined, to enhance resilience to slow- and rapid onset natural hazards and disasters, including those caused or exacerbated by a changing climate.

LAR 554 Disaster Resilient Policy, Engineering and Design course addresses the multidisciplinary (policy, engineering and design) study and practice of disaster resilience. Emphasis is placed on the critical review of existing policies, programs and approaches taken that have led to increased levels of exposure to natural hazards, growing levels of social vulnerability and exponentially rising disaster losses. In an era of climate change, these issues are explored relative to the need to enhance adaptive capacity through sound policy, engineering, and design. Class lectures, readings and student/faculty discussions help to advance each student's

knowledge of the subject matter and provide relevant background information to inform interdisciplinary class projects.

LAR 546 The Landscape Imperative, an interdisciplinary seminar including graduate students from landscape architecture, architecture, business, and engineering examines the changes, issues, challenges, and opportunities associated with population growth, land development, and resource stewardship that may occur during the next 25 – 35 years. This course focuses on the growth and transformation of North Carolina. The population of 10.5 million is projected to increase to more than 13 million by 2050. The impact of this growth on North Carolina's natural and constructed resources will be significant affecting land and water resources, air quality, transportation, and urban footprint. The course includes guest lectures from faculty and guest speakers. The students conduct research, author white papers on key subjects, discuss and debate findings, generate digital presentations, and deliver oral presentations and a written report to local community constituents.

LAR 542 Human Use of the Urban Landscape is an interdisciplinary course open to advanced undergraduate, masters, and doctoral students, conducts field research on topics of interest to the Raleigh Urban Design Center (UDC). Students work in groups, learn field research methods (behavior and cognitive mapping, interviewing, and survey methods), and conduct a research project in the urban public realm where they must interact with the public as users. The course concludes with a public presentation involving UDC and other City departments, where copies of research findings are filed to provide empirical evidence to support UDC projects. Other course projects are linked to local parks systems and educational institutions (schools, museums, botanical gardens). This course has not been offered for the last three years.

LAR 535 Environmental and Social Equity in Design seminar focuses on trends affecting environmental and human health in the built environment with an emphasis on emerging issues in Durham, North Carolina. This seminar aims to increase student awareness and experience with the principles of environmental justice and social equity in the context of design and community engagement. Through class activities, case study analysis, field study, collaborative work with other disciplines and institutions, as well as direct engagement with community organizations, students build experience with tools for assessing, documenting, and responding to social equity issues in the built environment.

2. How are service activities documented on a regular basis?

Faculty's service learning and community engagement related course activities, including the records of course presenters, projects, and final presentation reviewers are filed in annual faculty reports. These reports are submitted to the Department Head at the end of each academic year.

The College of Design's Research and Extension Office also provides a monthly report to the Dean on the College and each departments externally funded scholarly activities, including faculty's sponsored engagement projects, partnerships, and funding amounts. The Dean shares this report with the Department Heads, who also share this information with all faculty.

The achievements in service and community engagement are reviewed by the Department Head and incorporated into faculty's Statement of Faculty Responsibilities (SFR), as relevant. Managed by the College's Communication Director, the College of Design's *DesignLife* newsletter and website, monthly e-mails, social media features, and magazine also provide platforms for disseminating departmental service accomplishments with the larger community on campus and beyond.

3. How does the program interact with the institution and the public, aside from service learning?

The Department of Landscape Architecture interacts with the institution and public in many important ways in addition to service learning. Faculty, including Professor Robin Moore, Research Associate Professor Dr. Nilda Cosco, Associate Professor Dr. Celen Pasalar, Professor Kofi Boone, and Professor Andy Fox, are actively engaged in design assistance and action-research programs interacting extensively with NCSU units within and beyond the College of Design, with communities across North Carolina and beyond, and practicing professionals nationwide. Faculty have been featured presenters at local/national/international conferences and serve as advisors on area community design and engagement efforts.

Most of the efforts discussed below provide **Research Assistantship** opportunities and/or **in-class projects** for MLA Students. In 2020-21, fourteen MLA students held research assistantships with faculty research, scholarship and outreach projects. In addition, some of these projects were brought into studio and seminar assignments so most of our students were engaged in this work.



The Natural Learning Initiative (NLI) directed until August 2021 by Professor Robin Moore and Research Associate Professor Dr. Nilda Cosco, now directed by Dr. Deepti Adlakha engages in design assistance activities with early childhood centers and consulting activities with professional design firms. They are working with Michael Van Valkenburgh and Associates (MVVA), on initial design phases for playgrounds at Dix Park in Raleigh, NC. NLI's professional development

institutes, symposia, and workshops engage other professions besides landscape architecture, including early childhood education, environmental education, architecture, parks and recreation, urban design, and public health.

Most recently in 2017, NLI launched an NC State Continuing Education, noncredit, online certificate program, supported by Blue Cross Blue Shield of North Carolina Foundation, Texas Department of State Health Services, and Nemours Children's Health System. The program focuses on designing early childhood outdoor environments as well as the creation of early childhood outdoor learning environments. The program continues to receive accolades and expand its reach at the state, national, and international levels. To date more than 500 have participated and 360 certificates have been awarded or are in-process.

NLI continues to conduct and lead scientific research projects in partnership with research units across the NCSU campus and beyond. Through the support received from the Federal Social Innovation Fund (CIF), Corporation for National and Community Service and Blue Cross and Blue Shield of North Carolina Foundation (BCBSNC) in partnership with the North Carolina Partnership for Children (NCPC), NLI provided professional development and design assistance for 60 sites in four NC counties from 2017 to 2020. This interdisciplinary and multi-year project effort addressed early childhood obesity prevention.

NLI's design assistance and related research activities are aimed at implementing innovative demonstration models serving low-resource communities, often with landscape architecture professionals, to inform practice. Their recent efforts on the creation of childcare outdoor learning environments as active food systems, aiming to prevent obesity, have recently been funded by a multi-year grant received from USDA-NIFA-AFRI. NLI also continues to collaborate with researchers at Cornell

University and Texas Tech University. As NLI is currently transitioning to a new leadership, the initiative has recently been awarded a three-year grant from the Blue Cross and Blue Shield of North Carolina Foundation (BCBSNC) to create a comprehensive database of implementation and evaluation materials including new and refined tools, A/V resources, update certificate programs, and online/print publications that will help respond to the challenges of scaling up, creating, and managing high quality early childhood outdoor environments in North Carolina.



Professor Andrew Fox has co-founded and been co-directing the **Coastal Dynamics Design Lab (CDDL)** whose mission is to organize and lead design efforts to address critical ecological and community development challenges in vulnerable coastal regions. The CDDL has formed partnerships with experts in the College of Engineering, the College of Natural Resources, the UNC Coastal

Studies Institute, the East Carolina University Department of Geography, Planning, and Environment, the University of North Carolina Coastal Hazards Center, and numerous professional design firms. CDDL's recent funded engagement projects have focused on the planning, design and management of the open spaces in Princeville, Lumberton, Pollocksville, and Nags Head addressing their resilience to flooding. These efforts have been facilitated in partnership with community stakeholders.

Professor Kofi Boone has recently collaborated with the Coastal Dynamics Design Lab (CDDL) on an effort that focused on the creation of a plan that will help design and manage the floodplain and open space in the City of Lumberton and Princeville. Professor Boone is president-elect of the Landscape Architecture Foundation (LAF) executive board, and a board member of the Corps Network and the Land Loss Prevention Project. He also continues to participate in varying speaking engagements and publishing in trade magazines and journals focusing on environmental justice, cultural landscapes, and black landscape architecture.

Professor Dr. Gavin Smith has recently worked on a funded multi-disciplinary project, which aimed to expand and institutionalize disaster resilient policy and design education through national hazard mitigation policy counsel and course development. Working with FEMA and AECOM (FEMA contractor), Professor Smith's efforts continue to contribute to the development of policy recommendations (policy briefs) tied to the development and implementation of the new Disaster Recovery Reform Act (DRRA).



Associate Professor Dr. Celen Pasalar, in her College Extension Liaison appointment, has developed and led numerous funded communitybased projects (urban and rural) in partnership with units across the NCSU campus and beyond.

Her impactful partnerships with the College of Agriculture and Life Sciences, College of Humanities and Social Sciences, NC Cooperative Extension, College of Natural Resources, various non-profit groups, and communities across the state are aimed at achieving sustainable, healthy, and economically strong communities. The strategic partnerships nurtured through these processes continue to enrich the legacy and influence of the Department of Landscape Architecture, the College of Design, and NC State within

the local and national communities. Dr. Pasalar has recently co-led the multi-disciplinary effort to coestablish the Southern Equine Research and Education Partnership in western North Carolina, through a funded research study including the Isothermal Community College and the Appalachian Regional Commission (ARC). Over multiple years, the partners worked on the development of a masterplan and the design of a research and community center (its facilities and landscapes) with a focus on horse, human, and environmental health. She is currently leading a community design effort for the Town of Angier addressing the future development of the downtown.

Dr. Pasalar's ongoing funded research efforts on smart and healthy communities have resulted in unique project partnerships and community engagement efforts involving expertise from NC State's Institute of Transportation Research and Education, practitioners in engineering, and community stakeholders. She is currently working on a multi-year research effort, supported by NC Department of Transportation (NCDOT), that focuses on the growth and transformation of three communities in North Carolina (Greenville, Knightdale, Smithfield) addressing the creation of complete streets and economically viable and sustainable developments.

Associate Professor Carla Delcambre has recently consulted the Wake County Public School System on the creation of a resource site for edible school gardens in support of curricular implementations. She managed the edible school garden created at Cary Elementary School and supported the creation of lesson plans for K-5 students. As part of her public service efforts, she contributed to the creation of Raleigh Space Parklet as part of the Parking Day efforts in 2016.

4. How does the program assess its effectiveness in interacting with the institution and the public?

Faculty engagement and service activities discussed above have garnered **awards**. Carla Delcambre's Design + Build Studio work at Syme Hall on campus was awarded a Sir Walter Raleigh Award for Community Appearance in 2019. Celen Pasalar's studio, *Growing Change Prison Flip: Reclaiming an Abandoned Prison Site* won a 2016 National ASLA Student Honor Award in Student Community Service. Robin Moore was awarded the 2021 Joe L. Frost Award from the National Play Association for his research and engagement work. Lastly, Andy Fox, CDDL and students won a national ASLA award in 2020 for their project *Lumberton Community Floodprint: Strategies for Repurposing Vulnerable Landscapes After Disaster* in Lumberton, North Carolina.

Faculty's engagement and service activities at the institution and community levels are incorporated into Statement of Faculty Responsibilities (SFR) and are amended based on annual reviews conducted by the department head. Faculty are directly engaged with university-wide activities including the Park Scholar Program, Research Operations Council, the Outreach and Engagement Strategic Steering Committee, NC State International Study Advisory Board and a wide array of advisory positions.

The faculty regularly engages in discussions reflecting on the impact of our efforts and interactions with the public that aligns with the mission of the Department of Landscape Architecture, College of Design, and the NC State University while contributing to the enhancement of the design practice and relevant private industry in the state and beyond.

Faculty's engagement and active services in both university and communities have demonstrated impact and significant influence. For example, the Design + Build studio's work on campus and in underserved communities have transformed how NC State University and the overall communities perceive the role and potential of landscape architecture in transforming communities. Faculty's recent community-based efforts, such as the creation of the Southern Equine Research and Education Partnership and the development of a new Equine Research and Education Center in western North Carolina, has enabled the NC Cooperative Extension to open a new position in support of the equine community in the region. The Isothermal Community College also utilized this effort to introduce new curriculum that will contribute to the education and development of workforce for the equine industry in the region. Ongoing engagement projects in Princeville and Lumberton also attracted partnerships and funding support to continue to addressing resilience through restoration of open spaces and flood management education in the community.

B. Interaction with the Profession, Alumni and Practitioners

1. How does the program recognize professional organizations, alumni, and practitioners as resources?

We actively cultivate strong relationships with external constituents such as alumni, professional organizations and other professionals in the Triangle, across the country, and even overseas. As our MLA program is a professional program, we value involvement of professionals in the MLA curriculum and in settings outside the classroom. We rely on professionals to inform us about issues in practice and, in turn, we inform the profession about leading edge issues in the Academy. This back-and-forth relationship is key to our work as well - as the work of professionals.

We have close ties with professional organizations North Carolina ASLA, the Landscape Architecture Foundation and national ASLA; invite nationally and internationally recognized professionals to provide lectures to students, faculty, and the public; engage professionals in design reviews and our *Professional Mentor Program*; hold alumni receptions at state, regional and national conferences; and maintain active alumni engagement on social media. Alumni are recognized for their achievements on social media and in college-wide publications, including the annual *Designlife* Magazine and the monthly *DesignNews* newsletter.

LAEP Professional Advisory Board: The LAEP Professional Advisory Board (PAB) is composed of ten professionals from a diversity of practice settings, and a balance of age, gender and ethnicities. Seven members are alums of our MLA or former BLA program, while three are friends of the program. The goal of the Professional Advisory Board is to understand how the Department can support landscape architecture practice, and how practice can inform and support our students, curriculum, and faculty. Agenda items range from feedback on the curriculum, the direction of the program, the makeup of the student body, and issues in practice that we must address in our curriculum.

The board meets four times a year and meetings are convened and moderated by the board chair, Emily McCoy, Principal of Design Workshop and Associate Professor of Practice in the MLA Program. While each meeting has a distinct topic that is discussed in detail, we always check in on the goals and objectives for the program. Topics that have recently been considered are: Diversity, Equity and Inclusion in the Academy; preparing students for practice in pandemic office settings; and critical issues for Landscape Architects in the Southeast.

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Name	Affiliation	Location
Emily McCoy, Chair, SITES AP, PLA	Associate, Design Workshop	Raleigh, NC
Deb Guenther, FASLA, SITES AP, PLA	Partner, Mithun	Seattle, WA
Melissa Henao-Robledo	Landscape Forms	Austin, TX

Michael Batts, LEED AP, PLA	Practice Leader, VP, Stewart	Durham, NC
Anna Grace Fitzgerald	Landscape Designer, Olin	Philadelphia, PA
Christine Hilt, FASLA, PLA, LEED AP	Owner, CLH Design	Apex, NC
Wesley Brown	Director, Planning and Capital Projects, Atlanta Downtown	Atlanta, GA
Austin Bowman	Urban Designer, City of Raleigh	Raleigh, NC
Linda Jewell, FASLA, PLA	Professor Emerita, UC Berkeley	Berkeley, CA
Mark Hough, FASLA, PLA	University LA, Duke University	Durham,NC

The College Leaders Council is a select group of outstanding alumni and friends from across the country who have distinguished themselves in the design professions. As an advisory board for the College, representation from all degree programs is prioritized, including landscape architecture. Department heads and faculty are encouraged to recommend new members.

Members of the Leaders Council advise the College of Design in a number of important ways, including high-level strategic planning, branding and positioning, current trends in the professions, and student mentoring. They also serve as advocates for the College of Design, promoting collaboration, developing networking opportunities, and expanding the College's visibility and raising its profile.

LAEP Lecture Series: The LAEP evening lecture series consists of seven lectures by exemplary professionals and academics per academic year. An effort is made to bring in diverse speakers with respect to topics, practices and approaches to design. We also attempt to foster speaker diversity by gender, ethnicity and race. Lectures usually last for one hour and are followed by 30 minutes of Q&A. Lectures are recorded and posted on the departmental <u>Lectures and Events</u> website. During Covid, lectures were given over Zoom offering the benefit of engaging speakers from international locations such as China, Thailand, the UK, and Spain. All LAEP lectures are approved for 1.5 continuing education hours from the North Carolina Board of Landscape Architects (NCBOLA).



North Carolina ASLA Executive Committee The department head is an ex-officio member of the North Carolina ASLA Executive Committee. The fourteen member NCASLA executive committee meets monthly for two to three hours to discuss local and statewide professional initiatives, issues affecting licensure,

continuing education events, conferences, membership and professional support issues. Regular participation on this committee has strengthened the relationship between the department and the statewide practice community.

Professional mentor program Seventy-four practicing landscape architects are engaged as mentors for our MLA students in the *LAEP Mentor Program*. Individual students are paired with a practitioner providing opportunities for both parties to ask questions, discuss the profession, and review student work. The practitioners advise the department head or a faculty member about the work of the student they are mentoring. Mentors are also invited to attend their student's interim and final reviews. The students, in turn, are expected to visit with their respective mentor at the mentor's place of work. This enables students to have exposure to the workings of a professional office, see work currently "on the boards," and to ask questions of their mentors concerning the practice of landscape architecture. A number of students have been invited to "shadow" their mentors as they go to meetings with clients, attend hearings, and meet with other consultants.

Alumni and Professionals in Design Reviews The alumni and other members of the professional community play an active role in evaluating student work. Local alumni and practitioners attend and participate in formal and informal studio reviews, and class project reviews and presentations. Alumni across the country are engaged in "redlining" construction document sets for students in the *LAR 503 Design Development and Construction Documentation studio*. Inclusion of alumni serves the department by exposing our students to professionals and their priorities, and it also serves to engage them and strengthen their ties to the department.

The College Development and External Relations Team is a four-member team that engages alumni and friends of the College Departments and Programs. This office undertakes the following activities: fundraising, endowment establishment and administration, scholarships, event planning related to alumni and friends, and administration of the *College Leader's Council*.

Their Mission Statement is:

The development and external relations team amplifies the voices of students, faculty, staff, alumni and friends to bring resources to and facilitate connections within our community.

- We empower students and the broader community through meaningful fundraising and communications to accelerate impact with design education, research and thinking.
- We act in service to the college and its stakeholders, delivering resources and facilitating connections to the college.
- We amplify the voices, vision and impact of the college while maximizing the resources of a public research university.

2. Does the program maintain a current registry of alumni that includes information pertaining to current employment, professional activity, postgraduate study, and significant professional accomplishments?

The university maintains an alumni database that includes information related to educational degrees, and professional titles and employers. This information is accessible through the college's Development and External Relations office. The College of Design has one of the highest rates of updated biographical information in the University. This database is used for regular mailings to landscape architecture alumni regarding events and accomplishments.

The Department maintains a database of alumni who actively attend departmental and college events such as receptions, lectures, and student design reviews. Emails are regularly sent to alumni and departmental friends to update them on student and faculty accomplishments, and events in the department and college.

The department has a LinkedIn Alumni group with 231 alumni members. Alumni accomplishments are tracked through LinkedIn and other social media outlets such as Instagram and Twitter. The accomplishments are re-posted and celebrated on the Department LinkedIn page, College social media and in the *DesignLife* and *DesignNews* newsletters.

3. Does the program use the alumni registry to interact with alumni?

The program uses the alumni databases for:

- Invitations to alumni receptions at ASLA national, regional and state conferences
- College e-newsletter *DesignNews* and the *DesignLife* magazine
- Invitations to college and department events and lectures
- Identifying and engaging prospective donors
- Soliciting alumni via mail and email for annual donations

4. How does the program engage alumni, practitioners, allied professionals and friends in activities such as a formal advisory board, student career advising, potential employment, curriculum review and development, fund raising, continuing education, etc?

Please refer to **section B.1.** above for discussion of how the program engages alumni practitioners, allied professionals, and friends in multiple activities.

5. How does the program assess its effectiveness in engaging alumni and practitioners?

Assessment measures for alumni engagement very widely and may be less quantified than other assessment areas. The LinkedIn alumni group is growing in numbers with 231 members who actively like and comment on posts. Another measure is alumni engagement in conference receptions. Receptions for local and regional ASLA conferences usually involve 50 to 80 participants while the national conference's receptions draw 80 to 150 attendees. We also keep records of attendees at evening lectures and the receptions that follow. Face-to-face lectures draw anywhere from 40 to 70 participants but the online lectures during the pandemic have drawn well over 100 practitioners. Many are alumni and friends, but others have heard about the lectures through social media shares or word-of-mouth and are located across the US with even a few from Asia or Europe.

Other assessments of engagement of professionals are more qualitative. We enjoy strong relationships with local practitioners and alumni that the former department head cultivated over his 13 years leading the department. He was generous with his time to introduce the incoming department head to scores of local practitioners. These relationships are maintained in a variety of settings discussed above as well as studio reviews and the mentorship program

Another qualitative measure is the relationships of individual faculty with practitioners nationwide - and even worldwide. Our faculty have practiced in multiple locations around the US including Seattle, San Francisco, Philadelphia, New Orleans, Atlanta, Denver, Washington DC and Ann Arbor Michigan. They maintain contact with practitioners in these areas and we connect students with practitioner contacts for internships or jobs post-graduation.

FACILITIES, EQUIPMENT & TECHNOLOGY

STANDARD 7: Faculty, students and staff shall have access to facilities, equipment, library and other technologies necessary for achieving the program's mission and objectives.

INTENT: The program should occupy space in designated, code-compliant facilities that support the achievement of program mission and objectives. Students, faculty, and staff should have the required tools and facilities to enable achievement of the program mission and objectives.

A. Facilities

1. How are faculty, staff, and administration provided with appropriate office space?

Each faculty member has an adequate and individual office space. All offices are equipped with a phone and linked to the NC State University network. Landscape Architecture and Environmental Planning faculty offices are located in Kamphoefner, Brooks, and Leazar Halls. The average office space is 182 square feet.

The department head's office is located in the Department Head Suite in the Brooks Hall Breezeway. Colocation of College Department Heads offers opportunities for cross-disciplinary communication and collaboration. The suite includes two workstations for the department assistants, storage and file cabinets, and two conference tables. The landscape architecture department head's office is equal in size to those assigned to other college department heads.

2. How are students assigned permanent studio workstations adequate to meet the program needs?

The landscape architecture graduate studio spaces are housed in Kamphoefner Hall. Each student has a workspace that includes a large drafting table with lockage storage, chair, and access to wireless networks and electricity. This arrangement has been very effective in bringing the students together as well as creating a central location where the department may display notes, advertisements, and mailboxes for delivering information. The Department of Landscape Architecture and Environmental Planning has its own computer cluster, with six computers, scanners, plotters and printers. This cluster is networked with the rest of the College of Design. Through the College of Design computer network, students can link their computers in the studios to the large- and small format printers (both black and white and color); students using the college's printers pay a per page fee. The network also allows students to link to the Internet and to other students as well as faculty and to university-wide resources represented as the NCSU Computing Center. Students have access to the studios twenty-four hours a day, seven days a week.

3. How are facilities maintained to meet the needs of the program?

College of Design facilities are maintained in accordance with university policies. Faculty and department offices are cleaned monthly, student studio floor areas are swept daily, in accordance with Fire Marshal requirements. Major renovations are typically completed during the summer months.

Recommendations are submitted to the dean's office, discussed in the administrative council, and assigned priorities relative to available funding.

Significant College of Design facility updates include:

• Building data networks in Brooks and Kamphoefner Halls were completely replaced in the last three years.

The fire alarm system in Brooks Hall was replaced in the last year.

• Digital Critique spaces were upgraded in the last two years to provide two integrated 82" 4K displays in each space. Two spaces were added to bring a total of six Digital Critique Spaces.

• Video conferencing systems have been installed in ±20 meeting spaces and classrooms. Portable video conferencing units are available upon request.

Acoustic improvements have been made in Brooks, Kamphoefner and Leazar Halls.

• Roof replacement, water-proofing and HVAC improvements have been completed. Another major HVAC replacement project is scheduled for 2022.

• Campus ID card swipe access to the LAEP studios has been implemented, improving security and student safety.

• The Department of Industrial Design has moved to the 111 Lampe Drive building, providing opportunities to back-fill spaces the department previously occupied. This has allowed us to improve adjacency and improve departmental "neighborhoods" having faculty offices closer to their affiliated colleagues and studio spaces.

• The Coastal Dynamics Design Lab (CDDL) office has moved to 110 Kamphoefner Hall, doubling their work space.

• A Design Hub has been created to provide flexible workspace for research projects.

Indoor and outdoor third space areas have been created throughout the college facilities.

Additional laser cutters and an improved exhaust system have been provided in the Materials
Lab.

• Two Bayley IT Lab classrooms and many other departmental cluster computers have been converted from dual-boot iMacs to Windows-only computers with Cintiq displays. This was done to better serve curricular changes utilizing VR/AR.

4. Are facilities in compliance with ADA, life-safety, and applicable building codes?

ADA improvements are continually worked on by the College and the University. The College of Design is as accessible as possible given the age of its buildings and the budget of the university facilities division. We are ADA compliant in every area except some of our oldest restrooms. These are on the list to be renovated when the College budget will allow it.

5. If known deficiencies exist, what steps is the institution taking to correct the situation? (Provide documentation on reasonable accommodation from the institution's ADA compliance office and/or facilities or risk management office.)

• A new ADA-compliant, single occupant restroom was completed in Brooks Hall in 2020.

• The main doorway to LAEP studios has been brought into ADA compliance with an automatic push button opener.

- ADA compliant barriers were installed in all needed stairways in 2021.
- Other ADA improvements are planned as budgets allow.

University ADA Statements are found <u>here</u>.

B. Information Systems and Technical Equipment and Facilities

1. How does the program ensure that students and faculty have sufficient access to computer equipment and software, workshops, wetlabs and work yards, as appropriate?

The College of Design offers students and faculty a broad range of state of the art <u>facilities</u> including:

- William Keating Bayley IT Lab
- The Materials Lab
- The Experience Design Lab

MLA students have access to the **William Keating Bayley IT Lab**, a computer lab in Brooks Hall with 50 computers, plotters, a broad range of equipment that can be checked out for short periods such as digital cameras, video cameras, laptops, power cords, screens, VR headsets, GPS equipment, and others. Computers in the lab are equipped with software to support all classes in the College.



The **Materials Lab** includes a range of equipment, from traditional hand tools to modern CNC equipment, and allows students to work in wood, plastic, concrete, and fabric. The Materials Lab provides space, equipment, and trained personnel to assist design students in their work.

The **Experience Design Lab**, a cross-disciplinary community, explores virtual and augmented

experiences as a cultural practice. The lab takes a human-centered approach, empowering artists, designers, humanists, scientists, and engineers to delve into the evolution of our society through direct engagement with technology. The lab offers experiences that benefit people while challenging current conceptions of the status quo. The lab invites collaboration with communities across NC State as well as partners in industry and other cultural institutions.

In January 2019, the personnel, budget management, and resources of the Information Technology, Materials Laboratories and Facilities were merged into the Operations Department under a Director of Operations. This has produced efficiencies in functions, budgeting and resource management. The College Operations Committee, with representatives from Operations, each academic department and students, set priorities for all operational purchases based on curricular needs, research support and administrative uses. This committee is chaired by the Director of Operations. Funding comes from the College operating budget, Educational Technology Fees (ETF) paid by students, and other sources.

2. What are the program's policies on the maintenance, updating, and replacement of computer hardware and software and other technical tools such as GPS, drones, water-sampling kits, cameras, as appropriate?

A staff of four full time Information Technology professionals supports the College's IT needs. Six to eight part time student lab attendants assist as well.

Computers for faculty, staff and public labs are placed on a 3–4 year replacement cycle. In most cases the goal of 3–year replacement is achieved. Each year, approximately one third of lab computers are replaced. Older computers are then used for other functions, helping to extend the usable life of our computers to 5 or 6 years.

In the public labs and departmental clusters, major software updates are installed each summer in preparation for the next academic year. Minor updates are installed between semesters, and security patches are installed as needed. Software on faculty and staff computers is updated as needed.

3. What are the hours that the computer lab and workshops (if applicable), and studios are open to students / faculty?



The Bayley IT Lab_is open 77 hours per week during the fall and spring semesters and 60 hours per week during summer sessions. Equipment checkout services are available during those hours. Hours will vary on University Holidays and on days when classes are not in session. Access may be limited when classes are using lab rooms.

<u>Fall/Spring Semester Hours:</u> Monday - Friday, 8:00 a.m. to 9:00 p.m. Saturday, 11:00 a.m. to 3:00 p.m. Sunday, 1:00 p.m. to 9:00 p.m

<u>Summer Session Hours:</u> Monday - Thursday, 9:00 a.m. to 9:00 p.m. Friday, 9:00 am to 5:00 pm Saturday, closed Sunday, 1:00 to 5:00 pm

In addition, there are smaller computing clusters located in or near studios available 24 hours a day throughout the year, except on days the University is closed.

The Materials Lab (wood and metal shop) can be accessed during posted hours only. Users must attend safety orientation and be enrolled in the College of Design.

Monday – Thursday: 9 a.m. – 5 p.m. and 6 p.m. – 10 p.m. Friday: 9 a.m. – 5 p.m. Saturday & Sunday: 1 p.m. – 5 p.m. (closed most holidays)

4. How does the program determine if these times are sufficient to serve the needs of the program?

Hours of the labs were established by an analysis of usage, equipment checkout, and course schedules. Special requests are handled as needed.

5. How does the program assess the adequacy of equipment needed to achieve its mission and objectives?

The Operations Committee, a standing committee of the College of Design, assesses needs based on curricular requirements, research support and administrative uses. In addition, individual faculty and students are asked at least annually by the department head to provide suggestions and justifications for digital hardware, software resources and facilities improvements. Such requests are forwarded to the College Operations Department and or the Dean for further consideration. Virtually all requests for technology resources during the past 5 years have been approved for procurement and deployment. Many facilities improvements have been made through this process.

In addition, the college has instituted two task forces: the Designing Our Community task force and a Space task force. Ideas and improvements brought through these task forces have been implemented or are planned as budgets allow.

6. How does the program fund, maintain, and advance technology that supports learning?

The Director of Operations manages the budgets for IT, facilities and laboratories. Funds are provided by the College's central operating budget (State Appropriated), student <u>Educational Technology Fee</u>, academic department budgets, research funding and various other funding sources. Priority for projects and spending is based on curricular needs. The College Operations Committee, task forces and administration implement projects to improve, maintain and start new initiatives. A "wish list" of projects and initiatives is continuously updated to be implemented as funding becomes available.

C. Library Resources

1. What traditional and digital library resources are available to students, faculty, and staff?

Students and faculty from all disciplines of the College of Design use the **Harrye B. Lyons Design Library**, a branch of the NCSU Libraries. The 4,000-square-foot facility is located in Brooks Hall, in the heart of the College of Design, and houses a comprehensive collection of design-related books, periodicals, and DVDs. The Design Library collection is especially strong in the areas of architecture, landscape architecture, and graphic and industrial design, although all Library of Congress classifications are represented.



The Harrye B. Lyons Design Library collection emphasizes landscape architecture, architecture, graphic design, industrial design, and art and design resources. There are approximately 42,092 volumes and 123 current journal subscriptions in the Design Library. The Design Library collects materials in all formats including CDs, DVDs, e- books, and e-journals. An attempt is also made to consider the needs of the whole university and the local community. Some

books are also selected for the main collection in the general arts area.

The entire NCSU Libraries research collection, including online databases, e-journals, and e-books, as well as media and print materials, is available to Design students and faculty. This collection comprises more than 4.9 million volumes, including approximately 69,000 print and electronic serials (68,000 are electronic), over 760,000 e-books,710 bibliographic databases, and a growing array of electronic full-text and image collections. Patrons can log into electronic resources from their studio workstations, from computers located in the library, or from remote locations. Patrons can also manage their borrowing account and renew materials online. In addition, the combined collections of the Triangle Research Libraries Network (NC State, Duke, NC Central, and UNC–Chapel Hill) offer more than 16 million volumes with cross---searching capabilities and a rapid delivery service.

The **Design Library Image Database** offers more than 90,000 records for slides/digital images in the areas of art, architecture, landscape architecture, industrial design, and graphic design. Over 70,000 of those records also have digital images in this database, which includes software for creating presentations for classroom use. Other images are also available in ARTstor, a digital image database of over one million art, architecture, design, and landscape architecture images. Faculty and students can request new digital images or digitization of particular slides.

The primary databases for Design available online through the libraries are: Avery Index to Architectural Periodicals Art Index and Art Index Retrospective Arts and Humanities Citation Index ARTstor Design and Applied Arts Index Grove Dictionary of Art Online ULI Development Case Studies Additional resources that contain Design materials are: Bibliography of Asian Studies Ingenta (formerly known as UnCover) JSTOR

Titles held in the Harrye B. Lyons Design Library that are not utilized for a period of time are transferred to the main D.H. Hill Library, a short distance away. Faculty and students can go to the Hill Library and browse those books or have them delivered to the Design Library.

At present, the Design Library employs 2 full-time librarians, 2 full-time support staff, and 16-20 parttime student assistants. Library facts, policies, rules, and information about collections, services, and facilities are available on both the <u>Libraries' website</u> and the <u>Design Library website</u>.

The **D. H. Hill Library**, one of two main libraries at NC State University, is located within 10 minutes' walking distance of the college. Library reference service, <u>"Ask Us"</u>, is available 24 hours through online chat, and via text messaging, email, and instant messaging from early morning until midnight most days. This library also houses a Visualization Studio and a new Makerspace.

Students and faculty can also use the new James B. Hunt Jr. Library, located on the university's Centennial Campus. This new, state-of-the-art-library houses multiple technology-rich spaces for research, teaching, and learning, with almost 100 reservable rooms for group study and use of specialized tools. Five large, high-definition display walls around the building showcase faculty and student work, including that of Design students, and encourage the exploration of the large-scale visualization techniques that are changing how data is seen and used. The 21-foot-wide video wall in the Game Lab gives designers and developers of virtual environments a perfect space for their creative and innovative work. The Teaching and Visualization Lab's visualization and display technologies enable the recreation of historical scenes and narratives (one prominent example is the Virtual Paul's Cross project at http://vpcp.chass.ncsu.edu/, on which Design faculty and students collaborated), interactive simulations, immersive interactive computing, "big data" decision theaters, and comparative social computing. Design students and faculty frequently take advantage of the Creativity Studio, a flexible, "white box" display and collaboration space that can be reconfigured to support a variety of activities in many disciplines, with high definition, 3D-capable projectors; movable and writable walls; a full theater lighting kit; and many interactive tools that can be configured for simulations and virtual environments.

The Hunt Library also offers reservable labs and green screens for digital media creation; software and hardware fully equipped for creating and mixing music, voice recording, and video. A 3D printer and laser cutter in the Makerspace enable students and researchers to prototype and "print" out multidimensional physical versions of their designs.

The Director of the Design Library welcomes requests for new materials from all faculty and students, and faculty are quick to take advantage of this option. Library staff are very supportive of acquiring new materials in response to faculty publications, recommendations, and teaching requests. There is also a Design Library committee with faculty from all the departments in Design, which brings areas of concern to the Director and advocates for the Design Library within the college and the university. In the past, the Director has requested and received additional collections funding from the Libraries when the college has created a new program or new faculty with additional areas of interest are hired.

3. How does instructional courses integrate the library and other resources?

Incoming students have the option to have a tour of the library during their pre-semester orientation. A more formal introduction to Design Library resources is included during the first-year orientation course for all graduate students. Additional instruction sessions are at the discretion of the professor, and professors from all departments regularly include library instruction sessions in their courses. Doctoral programs (e.g. Doctor of Design program) offer workshops that focus on literature searching and analysis, and leverage the Library's own rich workshops series.

The NCSU Libraries offers an award-winning set of <u>online guides and tutorials</u> to help students build their research skills and complete their coursework successfully. Design courses, along with all other courses at the university, are featured in the <u>Libraries' Course Tools</u> system, which brings together relevant library resources and services selected for each course by both the faculty members and subject specialist librarians.

In addition, the Director works with faculty and students using the high-technology spaces at the Hunt Library, assisting them with the technology and ensuring their presentations or programs go smoothly.

4. What are the hours that the library is open to students and faculty?

Design Library regular semester hours are as follows: Monday - Thursday, 7:30 a.m. to 10:00 p.m. Friday, 7:30 a.m. - 6:00 p.m. Saturday, Closed Sunday, 1:00 p.m. to 10:00 p.m

Summer Session Hours are as follows: Monday - Thursday, 7:30 a.m. to 9:00 p.m. Friday, 7:30 a.m. - 5:00 p.m. Saturday, Closed Sunday, 1:00 p.m. to 5:00 p.m

5. How does the program determine if these hours are convenient and adequate to serve the needs of faculty and students?

The Design Library Committee, a standing committee of the College of Design, is able to bring any concerns about library operating hours to the Director of the Design Library. The Saturday closure was implemented due to budget constraints; it was decided to close the library on the day it is least used, rather than curtail hours in the evening.

6. How does the program assess its library resources?

All electronic databases, e-journals, and e--books provided by the NCSU Libraries are available to Design students. Patrons can log into electronic resources from their studio workstations, from computers located in the library, or from remote locations. Patrons can also manage their borrowing account and renew materials online.

Other libraries at NC State University also hold materials of interest to design researchers. A number of collections in architecture, horticulture, and natural resources are available in the Special Collections Research Center at the D.H. Hill Library. Landscape architecture students and faculty may also find materials of interest at the university's Natural Resources Library. Students and faculty can request that material at other libraries on campus be delivered to the Design Library for their convenience.

The NCSU Libraries is a member of the Triangle Research Libraries Network (TRLN), and NC State University students and faculty may use the libraries and borrow materials directly at Duke University, the University of North Carolina at Chapel Hill, and North Carolina Central University. The combined TRLN collections offer more than 16-million volumes with cross-searching capabilities and a rapid delivery service (1-2 days). Students and faculty may request delivery of materials from other University of North Carolina libraries across the state or from libraries across the nation and the world through interlibrary loan ("Trip saver" service).





ADDENDA

Addenda information is considered important to giving a full understanding for the program.

A. Program Details (as illustrated by the following tables)

B. Curriculum / Syllabi (The syllabi may be provided in digital format and don't need to be provided in paper in the paper SER document.)

C. Student Information

D. Alumni Information

E. Faculty Information

(The individual faculty records for each faculty member may be provided in digital format and don't need to be provided in paper in the paper SER document.)

F. Facilities Information

(The floor plans may be provided in digital format and don't need to be provided in paper in the paper SER document.)

Accompanying Information:

Visit Schedule (if available) See Front Matter

Visit Map

Include a one-page map showing the locations (labelled) of buildings, meeting locations, lodging, library, and program resources into the SER making it easily accessible by Visiting Team Members during the visit.



Brooks Hall:

Team Room, Belk Rotunda Brooks Gallery Department Heads Office, Brooks 215 Dean's Conference Room, Brooks 110 Harrye B. Lyons Design Library William Keating Bayley IT Lab

Kamhoefner Hall:

Design Studios Computer Pods Faculty Offices Allred Gallery KAM 130 Coastal Dynamics Design Lab Offices

Leazar Hall:

Materials Lab Natural Learning Initiative Offices Faculty Office



Holladay Hall: Chancellor's Conference Room

Faculty Resources

1. Budgeted Faculty Resources: TOTAL

Record the total faculty FTE resources committed to program under review.

	Current Year (FALL 2020- SPRING 2021)	Last Year (FALL 2019- SPRING 2020)	2 Years Ago (FALL 2018- SPRING 2019)	3 Years Ago (FALL 2017- SPRING 2018)	4 Years Ago (FALL 2016- SPRING 2017)	5 Years Ago (FALL 2015- SPRING 2016)
Professors (Tenured/Tenure-track)	665,796	790,135	434,601	391,870	386,595	397,127
Associate Professors (Tenured/Tenure-track)	156,122	156,122	253,688	244,860	229,109	220,243
Assistant Professors (Tenured/Tenure-track)	n/a	n/a	n/a	n/a	n/a	91,279
Instructors/Lecturers (Tenured/Tenure-track)	63,000	82,990	45,000	65,000	40,040	45,528
Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Associate Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Assistant Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Instructors/Lecturers (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Adjunct Faculty (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Sessional Faculty (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Totals	884,918	1,029,247	733,289	701,730	655,744	754,177

2. Budgeted Faculty Resources: Male

Record the Male faculty FTE resources committed to program under review.

	Current Year (FALL 2020- SPRING 2021)	Last Year (FALL 2019- SPRING 2020)	2 Years Ago (FALL 2018- SPRING 2019)	3 Years Ago (FALL 2017- SPRING 2018)	4 Years Ago (FALL 2016- SPRING 2017)	5 Years Ago (FALL 2015- SPRING 2016)
Professors (Tenured/Tenure-track)	520,796	650,135	128,334	391,870	386,595	397,127
Associate Professors (Tenured/Tenure-track)	80,122	80,122	253,688	244,860	229,109	220,243
Assistant Professors (Tenured/Tenure-track)	n/a	n/a	n/a	n/a	n/a	n/a
Instructors/Lecturers (Tenured/Tenure-track)	47,900	70,490	35,000	60,000	35,040	n/a
Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Associate Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Assistant Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Instructors/Lecturers (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Adjunct Faculty (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Sessional Faculty (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Totals	648,818	800,747	417,22	696,730	650,744	617,370

3. Budgeted Faculty Resources: Female

Record the Female faculty FTE resources committed to program under review.

	Current Year (FALL 2020- SPRING 2021)	Last Year (FALL 2019- SPRING 2020)	2 Years Ago (FALL 2018- SPRING 2019)	3 Years Ago (FALL 2017- SPRING 2018)	4 Years Ago (FALL 2016- SPRING 2017)	5 Years Ago (FALL 2015- SPRING 2016)
Professors (Tenured/Tenure-track)	145,000	140,000	128,334	0	0	0
Associate Professors (Tenured/Tenure-track)	n/a	76,000	0	0	0	0
Assistant Professors (Tenured/Tenure-track)	n/a	n/a	n/a	n/a	n/a	91,279
Instructors/Lecturers (Tenured/Tenure-track)	n/a	n/a	n/a	n/a	n/a	n/a
Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Associate Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Assistant Professors (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Instructors/Lecturers (non-Ten./Tentrack)	15,400	12,500	59,136	54,136	52,136	45,528
Adjunct Faculty (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Sessional Faculty (non-Ten./Tentrack)	n/a	n/a	n/a	n/a	n/a	n/a
Totals	236,400	228,500	187,470	54,136	52,136	136,807

4. Budgeted Faculty Resources: Race/Ethnicity

Record the race/ethnicity for faculty FTE resources committed to program under review

	Current Year (FALL 2020- SPRING 2021)	Last Year (FALL 2019- SPRING 2020)	2 Years Ago (FALL 2018- SPRING 2019)	3 Years Ago (FALL 2017- SPRING 2018)	4 Years Ago (FALL 2016- SPRING 2017)	5 Years Ago (FALL 2015- SPRING 2016)
American Indian/	n/a	n/a	n/a	n/a	n/a	n/a
Alaska Native						
Asian	n/a	n/a	n/a	n/a	n/a	n/a
Native Hawaiian/ Other Pacific Islander	n/a	n/a	n/a	n/a	n/a	n/a
Black / African American	97,901	82,440	78,522	78,522	76,922	73,935
Hispanic / Latino	80,122	80,122	80,122	80,122	79,122	76,613
White / Non-Hispanic	422,895	567,695	401,311	478,086	459,660	466,822
Mixed	n/a	n/a	n/a	n/a	n/a	n/a
Unknown	n/a	n/a	n/a	n/a	n/a	n/a
Totals	600,918	730,257	559,955	636,730	615,704	617,370

5. Budgeted Faculty Resources: FTE Allocation Among Multiple Programs

For LA faculties engaged across multidisciplinary programs, illustrate the distribution of FTE resources of current faculty across those various programs.

	FTE LA Faculty Resources Applied to BLA/BSLA Program	FTE LA Faculty Resources Applied to MLA Program	FTE LA Faculty Resources Applied to non-LA Program(s)
Professors (Tenured/Tenure-track)	n/a	n/a	n/a
Associate Professors (Tenured/Tenure-track)	n/a	n/a	n/a
Assistant Professors (Tenured/Tenure-track)	n/a	n/a	n/a
Instructors/Lecturers (Tenured/Tenure-track)	n/a	n/a	n/a
Professors (non-Ten./Tentrack)	n/a	n/a	n/a
Associate Professors (non-Ten./Tentrack)	n/a	n/a	n/a
Assistant Professors (non-Ten./Tentrack)	n/a	n/a	n/a
Instructors/Lecturers (non-Ten./Tentrack)	n/a	n/a	n/a
Adjunct Faculty (non-Ten./Tentrack)	n/a	n/a	n/a
Sessional Faculty (non-Ten./Tentrack)	n/a	n/a	n/a
Totals	n/a	n/a	n/a

6. Budgeted Faculty Resources: Degrees

Record the number of degrees earned by current LA faculty.

	Undergrad degree in Landscape Architecture (BLA or BSLA)	MLA	Doctorate
Professors	0	4	2
(Tenured/Tenure-track)			
Associate Professors	1	2	1
(Tenured/Tenure-track)			
Assistant Professors	n/a	n/a	n/a
(Tenured/Tenure-track)			
Instructors/Lecturers	n/a	n/a	n/a
(Tenured/Tenure-track)			
Professors	1	2	0
(non-Ten./Tentrack)			
Associate Professors	0	1	1
(non-Ten./Tentrack)			
Assistant Professors	2	4	0
(non-Ten./Tentrack)			
Instructors/Lecturers	0	2	0
(non-Ten./Tentrack)			
Adjunct Faculty	n/a	n/a	n/a
(non-Ten./Tentrack)			
Sessional Faculty	n/a	n/a	n/a
(non-Ten./Tentrack)			
Totals	4	15	4

Other Program Resources

7. Other Budgeted Resources:

Record the other budgeted resources (by FTE or by budgeted dollars) committed to program under review.

Guest Speakers or Critics	Current Year (FALL 2020- SPRING 2021) 2800	Last Year (FALL 2019- SPRING 2020) 12000	2 Years Ago (FALL 2018- SPRING 2019) 8666.50	3 Years Ago (FALL 2017- SPRING 2018) 9500	4 Years Ago (FALL 2016- SPRING 2017) 4145	5 Years Ago (FALL 2015- SPRING 2016) 1500
Endowed Positions	n/a	n/a	n/a	n/a	n/a	n/a
Undergraduate Teaching Assistantships	n/a	n/a	n/a	n/a	n/a	n/a
Graduate Teaching Assistantships	173900	102500	81100	90800	82400	unknown
Undergraduate Research Assistantships	n/a	n/a	n/a	n/a	n/a	n/a
Graduate Research Assistantships (sponsored by the institution)	n/a	n/a	n/a	n/a	n/a	n/a
Graduate Research Assistantships (sponsored by outside sources)	n/a	n/a	n/a	n/a	n/a	n/a
Other (explain)	n/a	n/a	n/a	n/a	n/a	n/a

1. Required / Elective Courses

Total Units/Credit Hours required to graduate: _____ units or **81** credit hours

Elective Units / Credit Hours required to graduate: _____ units or 9 credit hours

Required Courses	Units/Credit Hours
Landscape Architecture	72
Architecture	
City & Regional Planning	
Natural Sciences	
Horticulture	
Engineering	
Art or Design	
Computer Applications/Technology	
Other	
Other	

Group or Controlled Elective Choices	Units/Credit Hours
Natural Sciences	
Social Sciences	
English, Speech, Writing	
Other	
Free Electives	9

2. Typical Program of Study

Identify length of term/semester and relation of contact hours to unit/credit hours. List courses (instructional units) for a typical program of study, using the format given below.

Instructions

1. List specific LA courses required (e.g., LA 31 Landscape Architecture Studio 4). Course numbers must correspond with those used in other sections of this report.

2. Show group or controlled elective requirements by title (e.g., Social Science Elective, Planning Elective).

3. List free electives as "Electives."

4. The sequence of courses is to be typical student coursework.

5. Reproduction of appropriate pages from the program catalog may be used for this description providing they contain the required information.

MLA Track III Curriculum

First Professional LAAB Accredited Degree

81 credit hours [72 cr. LAR Courses and 9 cr. free electives]

The LAAB Accredited Track III curriculum is intended for graduate students with undergraduate degrees in fields other than landscape architecture, architecture or related design fields.

	Summer		Fall	12	Spring	
First year						
		LAR 501 (6)	Landscape Architecture Introduction Design Studio	LAR 502 (6)	Site Design and Environmental Planning Studio	
-		LAR 520 (3)	Environment and Culture	LAR 527 (3)	Landform, Grading and Environmental Site Systems	
		LAR 582.017 (1) LAR 582.018 (1) LAR 582.019 (1)	Adobe Suite Autocad 3D Modeling	LAR 582.001 (3)	LA History Graduate Seminar	
		LAR 582 012 (2)	Landscape Architecture Immersion	-		
		14 credit hours		12 credit hours		
Second year						
LAR 523 (2)	Landscape Architecture Plant Identification	LAR 503 (6)	Design Development and Construction Documentation Studio		Design + Build Studio <u>or</u> Advanced Topics Studio In Land. Arch + Env. Planning <u>or</u> Independent Project	
LAR 524 (2)	Landscape Architecture Planting Design	LAR 528 (3)	LA Construction Materials and Methods	LAR 550 (3)	Landscape Architecture Professional Practice	
L		LAR 517 (3)	GIS Applications in Landscape Architecture + Env. Planning	LAR 540 (3)	Research Methods in Environmental Design + Landscape Architectur	
		Varies (3)	Free Elective(s)			
4 credit hours		12 credit hours +	3 free electives	12 credit hours		
Third year						
Open for free electives		LAR 507 (6)	Advanced Topics Studio In Landscape Architecture + Env. Planning		Design + Build Studio <u>or</u> Advanced Topics Studio In Land. Arch + Env. Planning <u>or</u> Independent Project	
		LAR 534 (3)	Landscape Architecture Theory and Criticism	LAR 545 (3)	City Planning and Design	
		Varies (3)	Free Elective(s)	Varies (3)	Free Elective(s)	
		9 credit hours + 3	fraa alastiwar	9 credit hours + 3 free electives		

Bold denotes a design studio. LAR 501 and 502 must be taken in sequence and are prerequisites for all other studios.

MLA Track II Curriculum

First Professional LAAB Accredited Degree, Advanced Placement Track

63-69 credit hours*

This curriculum is designed for:

1. Graduate students with prior degrees in landscape architecture, architecture, or related design programs that are <u>not</u> LAAB accredited.

2. Graduate students obtaining concurrent degrees in Architecture, Urban Design or Urban Planning.

*IMPORTANT NOTE: <u>This is a sample curriculum</u>. The actual required courses, number of studio courses (either 4 or 5), and credit hours will be determined based on evidence of work from the individual student's undergraduate degree, and a portfolio review after completion of the first semester in the NCSU MLA program.

	Summer		Fall		Spring
First year					
TTA Ameri		LAR 501 (6) LAR 507 (6)	Landscape Architecture Introduction Design Studio <u>or</u> Advanced Topics Studio in Land. Arch + Env.Plng	LAR 502 (6)	Site Design and Environmental Planning Studio
		LAR 520 (3)	Environment and Culture	LAR 527 (3)	Landform, Grading and Environmental Site Systems
		LAR 517 (3)	GIS Applications in Landscape Architecture + Env. Planning	LAR 582.001 (3)	LA History Graduate Seminar
-		LAR 582 012 (2)	Land. Arch. Immersion	N	
		14 credit hours		12 credit hours	

Second year				100 500 (0)	
LAR 523 (2)	Landscape Architecture Plant Identification	LAR 503 (6)	Design Development Studio	LAR 506 (6) LAR 507 (6) LAR 508 (6)	Design + Build Studio <u>or</u> Advanced Topics Studio In Land. Arch + Env. Planning <u>or</u> Independent Project
LAR 524 (2)	Landscape Architecture Planting Design	LAR 528 (3)	LA Construction Materials and Methods		Landscape Architecture Professional Practice
		Varies (3)	Free Elective(s)	LAR 545 (3)	City Planning and Design
1	21			LAR 540 (3)	Research Methods in Environmental Design + Landscape Architecture
4 credit hours		9 credit hours +	3 free electives	15 credit hours	
Third year					
Open for free electives		LAR 507 (6)	Advanced Topics Studio in Landscape Architecture + Env. Planning		
		LAR 534 (3)	Landscape Architecture Theory and Criticism		T
		Varies (3)	Free Elective(s)		
		9 credit hours +			

Bold denotes a design studio.

3. Landscape Architectural Courses Offered During Past Academic Year¹ (Fall 2020-Spring 2021)

List all landscape architecture courses offered during the past academic year and who taught each. Course numbers must correspond with those used in other sections of this report. Course descriptions should be in the Appendix — not in this section.

Course Title	Course Number	Instructor	Credit Hours	Contact Hours / Week	# of Stud ents
FALL 2020					
History of Landscape Arch	LAR 444	Magallanes	3	3	41
LAR Intro Design Studio	LAR 501	Delcambre/Bressler	6	8	26
LAR DD & CD Studio	LAR 503	Klondike/Monette	6	12	28
Adv. Top. Studio in LA and EP (Cultural Landscapes)	LAR 507	Boone	6	8	14
GIS Apps in LAR	LAR 517	МсСоу	3	3	29
Environment and Culture	LAR 520	Fox	3	3	34
LAR Materials & Methods	LAR 528	Calkins	3	3	27
LAR Theory and Criticism	LAR 534	Boone	3	3	19
Special Topics: Survey of Natural Hazards & Disasters	LAR 582.008	Smith	3	3	18
Special Topics: Computational / Parametric Modeling using Rhino	LAR 582.011	Bowman	3	3	17
Intro to Autocad, Adobe, and 3D Modeling	LAR 582.018, .017 and .019	Baldwin	3	3	30
LA Immersion course*	LAR 582.012	Calkins/Monette	1	20	27
Independent Study	LAR 630.005	Delcambre	3	varies	1
Independent Study	LAR 630.008	Fox	3	varies	1
Independent Study	LAR 630.011	Klondike	3	varies	1
SPRING 2021					
Site Design and Env Planning Studio	502	Magallanes/Monette	6	8	28
LAR Design + Build	506	Delcambre	6	12	10
Adv. Top. Studio in LA and EP (Coastal Dynamics)	507	Fox	6	12	12
Adv. Top. Studio in LA and EP (Green New Deal)	507	Boone	6	12	16
Grading and Environmental Site Systems	527	Magallanes and Delcambre	3	3	29
Env Social Equity and Design	535	Boone	3	3	26
Research Methods in LA and EP	540	Pasalar	3	3	28

NC State University LAAB Self-Evaluation Report, December 2021

	1				
Landscape Performance Metrics	543	МсСоу	3	3	10
City Planning and Design	545	Howe	3	3	29
Landscape Imperative	546	Flink	3	3	14
Professional Practice	550	Swink	3	3	23
History of Designed Landscapes	582.001	Deming	3	3	29
Special Topics LAR: Biophilic	582.019	Moore	3	3	26
Design					
Special Topics LAR: Disaster	582.005	Smith	3	3	18
Resilient Policy, Engineering and					
Design					
Special Topics LAR: Speaker	582.002	Smith	1	1	18
Series: Natural Hazards,					
Disasters and Climate Change					
Adaptation					
Internship	650.001	Calkins	3	12	1

*LA Immersion Course is taught in the two weeks before the semester begins.

1. Student Information Overview

Include only full-time students recorded as majors in the program being reviewed for the last five years.

	In-S	tate	Out-of-State		International		TOTAL	
Academic	Male	Female	Male	Female	Male	Female	Male	Female
Year								
2020-2021	15	28	2	11	3	12	20	51
2019-2020	14	25	1	9	3	13	18	47
2018-2019	17	15	1	3	6	13	24	31
2017-2018	17	17	4	0	6	15	27	32
2016-2017	18	15	2	2	6	11	26	28

2. Ethnic Group/Diversity

Include only full-time current landscape architecture students.

- <u>1 %</u> American Indian <u>2.8 %</u> Hispanic
- <u>3 %</u> Black (non-Hispanic) <u>66 %</u> Caucasian
- <u>22</u> % Asian or Pacific Islander <u>3</u> % Mixed (Two or more races)
- 4.5 % Other/Unknown

3. Applications

	Current Year (2020- 2021)	Last Year (2019- 2020)	2 Years Ago (2018- 2019)	3 Years Ago (2017- 2018)	4 Years Ago (2016- 2017)	5 Years Ago (2015- 2016)
Total number of applications	62	68	57	56	70	84
Applications from males	20	17	17	22	23	33
Applications from females	45	54	40	34	47	51

4. Enrollments

Current	Last	2 Years	3 Years	4 Years	5 Years
Year	Year	Ago	Ago	Ago	Ago

	(FALL 2020- SPRING 2021)	(FALL 2019- SPRING 2020)	(FALL 2018- SPRING 2019)	(FALL 2017- SPRING 2018)	(FALL 2016- SPRING 2017)	(FALL 2015- SPRING 2016)
Total enrollment	71	65	55	59	54	58
Males	20	18	24	27	26	27
Females	51	47	31	32	28	31

5. Student Ethnic Backgrounds

Race/Ethnicity	Current Year (FALL 2020- SPRING 2021)	Last Year (FALL 2019- SPRING 2020)	2 Years Ago (FALL 2018- SPRING 2019)	3 Years Ago (FALL 2017- SPRING 2018)	4 Years Ago (FALL 2016- SPRING 2017)
Asian	15	16	19	20	16
Black or African American	2	1	0	1	0
Hispanic/Latino	3	2	2	0	4
Mixed (Two or more races)	2	0	0	0	0
Unknown	6	10	6	9	11
White	45	37	29	29	23
Total	71	65	55	59	54

1. Degrees Awarded

Tabulate the number of degrees awarded in the present year (estimated) and for the years since the last SER.

Academic Year	Males	Females	TOTAL
Current Year (2020-2021)	6	12	18
1 Year Ago (2019-2020)	4	12	16
2 Years Ago (2018-2019)	6	9	15
3 Years Ago (2017-2018)	9	8	17
4 Years Ago (2016-2017)	9	10	19
5 Years Ago (2015-2016)	7	11	18
6 Years Ago (2014-2015)	14	9	23

2. Record of Advanced Study

Tabulate for the years since the last SER all alumni who were or are engaged in advanced study in any field. (Include alumni who are in the process of earning an advanced degree.)

Institution	Degree	Number of	Year LA degree	Year advanced
		Students	awarded	degree awarded
North Carolina State	PhD	4	2019, 2019, 2018, 2015	In progress
University				
West Virginia University	PhD	1	2017	2019
University of Florida	PhD	1	2015	In progress
Hunan University	PhD	1	2015	In progress

3. Current Employment

Tabulate the present employment of those having the degree conferred by the program since the last SER.

Present Occupation	Males	Females	TOTAL
Advanced Study and Research	2	5	7
Teaching	3	1	4
Private Practice	33	43	76
Public Practice	6	6	12
Landscape Hort./Design Build	1	1	2
Volunteer Service (Specify)	n/a	n/a	n/a
Other (Specify)*	n/a	2	2
Unknown	10	17	27
TOTAL	55	75	133

*Other: Visual Artist, Technology Design
1. Previous and Present Faculty

Tabulate faculty and staff specifically assigned and budgeted to the particular program under review. The number listed in the TOTAL column should agree with the information provided for Standard 2C (Faculty Numbers). Use the following format:

Rank/Title	Current	1 Year Ago	2 Years Ago	TOTAL
Professor/LA	6	7	5	18
Assoc. Professor/LA	2	2	1	5
Asst. Professor/LA	0	0	0	0
Instructor	6	8	5	19
Asst. Professor/Arch.	n/a	n/a	n/a	n/a
Visiting Lecturer/ Adjunct	n/a	n/a	n/a	n/a
TOTALS	14	17	11	42

2. Instructional Assignments

Complete the following table for all full and part time instructors. Begin with the Program Administrator and list in order of rank.

Teaching: Percentage FTE assigned to courses taught/instruction.

Research: Include only the percentage of time specifically assigned to research and so recognized by reduction in full-time teaching load. Do not include research efforts normally considered a part or full-time faculty members' contributions.

Service: Include only the percentage of time specifically allocated to service activities (internal, institutional, community and professional) specifically assigned and reviewed as a part of a faculty member's assigned workload.

Administration: Include only the percentage of time devoted to regularly assigned administrative responsibilities. Do not include incidental ad hoc administrative duties, i.e., committee work, visiting lecturer arrangements, student advisement.

reaching %

Faculty member	Degree	Land. Arc. Bachelors Program	Land. Arch. Masters Program	Other non-L. A. programs	Research %	Service %	Admin / other %	TOTAL %
FULL TIME,								
TENURED/TENURE TRACK Meg Calkins	BUP, MLA,		20%	_	10%	20%	50%	100%
Nieg Calkins	M.Arch	na	20%	-	10%	20%	50%	100%
Gene Bressler (Phased retirement 2018-2020, 50% time; Retired Dec. 2020)	BLA, MLA	na	30%	-	15%	5%	-	50%
Kofi Boone	BSNR, MLA	na	60%	-	30%	10%	-	100%
Art Rice (Retired July 2020)	BLA, MLA	na	60%		20%	20%		100%
M. Elen Deming	PhD	na	10%	30%	20%	15%	25%	100%
Andrew Fox	BS, MLA	na	60%	-	30%	10%	-	100%
Mark Elison Hoversten	BLA, MFA, PhD	na	-	-	-	-	100%	100%
Robin Moore (Phased retirement July 2021, 50% time)	Dipl. Arch, MCRP	na	60%	-	30%	10%	-	100%
Gavin Smith	BS, MS, PhD	na	60%	-	30%	10%	-	100%
Fernando Magallanes (Phased retirement July 2021, 50% time)	BLA, MLA	na	60%	-	30%	10%	-	100%
Carla Delcambre	B.Arch,ML A	na	60%	-	30%	10%	-	100%
Celen Pasalar	M.Arch, PhD	na	20%	-	30%	-	50%	100%
Julieta Sherk, Horticulture	MS, MLA		-	100%	-	-		100%
RESEARCH ASSOCIATE FACULTY								
Nilda Cosco	PhD	na	-		80%	20%	-	100%
Travis Klondike	BLA, MLA	na	30%		70%	-	-	100%
ADJUNCT PROFESSORS of the PRACTICE								
Rodney Swink	BA, MLA	na	10%					10%
Chuck Flink	BLA, MLA	na	10%					10%
Emily Mcoy	BS, MLA	na	20%					20%
Ben Monette	BA, MLA	na	30%					30%
Daniel Howe	BS, MLA	na	10%					10%
Jesse Turner	BLA, MLA	na	20%					
LECTURERS								
Madalyn Baldwin	BA, MLA	na	10%					
Austin Bowman	BS, MLA	na	10%					

3. Courses Taught by Individual Faculty Members

Complete the following table for each instructor.

Courses Taught: Use current year or last academic year depending on time of report preparation (Fall 2020-Spring 2021)

Term Symbols: Use the institutional terminology. For example: Fall Semester - FS, Spring Semester, SS, Fall Quarter - FQ, Winter Quarter - WQ, Spring Quarter SQ, Summer Term - ST.

Contact Hours: Actual number of scheduled contact hours per week between instructor and students. **FTE Students**: Multiply credit hours by number of students and divide by 15 for undergraduate courses, 12 for graduate level courses.

Courses Taught by Individual Faculty Members Fall 2020 - Spring 2021

Meg Calkins

Course Taught	Course	Term	Credit	Contact Hrs	Number	FTE
	Number		Hours	/ Week	Of Students	Students
LAR Materials & Methods	LAR 528	F20	3	3	27	6.75
LA Immersion*	LAR	F20	2	40 over two	27	2.25
	582.012			weeks		

*Co-delivered with Ben Monette. The LA Immersion course is taught in 40 hours over the course of two weeks, directly before the Fall semester begins

Kofi Boone

Course Taught	Course	Term	Credit	Contact Hrs	Number	FTE
	Number		Hours	/ Week	Of Students	Students
Adv. Top. Studio in LA and	LAR 507	F20	6	8	14	7
EP (Cultural Landscapes)						
LAR Theory and Criticism	LAR 534	F20	3	3	19	4.75
Adv. Top. Studio in LA and	LAR 507	S20	6	12	16	8
EP (Green New Deal)						
Env Social Equity and Design	LAR 535	S20	3	3	26	6.5

Gene Bressler

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
LAR Intro Design Studio	LAR 501	F20	6	8	13	6.5

Carla Radoslovich Delcambre

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
LAR Intro Design Studio	LAR 501	F20	6	8	13	6.5
LAR Design + Build	LAR 506	S21	6	12	10	5
Grading	LAR 527	S21	3	3	15	3.625

Elen M. Deming

Course Taught	Course	Term	Credit	Contact Hrs	Number	FTE
	Number		Hours	/ Week	Of Students	Students

Special Topics LAR: History	LAR	S21	3	3	29	7.25
of Designed Landscapes	582.001					

Andrew Fox

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
Environment and Culture	LAR 520	F20	3	3	34	8.5
Adv. Top. Studio in LA and EP (Coastal Dynamics)	LAR 507	S21	6	12	12	6

Fernando Magallanes

Course Taught	Course	Term	Credit	Contact Hrs	Number	FTE
	Number		Hours	/ Week	Of Students	Students
History of Landscape Arch	LAR 444	F20	3	3	41	10.25
Site Design and Env Planning	LAR 502	S21	6	8	14	7
Studio*						
Grading**	LAR 527	S21	3	3	14	3.625

Robin Moore

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
Special Topics LAR: Biophilic Design	LAR 582.019	S12	3	3	26	6.5

Celen Pasalar

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
Research Methods in LA and EP	LAR 540	S21	3	3	28	7

Gavin Smith

Course Taught	Course	Term	Credit	Contact Hrs /	Number	FTE
	Number		Hours	Week	Of Students	Students
Survey of Natural Hazards &	LAR	F20	3	3	18	4.5
Disasters	582.008					
Disaster Resilient Policy,	LAR	S21	3	3	18	4.5
Engineering and Design	582.005					
Speaker Series: Disaster	LAR	S21	1	1	18	1.5
Resilience	582.002					

Charles A. Flink

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
Landscape Imperative	LAR 546	S21	3	3	14	3.5

Daniel Howe

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
City Planning and Design	LAR 545	S21	3	3	29	7.25

Travis Klondike

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
LAR DD & CD Studio	LAR 503	F20	6	12	14	7

Emily McCoy

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
GIS Apps in LAR	LAR 517	F20	3	3	29	7.25
Landscape Performance	LAR 543	S21	3	3	10	2.5
Metrics						

Ben Monette

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
LAR DD & CD Studio*	LAR 503	F20	6	12	14	7
Site Design and Env Planning Studio**	LAR 502	S21	6	8	14	7

Rodney Swink

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
Professional Practice	LAR 550	S21	3	3	23	5.75

Madalyn Baldwin

Course Taught	Course Number	Term	Credit Hours	Contact Hrs / Week	Number Of Students	FTE Students
Intro to Autocad, Adobe,	LAR	F20	3	3	30	7.5
and 3D Modeling	582.018,					
	.017 and					
	.019					

<u>Austin Bowman</u>

Course Taught	Course	Term	Credit	Contact Hrs	Number	FTE
	Number		Hours	/ Week	Of Students	Students

Special Topics:	LAR	F20	3	3	17	4.25
Computational / Parametric	582.011					
Modeling using Rhino +						

4. Visiting Lecturers/Critics

List the name, specialty, dates in attendance and the contribution of visiting critics and lecturers, resource personnel, etc. who served the program. List only persons who were brought in for the program under review. Indicate by an asterisk (*) those sponsored jointly with other departments or sponsored at the college or school level. - Use the format below to list this information for the present and two preceding academic years.

Name	Field/Specialty	Date(s)	Contribution
Jose Alfredo Ramirez	Co-director, Landscape Urbanism MArch/MSc Postgraduate program at the Architectural Association, Director of Groundlab.	4/14/2021	LAEP Department Lecture Series Visiting Speaker
Pamela Conrad	ASLA, LEED AP, PLA, Principal, CMG LA and Founder, Climate Positive Design	3/31/2021	LAEP Department Lecture Series Visiting Speaker
Nina-Marie Lister	Graduate Program Director and Associate Professor, Ryerson School of Urban and Regional Planning	3/10/2021	LAEP Department Lecture Series Visiting Speaker, Co-sponsored by NCSU Doctor of Design Program
Deb Guenther	Partner, Mithun	2/21/2021	LAEP Department Lecture Series Visiting Speaker
Julian Agyeman	Professor of Urban and Environmental Policy and Planning at Tufts University, and co-founder and editor-in-chief of Local Environment: The International Journal of Justice and Sustainability	11/12/2020	LAEP Department Lecture Series Visiting Speaker
Kongjian Yu	Founder, Turenscape	10/23/2020	LAEP Department Lecture Series Visiting Speaker
Kotchakorn Voraakhom	Founder, Landprocess and Porous City Network, Landscape Architect, Thailand	9/18/2020	LAEP Department Lecture Series Visiting Speaker
Chuck Flink	FASLA, Professor of Practice at NCSU	4/15/2020	LAEP Department Lecture Series Visiting Speaker
Jennifer Guthrie	FASLA, RLA, Gustafson, Guthrie + Nichol	2/26/2020	LAEP Department Lecture Series Visiting Speaker, In-Class Studio Critic
Sara Zewde	Founder, Studio Zewde	10/16/2019	LAEP Department Lecture Series Visiting Speaker, In-Class Studio Critic

Andrew Cochran	FASLA, FLA, Andrea Cochran Landscape	9/25/2019	LAEP Department Lecture Series Visiting Speaker
Ignacio Bunster Ossa	Architecture FASLA, AECOM	3/19/2019	LAEP Department Lecture Series Visiting Speaker
Ryan Hargrove	ASLA, University of Kentucky	3/19/2019	LAEP Department Lecture Series Visiting Speaker
Kurt Culbertson	FASLA, Design Workshop	4/2/2019	LAEP Department Lecture Series Visiting Speaker
Christine TenEyck	FASLA, TenEyck Landscape Architects	2/27/2019	LAEP Department Lecture Series Visiting Speaker
Randolph Hester	Professor Emeritus of Landscape Architecture and Environmental Planning, UC Berkeley	9/26/2018	LAEP Department Lecture Series Visiting Speaker
Kofi Boone	Professor, NCSU	9/26/2018	LAEP Department Lecture Series Visiting Speaker
Marcia McNally	Professor Emeritus of Landscape Architecture and Environmental Planning, UC Berkeley; Directory, Neighborhood Laboratory, Durham	9/26/2018	LAEP Department Lecture Series Visiting Speaker
Laura Solano	Michael Van Valkenburgh Associates	10/10/2018	LAEP Department Lecture Series Visiting Speaker
David Vasini	West 8	11/28/2018	LAEP Department Lecture Series Visiting Speaker
Dr. C.L. Bohannon	Assistant Professor, Director of the Community Engagement Lab, Virginia Tech	Spring 2020	Final Reviewer
Chip Sullivan	Professor of Landscape Architecture and Environmental Planning. UC Berkeley	Spring 2020	Final Reviewer
Anne Spafford	Associate Professor. NCSU College of Horticulture	Spring 2020	Final Reviewer
Preston Montague	Landscape Architect and Artist	Spring 2020	Final Reviewer
Matthew Evans Helena Mitasova	Landscape Architect Professor of Marine, Earth and Atmospheric Sciences	Spring 2020 Spring 2019	Final Reviewer Guest Lecturer
Elen Deming, FASLA	Professor of Landscape Architecture, NCSU	Spring 2019	Guest Lecturer
Gene Bressler, FASLA	Emeritus Professor of Landscape Architecture, NCSU	Spring 2019	Guest lecturer/panelist/reviewer
George Hallowell, PhD	School of Architecture, NCSU	Spring 2019	Reviewer for Final Presentation
Karen Dewitt	Design Library Director, NCSU	Spring 2019	Workshop on Library Resources

Muntazar Mansur, PhD	Post-Doc Natural Learning Initiative, NCSU	Spring 2019	Workshop on Observation Technique
Emily McCoy	Assistant Professor of Practice in Landscape Architecture, NCSU; Design Workshop Principal	Spring 2019	Guest lecturer on Landscape Performance and Metrics
Tania Allen	Associate Professor of Art and Design, NCSU	Spring 2019	Guest lecturer on GIS/Mapping
Wayne Place	PhD, Professor of Architecture, NCSU	Spring 2019	Guest lecturer
Nancy Pekarek	Instructor, Department of Communication, NCSU	Spring 2019	Guest presenter
Dr. Sonika Rawal	Architectural Designer, Alliance Architecture	Spring, 2020	Guest Lecturer for Research and Strategic Thinking Seminar
Prof. Robin Moore	Director, Natural Learning Initiative	Spring, 2020	Guest Lecturer for Research and Strategic Thinking Seminar
Jennifer Ofstein	IRB Director, NCSU	Spring, 2020	Guest Lecturer for Research and Strategic Thinking Seminar
Michael Stevenson	Architect/Urban Designer, Perkins&Will	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Dr. Mark Hoversten	Dean, College of Design	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Oz Ozburn	Architect, CEO Ladder Up	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Mark Johnson	Landscape Architect/Urban Designer, President of Civitas	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Erin Sterling Lewis	Architect, Principal, Raleigh In Situ Studio	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Sean Eno	Landscape Architect, Associate Principal, Supermass Studio	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Dr. George Hallowell	School of Architecture, NCSU	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Joe Michael	Urban Designer, Principal Raleigh Urban Design Center	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Grayson Maughan	Parks Planner, City of Raleigh	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Kate Pierce	Project Manager Dorothea Dix, City of Raleigh	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Prof. Elen Deming	Department of Landscape Architecture	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Imran Aukhil	University Real Estate & Development, NC State University	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio

Prof. Meg Calkins	Department Head, Department of Landscape Architecture	Fall 2019	Visiting Lecturer/Reviewer for Urban Design Studio
Dr. Mohammed Gabr	Professor, Department of Civil Engineering, NCSU	1/16/2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
Dr. Tom Birkland	Associate Dean for Research and Engagement and Professor of Public Policy in the College of Humanities and Social Sciences, NCSU	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
Jeff Carney	Associate Professor, University of Florida	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
Dr. Jessica Whitehead	North Carolina Sea Grant	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
Dr. Ismael Pagan and Dr. Ricardo Lopez-Rodriguez	Professors in the Department of Civil Engineering and Surveying at the University of Puerto Rico at Mayaguez	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
David Perkes	Professor College of Art + Architecture, Mississippi State University	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
Dr. Mai Nguyen	Associate Professor, Department of City and Regional Planning, University of North Carolina at Chapel Hill	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
Dr. Gerry Galloway	Research Professor, Department of Civil Engineering, University of Maryland	Spring 2019	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series Course
*Brock Long	Former FEMA Administrator	Fall 2019	Emergency Management Policy and Practice Lecture (university-wide event)
Don Hornstein	Professor, UNC Law School	Fall 2019	Guest Lecturer on Law, Insurance, Natural Hazards and Climate Change Adaptation for Survey of Natural Hazards and Disasters Seminar
Jay Barnes	Author of North Carolina's Hurricane History	Fall 2019	Guest Lecturer on History of Hurricanes in NC for Survey of Natural Hazards and Disasters Seminar
Governor James B. Hunt	Former Lieutenant Governor of North Carolina	Fall 2019	Guest Lecturer on Gubernatorial leadership in disaster recovery for Survey of Natural Hazards and Disasters Seminar
Jessica Whitehead	State of North Carolina Chief Resilience Officer	Spring 2020	Final Project Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Holly White	Town Planner Nags Head, North Carolina	Spring 2020	Final Project Reviewer for Disaster Resilient Policy, Engineering and Design seminar

Adam Stein	NOAA Coastal Policy Advisor	Spring 2020	Final Project Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Jeff Carney	Associate Professor, School of Architecture, Associate Director, Florida Institute for Built Environment Resilience (FIBER)Professor University of Florida.	Spring 2020	Final Project Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Wendy Saunders	Natural Hazards Planner and Policy Researcher at GNS Science	Spring 2020	Mid-semester Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Christopher Galik	Associate Professor, Department of Public Administration, NCSU	Spring 2020	Guest Lecturer for Disaster Resilient Policy, Engineering and Design seminar
Dr. George Elvin	Associate Professor, Department of Architecture, NCSU	Spring 2020	Guest Lecturer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Sankar Arumugam	Professor, Department of Civil, Construction and Environmental Engineering, NCSU	Spring 2020	Guest Lecturer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Casey Dietrich	Associate Professor, North Carolina State University, Department of Civil, Construction and Environmental Engineering	Spring 2020	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series
Chris Coudriet	New Hanover County Manager	Spring 2020	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series
Dr. Kristin Ludwig	Staff Scientist, Department of the Interior Strategic Sciences Group U.S. Geological Survey Natural Hazards Mission	Spring 2020	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series
Allison Anderson, FAIA, LEED-AP	unabridged Architecture PLLC	Spring 2020	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series
Dr. Lori Peek	Director of the Natural Hazards Center and professor in the Department of Sociology at the University of Colorado Boulder	Spring 2020	Guest Lecturer for Natural Hazards, Disasters and Climate Change Adaptation Lecture Series
Basil Camu	Founder and Arborist, Leaf and Limb	Spring 2020	Guest lecturer/consultant - Design Build Studio
Jared Kaelin and	Gresham Smith, Louisville	Spring 2020	Guest lecturer/consultant - Design Build
Patrick Henry Shannon Currey	KY Hoffman Nursery	Spring 2020	Studio Guest lecturer/consultant - Design Build Studio
John Sanders	Fred Adams	Spring 2020	Guest lecturer/consultant - Design Build Studio

Brian Carter	NCSU Facilities Division Safety Specialist	Spring 2020	Guest lecturer/consultant - Design Build Studio
Bill Hunt	Department of Biological and Agricultural Engineering	Spring 2020	Guest lecturer/consultant - Design Build Studio
Dr. Amanda Martin	Deputy Chief Resilience Officer. North Carolina Office of Recovery and Resiliency	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
A.R. Siders	Assistant Professor, Biden School of Public Policy and Administration	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Dr. Alex Greer	Assistant Professor, College of Emergency Preparedness, Homeland Security and Cybersecurity State University of New York, Albany	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Sherri Brokopp- Binder	lead researcher and president of BrokoppBinder Research & Consulting	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
David Perkes	Professor, Mississippi State University. Director Gulf Coast Community Design Studio	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Chuck Flink	President/Owner Greenways Incorporated	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Brandon Love	Deputy City Manager (NCSU COD graduate)	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Christian Kamrath	Resilience Coordinator – Adaptation – Miami Dade County Office of Resilience	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Dr. Wendy Saunders	Principal Advisor: Risk Reduction and Resilience; Champion of Land Use Planning. Earthquake Commission, New Zealand	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Camille Crain	FEMA Building Resilient Infrastructure and Community Section Chief	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar
Dr. Jae Park	AECOM Associate Vice President, Risk	Spring 2021	Guest Lecturer for Survey of Natural Hazards and Disasters Seminar

	Management and Resilience		
Dr. Christopher Galik	Associate Professor, Department of Public Administration, NCSU	Spring 2021	Guest Lecturer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Gerry Galloway	Research Professor, Department of Civil and Environmental Engineering, University of Maryland	Spring 2021	Guest Lecturer for Disaster Resilient Policy, Engineering and Design seminar
Jeff Carney	Associate Professor, School of Architecture; Associate Director, Florida Institute for Build Environment Resilience. Director, Florida Resilient Cities Program. University of Florida	Spring 2021	Final Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Ismael Pagan	Professor, Department Head- Civil Engineering. University of Puerto Rico at Mayaguez	Spring 2021	Final Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Christopher Galik	Associate Professor, Department of Public Administration, NCSU	Spring 2021	Final Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Dr. Jae Park	Associate Vice President, Risk Management and Resilience, AECOM	Spring 2021	Final Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Anna Grace Fitzgerald	Landscape Designer, OLIN	Spring 2021	Final Reviewer for Disaster Resilient Policy, Engineering and Design seminar
Kurt Culberton, FASLA	Chairman/CEO, Design Workshop	Spring 2019	Lecturer
Laura Solano, ASLA	Principal, MVVA	Fall 2018	Lecturer
Daniel Vasini	Creative Director, West 8	Spring 2019	Lecturer
Robert McClendon	Asst. Director for Administration/Sustainable Design Specialist, Coastal Studies Institute	Spring 2019	Reviewer
Rich Olson	City Manager, Elizabeth City	Spring 2019	Community Stakeholder, Reviewer
Debbie Malenfant	Executive Director, Elizabeth City Downtown, INC.	Spring 2019	Community Stakeholder, Reviewer
Kellen Long	Planner, Elizabeth City	Spring 2019	Community Stakeholder, Reviewer
Mike Maza, AIA, LEED AP	Partner, Kliment Halsband Architects (NYC)	Spring 2019	Guest Reviewer

Michael Nieminen, FAIA	Partner, Kliment Halsband Architects (NYC)	Spring 2019	Guest Reviewer
Rob Reis, AIA, LEED AP BD+C	Principal/Design Director, Hanbury (Norfolk, VA)	Spring 2019	Guest Reviewer
Turan Duda, FAIA	Founding Principal, Duda Paine Architectures (Durham, NC)	Spring 2019	Guest Reviewer
Billy Askey, AIA, LEED AP	Principal/Co-founder, EVOKE Studio (Durham, NC)	Spring 2019	Guest Reviewer
Leslie Bartlebaugh, PLA, ISA Certified Arborist	Ratio (Raleigh, NC)	Spring 2019	Guest Reviewer
Martha Eberle, PLA, ASLA	Landscape Architect, Andropogon Associates, Ltd.	Spring 2019	Guest Reviewer
Tom Barrie, AIA	DPACSA, NCSU Architecture Faculty	Fall 2019	Guest Lecturer for Environment and Culture Seminar
Sara Queen, AIA	NCSU Architecture Faculty	Fall 2019	Guest Lecturer for Environment and Culture Seminar
Robert Pratt, PLA, LEED AP	Principal, Surface 678 (Durham, NC)	Fall 2019	Guest Lecturer for Environment and Culture Seminar
Jeff Israel, PLA	Project Manager, Surface 678 (Durham, NC)	Fall 2019	Guest Lecturer for Environment and Culture Seminar
Jeff Carney, AIA, AICP	Associate Professor, School of Architecture Associate Director, Florida Institute for Built Environment Resilience (FIBER) University of Florida	Spring 2020	Guest Lecturer/Critic
Ben Cahoon, AIA	Mayor, Town of Nags Head, NC	Spring 2020	Mid-semester and Final Reviewer
Michael Zehner, AICP	Directory of Planning, Town of Nags Head, NC	Spring 2020	Mid-semester and Final Reviewer
Robert McClendon, MLA	Assistant Director for Administration, Coastal Studies Institute/ECU Outer Banks Campus	Spring 2020	Mid-semester and Final Reviewer
Cliff Ogburn	Town Manager, Town of Nags Head, NC	Spring 2020	Mid-semester and Final Reviewer
Holly White, AICP	Principal Planner, Town of Nags Head, NC	Spring 2020	Mid-semester and Final Reviewer
Kate Jones, MLA	Engineer Technician, Town of Nags Head	Spring 2020	Mid-semester and Final Reviewer
Kelly Wyatt	Deputy Director of Planning and Development, Town of Nags Head	Spring 2020	Mid-semester and Final Reviewer
David Ryan	Town Engineer, Town of Nags Head	Spring 2020	Mid-semester and Final Reviewer

Margaux Kerr	Zoning Administrator, Town of Nags Head	Spring 2020	Mid-semester and Final Reviewer
Dr. Bill Hunt	NCSU Department of Biological and Agricultural Engineering, William Neal Reynolds Distinguished University Professor & Extension Specialist	January 2020	Guest speaker
Shannon Currey	Marketing Director at Hoffman Nursery	March 2020	Guest speaker
Jared Kaelin	Landscape Designer at Gresham Smith, NCSU MLA Alum	April 2020	Guest speaker
Jamee Kominsky	OLIN	11/23/2020	Juror, DD Studio Rinal Review
Jeff Israel	PLA, Surface 678	11/23/2020	Juror, DD Studio Rinal Review
Todd Schechinger	Schmidt Design Group, San Diego, CA	11/23/2020	Juror, DD Studio Rinal Review
Stephen Faber	Stewart (Raleigh)	11/23/2020	Juror, DD Studio Rinal Review
Emily McCoy	Principal, Design Workshop	11/23/2020	Juror, DD Studio Rinal Review
Ellie Lerner	Designer, Design Workshop, NCSU LAEP Alum	11/23/2020	Juror, DD Studio Rinal Review
Matt Sickle	Michael Vergason, Alexandria, VA	11/23/2020	Juror, DD Studio Rinal Review
Jordan Petersen	Cole, Jenest, and Stone (Raleigh, NC)	11/23/2020	Juror, DD Studio Rinal Review
Ben Roush	Design Workshop, LA	11/23/2020	Juror, DD Studio Rinal Review
Graham Smith	Site Collaborative, Raleigh, NC	11/23/2020	Juror, DD Studio Rinal Review
Laura Kessel	TGDA, Chicago	11/23/2020	Juror, DD Studio Rinal Review
Michael Batts	Stewart (Raleigh, NC)	11/23/2020	Juror, DD Studio Rinal Review
Rebecca Poposwky	OLIN	11/23/2020	Juror, DD Studio Rinal Review
Patrick Henry	Gresham, Smith and Partners (Louisville, KY)	11/23/2020	Juror, DD Studio Rinal Review

*Due to limitations and restrictions caused by COVID-19, some lectures during the Spring 2020 Semester had to be postponed or cancelled.

5. Individual Faculty Record

Name: Meg Calkins, FASLA, SITES AP

Rank: Professor and Head of the Department of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
University of California at Berkeley	2 2	MLA, 1995 M.Arch 1995

University of Cincinnati	5	MUP 1988

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	2018-present	Construction Materials and Methods, Sustainable Development, LAR Immersion
Ball State University	2009-2015	Site Design, Landscape Engineering, Landscape Construction, Landscape Theory, Housing and Community Design
University of Illinois at Urbana-Champaign	1999-2005	Site Design, Landscape Engineering, Landscape Construction, Landscape Theory, Housing and Community Design
University of California at Berkeley	1996-1998	Site Planning and Design, Landscape Construction

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Burks Toma Architects	2	Project design and coordination, construction documentation
Lutsko Associates Landscape Architects	2	Project design and coordination, construction documentation and administration
Freeman and Jewell, Landscape Architects	2	Project design and coordination, construction documentation and research
Peter Walker and Partners	2	Intern: construction documentation and research
HOH Associates	3	Project design and planning, research

Professional Registration: Give profession and state/province(s).

Licensed Landscape Architect in California (inactive) #4250, 1998

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- Editorial Advisory Board, Landscape Architecture magazine, 2020-present
- North Carolina American Society of Landscape Architects (NCASLA) Executive Committee 2018-present
- Natural Stone Council, Stone Sustainability Certification, 2020-present
- Credentialing Steering Committee, Green Business Certification Institute, 2016-2020
- ASLA Honors and Awards Advisory Committee, 2018-2020
- ASLA National Student Award Jury, Washington, DC, 2017
- Materials Working Group for "Site Commissioning White Paper" by Andropogon Associates and the General Services Administration, 2017
- SITES AP Exam Committee, Green Business Certification Institute, 2016
- Elevation to Fellow in the American Society of Landscape Architects, 2015
- Materials Technical Committee, *Sustainable Sites Initiative (SITES)*, 2006 to 2015
- Reviewer, 2016-19 CELA Conference Abstracts
- Honorary Fellow, Institute of Green Professionals, Weston FL and Paris, France, 2008 to present
- Peer Reviewer for book proposals, John Wiley and Sons, 2015, 2017, 2020
- College of Design Administrative Council, 2018 to present
- NC State University Campus Design Review Panel, 2018- present

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

<u>Books</u>

• Chinese Translation (2017) *The Sustainable Sites Handbook: A Complete Guide to the Principles, Strategies and Best Practices for Sustainable Landscapes.* Meg Calkins, Ed. Beijing: China Architecture and Building Press, May 2017.

• Calkins, Meg, Ed. (2012) *The Sustainable Sites Handbook: A Complete Guide to the Principles, Strategies and Best Practices for Sustainable Landscapes.* Hoboken, NJ: Wiley, January 18, 2012.

• Calkins, Meg (2008) *Materials for Sustainable Sites: A Complete Guide to the Evaluation, Selection and Use of Sustainable Construction Materials.* Hoboken, NJ: John Wiley & Sons. October 6, 2008

<u>Articles</u>

• Calkins, M. (2018). "Solid as a rock: Dimension stone and a new sustainability standard for the stone industry". *Landscape Architecture*, February 2018, v.108, n.2**.

• Calkins, M. (2017). "Concrete in the 21st Century: New technologies can reduce the environmental footprint of the most used construction material". *Landscape Architecture*, July 2017, v.107 n.7**.

• Calkins, M. (2017). "Hard Choices: Promising new alternatives to tropical hardwoods come with caveats". *Landscape Architecture*, April 2017, v.107 n.4**.

• Bernot, M. J., Calkins, M., Bernot, R. J., & Hunt, M. (2011). "The influence of different urban pavements on water chemistry". *Road materials and pavement design*, 12(1), 159-176*.

Research Reports

• Sustainable Sites Initiative. (2014). <u>SITES v2 Rating System for Sustainable Land Design and Development</u>. Sustainable Sites Initiative: Austin, TX. **[Contributing Author]

• Sustainable Sites Initiative. (2014). <u>SITES v2 Reference Guide for Sustainable Land Design and</u> <u>Development</u>. Sustainable Sites Initiative: Austin, TX. **[Contributing Author] **Contributions**. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Professor Meg Calkins, FALSA, SITES AP, has built a strong career in academic leadership, scholarship and service to the profession, most recently as Department Head and Professor of Landscape Architecture and Planning at NC State University. The overarching goal of her teaching and scholarship has been to facilitate the practice of sustainable design in landscape architecture. To achieve this goal, she has written books, book chapters and journal articles intended to provide technical and theoretical content to academics for use in their classrooms, and professionals for use in their practices. She has contributed extensively to the *Sustainable Sites Initiative* (SITES) since its inception in order to provide site design professionals with standards and performance benchmarks for the development and management of sustainable sites.

The trajectory of her scholarship has increased and broadened over 22 years in academia with the publication of two books, *The Sustainable Sites Handbook* (2012) and *Materials for Sustainable Sites* (2008) and publication of *The Sustainable Sites Handbook* with China Architectural and Building Press (Beijing, China) in 2016. This has resulted in numerous international citations, and an international reputation as an expert in the field of sustainable site design with an emphasis on sustainable construction materials.

Her scholarship has been recognized internationally by academics in landscape architecture, architecture, engineering, material science, and technology with numerous citations in peer reviewed journals and books. Sixty-nine percent of these citations are from authors and/or journals based outside of the United States in countries such as China, Sweden, France, Spain, The Netherlands, Switzerland, Iran, Turkey, Indonesia, South America, the United Kingdom and Germany.

Calkins is a founding member of the Sustainable Sites Initiative and has taken an active leadership role in developing SITES Standards since 2003. Her work on the Materials Subcommittee of SITES involved the development and refinement of standards and credits for materials, construction, and waste issues for the 2009 SITES Standards and Performance Benchmarks and the 2014 SITES V2 Standards and Reference Guide. In 2016, she was invited to join the Credentialing Steering Committee of the Green Business Certification Institute (GBCI). GBCI is the credentialing organization for LEED, SITES, WELL, and many other rating systems related to green business and development. The committee is responsible for monitoring, reviewing, and overseeing the development, implementation, and evaluation of existing and future professional credentialing programs under GBCI.

Name: Kofi Boone

Rank: Professor of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
University of Michigan	3	MLA, 1995
University of Michigan	4	BS, Natural Resources, 1992

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	2004-present	Landscape Description Studio, Landscape Architecture Advanced Topic Design Studio, LAR Design Research Project, Landscape Architecture Theory and Criticism, Environmental Social Equity and Design, Special Topics in LAR, DesignSprint

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
SmithGroupJJR, Ann Arbor MI	9	Site Designer
Carol R. Johnson and Associates, Cambridge MA	1	Intern

Professional Registration: Give profession and state/province(s).

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

Landscape Architecture Foundation (LAF)

- President-Elect (2020-2021)
- Chair, GND Superstudio Task Force (2020-present)
- Vice President of Education (2018-2020)
- DEI Task Force (2017-present)
- Board Member (2017-present)
- American Society of Landscape Architects (ASLA)
- Council of Fellows (2020-present)
- CEO Search Committee (2020)
- Design Awards Jury (2019)
- Environmental Justice Professional Practice Network (2016-present)

Council of Educators in Landscape Architecture (CELA)

Environmental Design Research Association (EDRA)

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

- Boone, K. "Soul City (Book Review)", Places Journal (anticipated publication Fall 2021)
- Boone, K. Klondike, T. and A. Fox. "(Ad)Just Recovery: Landscape, Climate and Adaptation in Eastern North Carolina", Climate Changed, MIT Press (anticipated publication in Fall 2022)
- Boone, K. "Black Landscapes: Critical Qualitative Research and Social Justice", Routledge Encyclopedia of Qualitative Methods, Routledge (anticipated publication in Spring 2022)

• Boone, K and Deming, M.E. Empty Pedestals: Narratives on History, Race & Design, LSU Press (anticipated publication Fall 2022)

• Empty Pedestals aims to helps practitioners, educators, students, and the general public understand ways in which monuments to the American Confederacy 'speak' to regionalism, racist agendas, and residual pain, among other things. The proposed book operates at the intersection of two possible responses to this moment in time: it is a work of critical historical scholarship and, in featuring the work of public designers and activists, it also seeks to identify constructive design strategies for healing. Boone (2021) "The Black Landscapes That Matter", Next City accessed via this link

• Agyeman and Boone (2020) "Land loss has plagued black America since emancipation – is it time to look again at 'black commons' and collective ownership?", The Conversation accessed via <u>this link</u> (reprinted in Business Insider, Fast Company, MarketWatch, Resilience, Yes! Magazine, etc.)

• Boone (2020) "Notes Toward a History of Black Landscape Architecture", Places Journal accessed via this link

• Hood, W and Tada, G.M. "Enabling Connections to Empower Place: The Carolinas", Black Landscapes Matter, UVA Press (November 2020)

• Agyeman, J. and Boone, K. "Land loss has plagued black America since emancipation-is it time to look again at 'black commons' and collective ownership?", *The Conversation*, June 18, 2020

Boone, K. "On Belonging and Becoming", Landscape Architecture Magazine, March 2020

• Boone, K. "The Water You Can't See", Landscape Architecture Magazine, December 2019

• Deming, E.M. and Boone, K. "Symbolic Conversations in the Public Landscapes of the American South: Reevaluating Monuments to the Confederacy", *Landscape & Conflict*, Springer, 2019

• Boone, K. "Making Landscape Design Accessible and Just: Past, Present, and Future", New Directions in the American Landscape, *BULLETIN 44*, Connecticut College Arboretum, 2019

• Boone, K. Chapter 2. Rising Voices: Striving for Power and Equity (1900-present), <u>Narrative</u>, <u>Place</u>, and <u>Memory: African American Landscapes from Jim Crow through Segregation</u>, CL Bohannon and Brian Katen eds., LSU Press (Not yet published)

• Boone, K. "Many Stories Matter", book review of <u>Cultural Landscape Heritage in Sub-Saharan Africa</u>, John Beardsley, ed. (Dumbarton Oaks Research Library and Collection, 2016), *Landscape Architecture Magazine*, November 2018

• Boone, K. : Cellphone Diaries (contribution to Chapter 3) and Cross-Cultural Prototyping (contribution to Chapter 7), <u>Design as Democracy: Techniques for Collective Creativity</u>, David de la Pena and Diane Jones Allen et al. eds. Island Press, December 2017

• Boone, K. "Black Landscapes Matter", *Ground Up Issue 06*, Journal of the Department of Landscape Architecture and Environmental Planning-UC Berkeley, 2017

• Boone, K. "What kinds of landscapes should we build in the South?", Scalawag Magazine, Winter 2016

• Boone, K. "Crime and Perception on Durham's American Tobacco Trail", Just Creativity: Perspectives on Inclusive Placemaking, *Carolina Planning Journal*, Vol. 41, 2016

• Boone, K. "Transferred, Translated, Transformed: Design tools for student engagement in Ghana, West Africa", *PUBLIC: A Journal of Imagining America* (2016)

• Delcambre, C., Boone, K. Chapter 6: City of Raleigh Testing Grounds, <u>Representing Landscapes: Hybrid</u>, Nadia Amoroso ed. Routledge, NY, 2016

• Boone, K. "Disembodied voices, embodied places: Mobile technology, enabling discourse, and interpreting place", *Landscape Architecture and Urban Planning Special Issue: Critical Visualization* 142C, 2015

• Boone, K. "Social Justice as it pertains to crime on the American Tobacco Trail", NC Rail-Trails, 2015

• Boone, K. Chapter 5: Digital Diagramming, and Chapter 21: Repairing Greyfield Sites, Amoroso, Nadia ed. Representing Landscapes: Digital, Routledge, NY, 2015

Other Awards and Recognitions:

• Became an ASLA Fellow in 2020.

• Co-Oorganized and co-facilitated Design SprintDesignWeek 20197 (beta), as the department's educational initiative. Multidisciplinary student teams worked collaboratively to explore and develop creative ideas and solutions addressing grand challenges associated with resilience, flooding and climate change.

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Professor Boone's research addresses the overlap between environmental justice and the practice of landscape architecture. Boone developed a conceptual framework for infusing environmental justice principles in a range of areas of landscape architecture. Sustainable design, planning, and decision---making tools have been the focus of my work. Boone developed comprehensive community design studios that incorporate design studios, but also a range of layered strategies. Boone is a regular inter--disciplinary collaborator, and frequent partner with extension agents to provide communities with best practices in community design. Boone has developed seven new courses: Site Analysis and Planning, Design Strategies for Community Building, Landscape Architecture Theory and Criticism, Environmental and Social Equity and Design, Landscapes of Eco---Tourism, Ghana Study Abroad Landscape Architecture Studio, and Advanced LAR Communications: Digital Video Case Studies in Landscape Architecture.

Name: Gavin Smith

Rank: Professor of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
Texas A&M University		Doctor of Philosophy in Urban and Regional Planning
Texas A&M University		Master of Science in Sociology
Texas A&M University		Bachelor of Science in Sociology

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	2019-present	Survey of Natural Hazards & Disasters, Disaster Resilient Policy, Engineering and Design; Speaker Series: Natural Hazards, Disasters and Climate Change
University of North Carolina at Chapel Hill	2008-2019	Planning for Natural Hazards and Climate Change Adaptation, Survey of Natural Hazards and Disasters, Natural

Hazards Resilience Speaker Series, and special topics as identified	
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Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

• Senior Disaster Recovery Advisor/Chief of Hurricane Matthew Disaster Recovery and Resilience Initiative. State of North Carolina. *January 2017 – January 2019.*

• Director, U.S. Department of Homeland Security Coastal Resilience Center of Excellence. University of North Carolina at Chapel Hill. *August 2015 – January 2019.*

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

Journal Articles

• Smith, Gavin, Wendy Saunders, Olivia Vila, Samata Gyawali, Samiksha Bhattarai, and Eliza

Lawdley. 2021. A Comparative Analysis of Hazard-Prone Housing Acquisition

Programs in United States and New Zealand Communities. Special Issue on Managed

Retreat and Environmental Justice. Journal of Environmental Studies and Sciences. Perspectives on Managed Retreat: Environmental Justice and Beyond. A.R. Siders and Jola Ajibade, Editors. DOI 10.1007/s13412-021-00689y.

• Smith, Gavin, Nguyen, Mai. University-Public Partnerships for Disaster Recovery: Promoting Community Resilience through Research, Teaching, and Engagement. *Journal of Community Engagement and Scholarship* (in press – Vol 14, Issue 1, 2021).

• Smith, Gavin, Allison Anderson and David Perkes. 2021. New Urbanism and the H-Transect: Improving the Integration of Disaster Resilience and Design in Coastal Areas. *Landscape Journal*, 40(1): 35-47.

• Smith, Gavin, Olivia Vila. 2020. A National Evaluation of State and Territory Roles in Hazard Mitigation: Building Local Capacity to Implement FEMA Hazard Mitigation Assistance Grants. *Sustainability* 12(10013): 1-18. doi:10.3390/su122310013.

• Horney, Jennifer, Carolina Dwyer, Bhagath Chirra, Kerry McCarthy, Jennifer Shafer and Gavin Smith. 2018. Measuring Successful Disaster Recovery, *International Journal of Mass Emergencies and Disasters* 36(1): 1-22.

• Smith, Gavin, Sabbag, Lea and Rohmer, Ashton. 2018. A Comparative Analysis of the Roles Governors Play in Disaster Recovery, *Risk, Hazards & Crisis in Public Policy*. 9(2): 205-243. doi: 10.1002/rhc3.12133.

• Smith, Gavin. 2016. Remembrances of the Past, Concerns for the Future, and the Potential Resilience of a Small Coastal Town, *Southern Cultures.* Summer: 64-87.

• Horney, Jennifer, Caroline Dwyer, Meghan Aminto, Phil Berke and Gavin Smith. 2016.

Developing Indicators to Measure Post-Disaster Community Recovery, Disasters 41(1): 124-149.

Publications (submitted for review or under development)

• Nguyen, Mai and Gavin Smith. *Resilient Design Education in the United States* (submitted for review).

• Smith, Gavin and Olivia Vila. Participation of Governors in Hazard Mitigation Grants

Management: State Hazard Mitigation Officer's Perspectives. (under development).

• Saunders, Wendy and Gavin Smith. Global Principles Guiding the Acquisition of Hazard-Prone Housing. (under development).

• Saunders, Wendy and Gavin Smith. A Comparative Review of Natural Hazards Insurance as a Risk Reduction Tool in the United States and New Zealand. (under development).

• Schwaller, Nora Louise, Campbell Leah, Nguyen, Mai Thi, and Smith Gavin. (Mis)trusting the Process: How Post-Disaster Home Buyout Processes Can Degrade Public Trust. (submitted for review).

• Campbell, Leah, Schwaller, Nora Louise, Nguyen, Mai Thi, and Smith, Gavin. Stuck in the Middle: The Challenges of Local Government Administration of Post-Hurricane Buyouts. (submitted for review).

Research Documents

Vila, O., and Smith, G. 2021. "Policy Innovation in Local Housing Acquisition Programs."
Special Call for Weather-Ready Research: Instrument and Data Publication. NSF-CONVERGE. DesignSafe-CI.
Smith, G., Vila, O., Caverly, G. 2020. "A National Evaluation of State Roles in Hazard
Mitigation: Building Local Capacity to Implement FEMA Hazard Mitigation Assistance
Grants." NSF-CONVERGE. DesignSafe-CI. <u>https://doi.org/10.17603/ds2-sjbv-eg87</u>.

Technical Reports and Training Guides

• Vila, Olivia, Gavin Smith and Samata Gyawali. January, 2021. *Capacity to Implement FEMA HMA Grants: SHMO Survey Report*. Raleigh, North Carolina: North Carolina State University.

• Saunders, W.S.A, and G. Smith. 2020. *Spend to Save: Investigating the Property Acquisition Process for Risk Reduction in Aotearoa New Zealand.* Lower Hutt (NZ): GNS Science. 65 p. (GNS Science report; 2020/23). doi:10.21420/6GR9-EE44.

• Smith, Gavin. April, 2020. *Best Practices and Lessons (Learned and Not Learned) in the United States Regarding the Role of States in Fostering Disaster Resilience at the Local Level through Program Design and Implementation*. Report for the Queensland Reconstruction Authority and the Regional Resilience Strategies (Statewide Rollout) Project. Brisbane, Australia: Queensland Reconstruction Authority.

• Smith, Gavin, Mai Thi Nguyen, Colleen Durfee, Darien Williams, Ashton Rohmer. September, 2018. *Resilient Design Education in the United States*. Chapel Hill, North Carolina: Department of Homeland Security Coastal Resilience Center of Excellence.

Contributions:

Smith is an internationally recognized expert on natural hazards, disasters, and climate change adaptation and as such regularly speaks at national and international conferences, conducts media interviews with US and international newspapers, radio and television outlets. In this He has served as an advisor to three US Governors, multiple states, more than 100 local governments, and several nations. He teaches courses focused on natural hazards, disasters and climate change adaptation as part of a new certificate program he developed, Disaster Resilient Policy, Engineering and Design.

Name: Andrew Fox

Rank: Professor of Landscape Architecture and Environmental Planning and University Faculty Scholar; Co-Director, NC State Coastal Dynamics Design Lab

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted

Louisiana State University	3 years	MLA, 2001
University of Michigan	4 years	Bachelor of General Studies in Literature, Science, and the Arts, 1995

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	12 years	Coastal Dynamics Studio, Design+Build Studio, Environment and Culture, Design Development Studio, Landscape Dynamics Seminar, Landscape Architecture Field Studies, Embarking on Design: Design Foundations and Visioning, Landform, Grading & Site Systems Seminar, Materials & Methods Seminar, Advanced Construction Technologies Seminar
University of Georgia	2 years	Design Fundamentals Studio, Design & Meaning Studio, Urban Design Studio, Construction and Materials Seminar
South Seattle Community College	1 year	Introduction to Design Fundamentals, Site Design
Louisiana State University	1 year	Design Fundamentals

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Coastal Dynamics Design Lab	8 years	Director
The Natural Learning Initiative (NLI)	2 years	Research Associate
Windrose Landscape Architecture	1 year	Project Landscape Architect
Cascade Design Collaborative, Inc.	5 years	Senior Associate
Louisiana State University Hilltop Arboretum	1 year	Graduate Assistant

Detroit Parks & Recreation, Land. Arch. Division	1 summer	Design Intern
Lone Pine Land Design, LLC	2 years	Owner/Operator
Garden Art	1 year	Field Superintendent
Paul Clute & Assoc. Golf Course Construction	1 summer	Construction Crewman

Professional Registration: Give profession and state/province(s).

- Landscape Architect, State of North Carolina, No. 1620
- Landscape Architect, State of Washington, No. 1007

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

• Steering Committee Member, *North Carolina Resilient Communities Planning Guide* (as a component of the North Carolina Regions Innovating for Strong Economies and Environment (RISE) program), North Carolina Office of Recovery and Resilience, 2021 – present.

• Member, Regional Events Subcommittee, ASLA Climate Action Committee, 2020 – present.

• Founding Member, American Society of Landscape Architects Climate Action Committee (formerly ASLA Climate Change Subcommittee), 2019 – present.

- Faculty Affiliate, Southeast Climate Adaptation Science Center, 2019 present.
- College of Design Representative, NCSU Coastal Resilience and Sustainability Initiative, 2019 present.

• Member, Operation Recreation Response Coalition. GreenPlay Research, Education, and Development

- (GP RED) for Health, Recreation, and Land Agencies, 2018 present.
- Affiliated Graduate Faculty, NC State University College of Natural Resources, 2014 present.
- NC State University Community Engaged Faculty Fellow, 2014 present.
- Member, NC State University Academy of Outstanding Teachers, 2014 present.
- University Faculty Scholar, NC State University, 2012 present.
- Member, NC State University Academy of Outstanding Faculty Engaged in Extension, 2012 present.
- Co-Chair, LAEP Faculty/Natural Learning Initiative Director Search Committee, 2020-2021
- Member, Collaboratory for Coastal Adaptation over Space and Time (C-CoAST) Advisory Board, 2019 2021.

• Member, CONVERGE COVID-19 Design Working Group. The Natural Hazards Center at the University of Colorado Boulder (funded by the National Science Foundation). 2020.

- Member, NCSU Department of Horticultural Science Strategic Plan: Green Industry Focus Group, 2020.
- Founding Member, Coastal Landscapes Initiative, North Carolina Sea Grant, 2018 2020.
- College of Design Representative, NC State University Research Committee, 2017 2020.
- Chair, Post-Tenure Review Committee, 2018 2019
- Fellow, NCSU Center for Geospatial Analytics Faculty, 2016 2019.
- Member, NC State University Sustainability Fund Advisory Board, 2016 2019.
- Member, NCSU Department of Landscape Architecture Head Search Committee, 2017 2018.
- Park Faculty Scholar, NC State University Park Scholarships, 2014 2018.

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

Publications

Hovis, M., C. Hollinger, F. Cubbage, T. Shear, B. Doll, J. Kurki-Fox, D. Line, A. Fox, M. Baldwin, T.

Klondike, M. Lovejoy, B. Evans, J. West, and T. Porter. (Submitted for consideration) "Natural Infrastructure Practices as Potential Flood Storage and Reduction for Farms and Rural Communities in the North Carolina Coastal Plain", in *Sustainability:* Special Issue "Evidence Based Solutions for an Agro-Ecological Transition".*

• Boone, K., A. Fox, and T. Klondike. (Invited chapter: submitted, under secondary review) "(Ad)Just Recovery: Landscape, Climate and Adaptation in Eastern North Carolina", in *Climate Changed: Models and the Built World* (forthcoming). I. Turan, E. Yarina, M. Freilich and J. Varner, Eds. Cambridge, MA: MIT Press.

• Hardison-Moody, A. and A. Fox. (Invited chapter: submitted, under secondary review) "Housing and Disasters", in *Introduction to Housing, Third Edition*. K. Anacker, A. Carswell, S. Kirby and K. Tremblay, Eds., Athens, GA: University of Georgia Press.

• Fox, A. (2020) "North Carolina State University landscape architecture Design+Build Studio", in *Design/Build in Landscape Architecture; An Integrated Academic/Practice Model*, pgs. 278-296. Daniel Winterbottom, New York, NY: Routledge.

• Naylor, L., Fall, V. & Fox, A. (2020) "The power of place in disaster recovery: Heritage-based practice in the post-Matthew landscape of Princeville, North Carolina." *Parks Stewardship Forum*, volume 36/1: 128-136.*

• Fox, A. & Hill, D. (2018) Decimated by Hurricanes, Rural America Needs Our Help, *The New York Times*, print: Sunday Edition, p. 10, Oct. 14; and online:

https://www.nytimes.com/interactive/2018/10/11/opinion/hurricane-michael-florence-north-carolina-florida-recovery.html

• Walters, A. and Fox, A. (2018) "Supporting Informed Coastal Landscapes: An Assessment of Preferences in Carolina Tidal Creek Communities." *Landscape Research Record No.* 7: 200-210.*

• Fall, V., Fox, A., and Naylor, L. (2019) Damaged by Hurricanes, a Historic North Carolina Town Plans for a Resilient Future, *ChangeLab Solutions Blog*, online: <u>https://medium.com/changelab-solutions/damaged-by-hurricanes-a-historic-north-carolina-town-plans-for-a-resilient-future-6fc97c0ad89e</u>

• Fox, A., S. Walters, and P. Huang. (2018) "North Carolina Museum of Art." *Landscape Performance Series: Case Study Briefs.* Washington, DC: Landscape Architecture Foundation. Online:

https://landscapeperformance.org/case-study-briefs/north-carolina-museum-art

• Fox, A., S. Walters, and P. Huang. (2018) "North Carolina Botanical Garden." *Landscape Performance Series: Case Study Briefs*. Washington, DC: Landscape Architecture Foundation. Online: https://landscapeperformance.org/case-study-briefs/north-carolina-botanical-garden

• Fox, A., Boone, K., Fall, N., and Naylor, L. (2018) "Troubled Waters: A Flood-Ravaged Town in Danger of Losing Its Nationally Significant History." *Landslide* 2018: Grounds for Democracy, The Cultural Landscape Foundation: Washington, D.C

• Fox, A. and D. Hill. (2017) "Reimagining Community Resilience: The Coastal Dynamics Design Lab." *Carolina Planning Journal*, Volume 42: 110-117.

• Winterbottom, D., J. Stevens, and A. Fox. (2016) "Design-Build on the Frontlines: Most Important Questions." In *Bridging the Gap: Proceedings of the ECLAS Conference*, pgs. 227-231. European Council of Landscape Architecture Schools, Rapperswil: Switzerland.*

• Queen, S., D. Hill, and A. Fox. (2016) "Filling the Voids: A Framework for Addressing Patterns of Urban Vacancy." *Proceedings of the ACSA Fall Conference: Between the Autonomous and Contingent Object*, Syracuse: NY.*

• Fox, A., S. Walters, and P. Huang. (2016) "Charlotte Brody Discovery Garden." *Landscape Performance Series: Case Study Briefs*. Washington, DC: Landscape Architecture Foundation. Online: http://landscapeperformance.org/case-study-briefs/charlotte-brody-discovery-garden

• Pasalar, C. and A. Fox, Eds. (2016) *Innovation::Shifting Ground, Conference Proceedings of the 47th Annual Conference of the Environmental Design Research Association*. Environmental Design Research Association, Madison: WI.

Presentations

• Fox, A. (2021) "Education in Action: Generative Applications within a Land-Grant Context." Keynote lecture: *CAUSES Professional Development Day*. Invited by Dr. Dwane Jones, Acting Dean of the College of Agriculture, Urban Sustainability, and Environmental Sciences (CAUSES) and Land-Grant Programs, University of District of Columbia.

• Fox, A., K. Boone, and T. Klondike. (2021) "Rebuilding Rural Communities: A Landscape Approach to

Recovery and Resilience." 2021 ASLA North Carolina Conference on Landscape Architecture.*

• Klondike, T. and A. Fox. (2021) "Conservation as Hazard Mitigation: An Adaptive Land Management Strategy for Environmentally At-Risk Communities." 2021 Annual Conference of the Council of Educators in Landscape Architecture.*

• Fox, A. (2021) "Visualizing Community Assets and Threats to Inform Post-Disaster Recovery." *Center for Geospatial Analytics Geospatial Forum*. NC State University Center for Geospatial Analytics.

• Crain, C., R. Braun, A. Fox, D. Irwin, and H. Stiller. (2021) Resilience in Action: Toolkits, Research & Applications Session: "Green Infrastructure & the Evolution of BRIC." *Southeast & Caribbean Disaster Resilience Partnership Winter Meeting*. NOAA/Southeast Coastal Ocean Observing Regional Association.

• Fox, A. (2020) "Coastal Dynamics and NCSU Disaster Resilience Initiatives." Presentation to the President's Council (ASLA/CELA/CLARB/CSLA/LAAB/LAAC/LAF).

• Fox, A., P. Mendez Lazaro, and K. Ludwig. (2020) "Disaster Recovery During a Global Pandemic." *The Southeast Climate Adaptation Science Center's Global Change Fellows Conversation*.

• Fox, A., S. Kelly, E. O'Mahoney, E. Stevens, and A. Vick. (2020) *ASLA Climate Action Committee Webinar: Southeast Coast Regional Conversation*. American Society of Landscape Architects.

• Fox, A. and M. Baldwin. (2020) "North Carolina Coastal Planting Templates." *NCASLA Webinar* (CEU qualifying). North Carolina Chapter of the American Society of Landscape Architects.

• Hill, D., K. Boone, A. Fox, and T. Klondike. (2020) "The Need for Rural Resilience in America's Black Belt: A Case Study of Princeville, NC." 48th Annual National Organization of Minority Architects (NOMA) Conference.*

• Fox, A. and T. Klondike. (2020) "Conservation Purpose and Benefit Assessments of Landscapes." NCASLA Webinar (CEU qualifying). North Carolina Chapter of the American Society of Landscape Architects.

• Panelist. (2020) "Crafting the Connection to Our Resources: Master Plans that enhance and protect North Carolina's landscapes, water, and cultural resources." *NCASLA Virtual Awards Gala and Panel Presentations*.

• Fox, A., S. Richardson, and E. Thomas. (2019) "Heavy-Lifting: How conservation lands can embed climate resiliency at the regional scale." Presentation at the *ASLA 2019 Conference on Landscape Architecture*.*

• Fox, A., D. Hill, and G. Knight. (2019) "Princeville, NC: Community-Engaged Resilient Design." Presentation at the North Carolina Rural Center: 2019 North Carolina Rural Assembly.

• Boone, K. and A. Fox. (2019) "Building Awareness, Growing Capacity." Presentation at The Conservation Fund Resourceful Communities Workshop: *Hurricane Recovery: The Real Scoop and Rural Success*.

• Fox, A. (2019) "Socio-Ecological Design in North Carolina's Coastal Region." *Natural Solutions for Flooding,* Drought and Nutrient Pollution Workshop: Building a Roadmap for Hurricane Recovery on North Carolina's Coastal Plain, Environmental Defense Fund.

• Fox, A. (2019) "Coastal Landscapes Initiative." *North Carolina Green & Growin' 19 Conference Education Program*, North Carolina Nursery & Landscape Association.

• Fox, A. (2018) "Coastal Dynamics Design Lab." *R.L. Raab Science and Sustainability Symposium*, NC State University.

• Fox, Andrew and Linda Smith. (2018) "Community Resilience Planning." 2018 GP RED National Think Tank.

• Fox, Andrew. (2018) "Princeville, NC: Capacity Building for Recovery and Resilience." *ChangeLab Solutions Community Cohort Symposium.*

• Fox, Andrew, Walter Havener, Randy Hester, Linda Jewell, Alexandra Lang, and Mitchell Silver. (2018) Closing Panel, *Leading with Landscape IV: North Carolina's Research Triangle.* The Cultural Landscape Foundation.

• Klondike, Travis and Andrew Fox. (2018) "Crossing Boundaries: When Private Development Meets the Design Studio." *CELA Annual Conference*.*

• Hill, David, Andrew Fox, and Travis Klondike. (2018) "Speculations, Conservation, and Scarp East." Keynote lecture #5: *Virginia Design Medal Program*.

• Hill, David and Andrew Fox. (2018) "Recovering from Hurricane Matthew." Keynote lecture #4: Virginia Design Medal Program.

• Hill, David and Andrew Fox. (2018) "P.A.R.C.S." Keynote lecture #3: Virginia Design Medal Program.

• Hill, David and Andrew Fox. (2018) "Professional Trajectories." Keynote lecture #2: Virginia Design Medal Program.

• Hill, David and Andrew Fox. (2018) "Coastal Dynamics Design Lab." Keynote lecture #1: Virginia Design Medal Program.

• Fox, Andrew. (2018) "Integrating Sustainability and Place-based Concepts into Teaching and Curricula." Keynote lecture, 9th Annual Trillium Sustainability Workshop (Duke University/NC State University).

• Fox, Andrew. (2018) "Water, People, Place: Strategies for Healthy Community Waters." Keynote lecture, *Forsyth Creek Week.*

• Fox, Andrew. (2017) "Education on the Frontlines." *NC State University Teaching and Learning Symposium: Inspiring Student Success*.

• Barre, Tom, Bryan Bell, Andrew Fox, Eike Roswag Klige, and Sue Thering. (2017) Panel: "Design and Culture". *Public Interest Design Institute*.

• Boone, Kofi, Chuck Flink, Andrew Fox, and Gavin Smith. (2017) Panel: "Resilient by Design: Building Better in Response to Rising Waters." 2017 ASLA National Convention (This session was recorded and made available as an ASLA webinar based on a conference attendee preference survey. The team then developed an accompanying quiz that enables webinar participants to receive Landscape Architecture Continuing Education System[™] (LA CES[™]) Professional Development Hours (PDH)). American Society of Landscape Architects.*

• Hill, David and Andrew Fox. (2017) "Pro-Active Recovery Community Structures (PARCS): A New Model for Design in Coastal Regions." *AIA North Carolina Annual Conference*.

• Fox, Andrew. (2017) Plenary Lecture: "Cultivating Care: Building Ecological Communities through Engagement and Education." *34th Cullowhee Native Plant Conference*.

• Fox, Andrew. (2017) "Design Adaptations: Exploring New Models of the Built Environment for North Carolina's Coastal Region", as a component of the *Coastal Planning Panel Session* (with Jason Fine, USGS and Holly White, Nags Head). *North Carolina's Coastal Conference*. Individual presenter and panel discussant. North Carolina Sea Grant.

• Fox, Andrew. (2017) "Green Infrastructure and Stormwater Management at NC State University Field Trip: Landscape Architecture Design+Build Projects." *Water Resources Research Institute (WRRI) Annual Conference*.

• Fox, Andrew and Adam Bossi. (2016) "Healthy & Green: Sustainable Communities and Economic Vitality." 2016 GP RED National Think Tank.

• Fox, Andrew and David Hill. (2016) "Resilient Design & the Coastal Dynamics Design Lab." *Climate Change, Sea Level Rise & Resilient Design: USGBC-NC Cape Fear Branch Signature Event.*

• Cahoon, Larry, Andrew Fox, David Hill, and Andy Keeler. (2016) Panel: "Climate Change, Sea Level Rise & Resilient Design." *USGBC-NC Cape Fear Branch Signature Event*. Panel Discussant. North Carolina Chapter of the US Green Building Council, Cape Fear Branch.

• Brooks, Ken, Andrew Fox, Arianna Koudounas, Emily McCoy, and Stephanie Rolley. (2016) Panel: "The Role of Landscape Performance in Standardized Landscape Architecture Curricula." *CELA Annual Convention.**

• Fox, Andrew and David Hill. (2016) "Pro-Active Recovery Community Structures (PARCS)." CELA Annual Convention.*

- Hill, David and Andrew Fox. (2016) "Coastal Dynamics Design Lab." Lecture, AIA Triangle Theory Forum.
- Hill, David and Andrew Fox. (2016) "Coastal Dynamics Design Lab." Structures for Inclusion 16 Conference.

Reports/Editorial Reviews/White Papers

• Coastal Dynamics Design Lab. (2021) *Taylor Farm Nature Area: Conservation Purpose + Public Benefit Study.*

• Coastal Dynamics Design Lab. (2020) *Princeville Floodprint: Strategies to Connect and Manage Vacant Land.*

• Coastal Dynamics Design Lab. (2020) *Lumberton Floodprint: Phase II, Design Toward Implementation.*

• Coastal Landscapes Initiative. (2020) North Carolina Coastal Landscape Templates. NC Sea Grant.

• Coastal Dynamics Design Lab. (2020) *Nicks Creek Longleaf Reserve: Conservation Value + Programming Study.*

• Bruck, J., A. Wik, A. Fox, and G. Newman. (2020) *Coastal Connections: Promoting Resilient Communities*. University of Delaware Resilience Awareness Project (DelRAP).

• Coastal Dynamics Design Lab. (2020) *Identifying Natural Infrastructure Opportunities in the Middle Neuse Watershed: Geospatial Analysis Summary Report.*

• Carney, J. and A. Yoachim, et al. (2020) Research Agenda-Setting Paper: *Bridging Needs with Research through Action-Oriented Community Design*. CONVERGE COVID-19 Working Group for Public Health and Social Sciences Research. Converge | Natural Hazards Center, University of Colorado Boulder Institute of Behavioral Sciences.

• Mary Watzin et al. (2020) *Coastal Resilience and Sustainability Initiative White Paper*. North Carolina State University Coastal Resilience and Sustainability Initiative.

• Coastal Dynamics Design Lab. (2020) *Rivercrest/Chenango Canal: Conservation Purpose + Public Benefit Study*.

• Coastal Dynamics Design Lab. (2019) *Lumberton Floodprint: Strategies for Resilient and Usable Open Space.*

• Coastal Dynamics Design Lab. (2019) Twin Creeks: Conservation Purpose + Public Benefit Study.

• Coastal Dynamics Design Lab. (2019) Holden Beach Gateway: Character & Density Study.

• Coastal Dynamics Design Lab. (2019) *Land Conservation and Adaptive Development Pre-Design Study in Hurt, Virginia.*

• Reviewer. (2018) "Chapter Two: Come Hell and High Water" in *Stories from the Trail: Reflections of an American Greenway Designer* by Charles (Chuck) Flink, FASLA. University Press of Florida.

• Coastal Dynamics Design Lab. (2018) *Greater Princeville: Design Strategies to Restore and Celebrate America's Oldest Black Town.*

• Coastal Dynamics Design Lab. (2018) *Greensboro Urban Reservoir Study*.

• Coastal Dynamics Design Lab. (2017) *Shifting Paradigms: The Brunswick Studio* | *Brunswick County, North Carolina*.

• Coastal Dynamics Design Lab. (2017) *Homeplace: A Conversation Guide for the <u>Fair Bluff</u> Community, Rebuilding After Hurricane Matthew. Hurricane Matthew Disaster Recovery and Resilience Initiative.*

• Coastal Dynamics Design Lab. (2017) *Homeplace: A Conversation Guide for the <u>Kinston</u> Community, Rebuilding After Hurricane Matthew. Hurricane Matthew Disaster Recovery and Resilience Initiative.*

• Coastal Dynamics Design Lab. (2017) *Homeplace: A Conversation Guide for the <u>Lumberton</u> Community, Rebuilding After Hurricane Matthew. Hurricane Matthew Disaster Recovery and Resilience Initiative.*

• Coastal Dynamics Design Lab. (2017) *Homeplace: A Conversation Guide for the <u>Princeville</u> Community, Rebuilding After Hurricane Matthew. Hurricane Matthew Disaster Recovery and Resilience Initiative.*

• Coastal Dynamics Design Lab. (2017) *Homeplace: A Conversation Guide for the <u>Seven Springs</u> Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative.

- Coastal Dynamics Design Lab. (2017) Homeplace: A Conversation Guide for the <u>Windsor</u> Community,
- Rebuilding After Hurricane Matthew. Hurricane Matthew Disaster Recovery and Resilience Initiative.

• Journal Referee. (2017) THE PLAN Journal.

• Ye, M., A. Fox, and J. Turner. (2016) *NC State University Design+Build Management Plan*. NC State Department of Landscape Architecture and University Housing.

• Coastal Dynamics Design Lab. (2016) *DUMoRe: Deployable Unit for Mobile Research (North Carolina Coastal Region).*

Select Awards

Conference*

• Received \$794,302 as grants and contracts in support of Coastal Dynamics Design Lab's communitybased design and engagement projects from 2016 to 2021.

• **2020 Honor Award in Analysis & Planning:** *Lumberton Community Floodprint,* American Society of Landscape Architects (national)*

• **2020 Award of Excellence in Research:** *Twin Creeks Conservation Purpose + Public Benefit Study*, ASLA North Carolina*

• 2020 Honor Award in Communications: North Carolina Coastal Planting Templates, ASLA North Carolina*

• 2020 Honor Award in Analysis & Planning: Sycamore Creek Site Analysis and Planning Study, ASLA North Carolina*

• 2019 Inductee: Council of Fellows, American Society of Landscape Architects

• **2019 Award of Excellence in Analysis & Planning:** *Lumberton Community Floodprint*, American Society of Landscape Architects Southeast Regional Conference*

• 2019 Honor Award in Research: Urban Water Rx: Prescribing Conservation through the Measurement of Two Urban Reservoirs, American Society of Landscape Architects Southeast Regional Conference*

• 2019 Merit Award in Analysis & Planning: Greater Princeville: Design Strategies to Restore and Celebrate America's Oldest Black Town, American Society of Landscape Architects Southeast Regional

- 2018 Honor Award in Communications: *Homeplace: A Conversation Guide for Six Communities, Rebuilding after Hurricane Matthew*, American Society of Landscape Architects (national)*
- 2018 President's Council Award, ASLA North Carolina
- 2018 Virginia Design Medalist, Hanbury (Norfolk, Virginia)
- 2018 Communications Award of Excellence: *Homeplace: A Conversation Guide for Six Communities, Rebuilding after Hurricane Matthew*, ASLA North Carolina*
- 2018 Research Honor Award: North Carolina Tidal Creeks Study, ASLA North Carolina*

• **2016 Research Merit Award:** *Landscape Architecture Foundation Case Study Investigation Program,* ASLA North Carolina*

• 2016 Excellence in Teaching Award (Junior Level), Council of Educators in Landscape Architecture*

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Professor Fox's continued achievements, contributions, and impacts on faculty, students, and the profession have significantly enhanced the profession of landscape architecture's collective body of knowledge and capabilities. Professor Fox leads communities toward sustainable alternatives to decades of shortsighted planning and design decisions that have left them vulnerable to the effects of climate change, sea-level rise, intense oceanic storms, and recurring floods. The knowledge generated by and disseminated through his work improves storm resilience, recovery planning, social equity, environmental function, economic development, and quality of life.

Professor Fox's body of research and engagement has received funding in excess of \$2.5M in sponsored grants and charitable gifts. Professor Fox's scholarship is widely published; his projects have been cited or featured in print, online, and television, including *Landscape Architecture Magazine, PBS Quest: The Science of Sustainability, Institute for Emerging Issues First in Future Podcast, World Landscape Architecture, Curbed, The Landscape Report, the Landscape Architecture Foundation (LAF) Landscape Performance Series, The Cultural Landscape Foundation (TCLF) Landslide® program, the Public Interest Design Education Guidebook, and the U.S. Department of Homeland Security Coastal Resilience Center of Excellence case study, Resilient Design Education. In 2018 he was invited by and wrote an "op-ed" in the New York Times on how hurricanes and flooding devastate inland, rural towns.*

In the last five years, the significance of his work has been recognized by numerous organizations. His highlights include being elevated to the ASLA Council of Fellows in 2019; awarded a 2020 ASLA Award of Honor in Analysis and Planning for Lumberton Community Floodprint and a 2018 ASLA Award of Honor in Communication for Homeplace: A Conversation Guide for Six Communities, Recovering from Hurricane Matthew (he served as the principal investigator and lead landscape architect on both). Additionally, he served as the faculty advisor of record for two national ASLA student awards, including a 2020 ASLA Honor Award in Analysis & Planning: Peat/Land: Strategies for Restoration, Design, and Planning of North Carolina Peatlands (Madalyn Baldwin, MLA 2019) and a 2020 ASLA Honor Award in General Design: Sound Design: Reconnecting the Coastal Edge (Xinyu Li, MLA 2020 and Xinyi Liu, MLA 2020). Lastly, Professor Fox's accomplishments during this period resulted in the following highlights: 2016 CELA Excellence in Teaching Award (Junior Level); the 2018 ASLA North Carolina President's Award; a 2018 Virginia Design Medalist; named a NC State Center for Geospatial Analytics Faculty Fellow; faculty advisor of record for 18 state and regional ASLA student awards; and nominations from the NC State College of Design for the NC State University Goodnight Distinguished Professorship in Coastal Resilience and Sustainability (2021), the University of North Carolina System Governor James E. Holshouser, Jr. Award for Excellence in Public Service (2020), and the NC State University Alumni Association Distinguished Graduate Professorship (2018 + 2019).

Name: M. Elen Deming

Rank: Director, Doctor of Design and Professor of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
Harvard Graduate School of Design	1997-2001	Doctor of Design, June 2001
Syracuse University	1994-1997	MA in History of Art & Arch, December 1997
Harvard GSD	1982-1985	MLA, June 1985
State University of New York at Albany	1973-1976	BA, August 1976

Teaching Experience: (College level)

Institution	Years Taught	Subjects
Doctor of Design program (Director) and Landscape Architecture and Environmental Planning Department; College of Design, North Carolina State University	Director and faculty member: Sept 2017 to present (4+ yrs)	DDes program: practice-based design research (incl. research design and methods, lit analysis, ethics & leadership, case studies in design); LAEP Dept. landscape history and theory
Landscape Architecture Dept, College of Fine & Applied Arts, University of Illinois at Urbana- Champaign	Head: Oct 2008 to August 2012; Faculty member: August 2012 to 2017 (9 yrs)	Design research (incl research design, methods, proposal development and thesis completion); design studios (entry-level and advanced); landscape design history and theory (survey with general education components)
Landscape Architecture Department, College of Environmental Science & Forestry, State University of New York	Faculty member: Feb 1993 to September 2008 (15.5 yrs)	Design studios (undergrad and grad, entry-level and advanced); graphics and site analysis studios; landscape history and theory; design research methods; thesis advising

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Sasaki Associates, Inc, Watertown MA (Landscape architecture and multidisciplinary design firm)	Sept 1985 to Jan 1993 (7.5 yrs)	Associate; Project Designer on urban design, resort/tourism facilities; institutional projects; commercial office parks; residential design
Mitchell Nelson Group, Portland OR (landscape architecture)	July-August 1984	Design intern
SWA Goup, Boston MA, and Sausalito CA (landscape architecture)	June 1983 to June 1984 (1 yr)	Design intern
Kramer, Chin & Mayo, Inc. Portland, OR (environmental engineering and multidisciplinary design firm)	March 1980 to August 1982 (2.5 yrs)	Graphic technician and draftsperson;
City of Portland Planning Bureau and METRO Metropolitan Planning District (planning offices)	May 1978 to March 1980 (2 yrs)	Graphic technician and draftsperson; cartographer

Professional Registration: Give profession and state/province(s).

Professional Licensure:

- Landscape architecture; Licensed (inactive) in the State of Illinois since 2009 (license #1341)
- Landscape architecture; Licensed (inactive) in the State of New York since 1994 (license #1469)
- Landscape architecture; Licensed (inactive) in the Commonwealth of Massachusetts since 1986 (license #867)

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

Professional Service & Leadership:

- Member and Fellow (since 2017), American Society of Landscape Architects.
- Landscape Architecture Foundation executive board member; Vice-President for Research 2016-2019;
- Member of LAF Research Committee 2016-21; Juror for Deb Mitchell Research Grant competition
- Member of State of Illinois Landscape Architecture Professional Registration Board 2010-2017

Academic Service & Leadership:

- NC State University: Joseph Moore Distinguished Professorship Review Committee, 2021
- NC State University: Review Promotion and Tenure Committee, 2019-2021
- College of Design: Chair: College Leadership Survey Committee, 2020-21
- University of Illinois, Fine and Applied Arts: Creative Research Board Member, 2015-2017
- University of Illinois, Fine and Applied Arts: Promotion & Tenure Committee, 2016-2017
- Promotion & Tenure review: 18 case reviews over past five years

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

Books and Editions:

under contract Kofi Boone & M. Elen Deming. eds. *E*^{MPTY}*P*^{EDESTALS}: Narratives on Race, Contested Memory & Design (working title). Curated and edited 12 contributor essays; contemporary responses by designers and

artists to removal of Confederate monuments in public spaces of the American South, framed by essays on critical history; manuscript in progress (LSU Press, ms due Nov 2021; forthcoming 2022).

under contract M. Elen Deming. *W^{ISH}-L^{ANDSCAPES AND G^{ARDEN} C^{ITIES}: Green Imagery in Utopian Urban Reform*. History of landscape representation in utopian planning; 120K-word manuscript in progress (Routledge (London); due Summer 2022; forthcoming 2023).}

2017 M. Elen Deming. ed. *LANDSCAPE OBSERVATORY: The Work of Terence Harkness*. Curated and edited book on the design work and teaching of Terry Harkness; foreword by Gary Hilderbrand; curated and edited 9 contributor essays (ORO Editions/AR+D Publishing).

2015 M. Elen Deming. ed. *VALUES IN LANDSCAPE ARCHITECTURE & ENVIRONMENTAL DESIGN: Finding Center in Theory & Practice*. Curated and edited 10 contributor essays; perspectives on the relationships between social values and physical form of environments; authored foreword, introduction, and conclusion (Louisiana State University Press).

Book Chapters:

2019 M. Elen Deming. WaterSheds: Metaphor as Method. Essay invited for *FRESH WATER*: *DESIGN THINKING FOR INLAND WATER TERRITORIES*, ed. J. Henson and MP Maguire. San Francisco, CA: ORO /AR+D (September 2019), pp. 84-90.

M. Elen Deming and Kofi Boone. **Symbolic Conversations: Confederate Legacies in Public Landscapes of the American South.** Chapter co-authored with Kofi Boone, invited for *LANDSCHAFTS_KONFLIKT* [*Landscape Conflicts*], series Raumfragen, ed. Karsten Berr and Corinna Jenal. Springer VS. (June 2019), pp 535-555.

M. Elen Deming. Values & Transformative Learning: On Teaching Landscape History as Community Inquiry. Chapter invited for *THE ROUTLEDGE HANDBOOK OF TEACHING LANDSCAPE*, ed. E. Mertens, N. Karadeniz, K. Jörgensen, R. Stiles. Routledge & ECLAS (Jan 2019), pp 177-190.

2017 M. Elen Deming and Molly Briggs. Landscape Observatory: An Introduction. Introductory chapter in *LANDSCAPE OBSERVATORY: The Work of Terence Harkness*, ed. M. Elen Deming, ORO/ARD Publishers (October 2017), pp 10-17.

M. Elen Deming and Frank Clements. **Biographical Notes: Toward a Grounded Phenomenology**. Chapter in *LANDSCAPE OBSERVATORY: The Work of Terence Harkness*, ed. M. Elen Deming, ORO/ARD Publishers (October 2017), pp 18-29.

M. Elen Deming. **Place-Based Pedagogy**. Chapter in *LANDSCAPE OBSERVATORY*: *The Work of Terence Harkness*, ed. M. Elen Deming, ORO/ARD Publishers (October 2017), pp 82-83.

M. Elen Deming and Kathleen Harleman. Borrowed Landscapes: Transforming the University. Chapter in *LANDSCAPE OBSERVATORY: The Work of Terence Harkness*, ed. M. Elen Deming, ORO/ARD Publishers (October 2017), pp 94-99.

2015 M. Elen Deming. Value Added: An Introduction. Introductory chapter in VALUES IN LANDSCAPE ARCHITECTURE & ENVIRONMENTAL DESIGN: Finding Center in Theory & Practice, ed. M.E. Deming, LSU Press (2015), pp 1-29

M. Elen Deming. Finding Center: Design Agency and the Politics of Landscape. Concluding chapter in VALUES IN LANDSCAPE ARCHITECTURE & ENVIRONMENTAL DESIGN: Finding Center in Theory & Practice, ed. M.E. Deming, LSU Press (2015), pp 220-236

M. Elen Deming. Gardens and the Working Body in the British Utopian Project. Chapter invited for *THE GOOD GARDENER? Nature, Humanity and the Garden*, ed. A. Giesecke and N. Jacobs. London: Artifice Books (2015), pp 188-201.

Refereed Articles and Papers:

2019 M. Elen Deming and Kofi Boone. **Symbolic Conversations in Public Landscapes of the American South: Re-evaluating monuments to the Confederacy.** Peer-reviewed abstract (extended); ECLAS conference proceedings, Ås, Norway (Sept. 17, 2019), *Lessons from the Past/Visions for the Future*, L. Gao and S. Egoz, eds. pp. 194-195.

M. Elen Deming. Landscape Values, On-line Learning, and Communities of Inquiry: Lessons from Landscape Design History. Peer-reviewed abstract (extended); ECLAS conference proceedings; Norway, University of Life Sciences at Ås, Norway (September 17, 2019), *Lessons from the Past/Visions for the Future*, L. Gao and S. Egoz, eds. pp. 237-238.

Ezgi Balkanay and M. Elen Deming. **Pedagogy & Praxis: Emerging Issues from Doctoral Programs in Design Research**. Peer-reviewed abstract presented at ARCC meeting, Toronto, ON (May 30, 2019).

Mackenzie Bullard and M. Elen Deming. How Designers Learn to Learn: Connecting Motivation and Cognitive Process in Practice-Based Research Design. Peer-reviewed abstract presented at ARCC meeting, Toronto, ON (May 30, 2019).

2015 M. Elen Deming, trans. Meng Shui. **Social & Cultural Metrics: Measuring the Intangible Benefits of Designed Landscapes.** Special issue on Landscape Performance, *Journal of Landscape Architecture (China)*, 114 (February), Beijing Forestry University, China, pp. 99-109.

Case Studies (refereed)

2015-16 Landscape Performance Series <u>www.lafoundation.org/research/landscape-performance-series/</u> Research Fellow (team leader) in collaboration with graduate assistant(s) D. Scott Douglas, for LAF's Case Study Investigation Program (CSI):

 Mary Barthelme Park (Chicago) – with Site Design Group (Chicago office) <u>http://landscapeperformance.org/case-study-briefs/mary-bartelme-park [pub 10.06.16]</u>
Loyola University (Chicago) – with Smithgroup/JJR (Chicago, IL office)

https://landscapeperformance.org/case-study-briefs/loyola-university. [pub 04.23.18]

 Evelyn Pease Tyner Interpretive Center (Glenview, IL) – with Conservation Design Forum. https://landscapeperformance.org/case-study-briefs/tyner-interpretive-center.
[pub 04.23.18]

Essays for Catalogs, Newsletters & Blogs (non-refereed)

2020 Roundtable Interview (Oct 14): "Cultural Landscapes Myths and Community Impacts." *Ground*, Ontario Association of Landscape Architects (OALA); <u>https://www.oala.ca/ground-quarterly/published-issues/</u>

2018 "Launching the Online Doctor of Design Program at NC State: A Collaborative Journey" in **DesignLife**, NC State College of Design News, co-authored with Rebecca Sanchez (October 2018)

2017 Summit catalog chapter 39: "Academic Practice Panel" in *The New Landscape Declaration: A Call to Action for the Twenty-first Century* (Los Angeles: Rare Bird Books), pp 187-190.

"Karl B. Lohmann, 1887-1963," in *Pioneers of American Landscape Design Series*. ed. C. Birnbaum. The Cultural Landscape Foundation & University of Virginia Press (Feb 28, 2017). np. http://tclf.org/people; http://tclf.org/pioneer/karl-lohmann/

"Carmel Clay Central Park," and "Mary Bartelme Park," in *Landscape Architecture Performs*. Casebook of projects in Illinois, digests from landscapeperformance.org, compiled by Illinois Chapter of American Society of Landscape Architects (January 2017), 14-17, and 28-29.

Audio/Video Publications

2020 "Elen Deming and the Doctor of Design. *Designlife Podcast*. Interviewed by Max Cohen, Design Communications Office, College of Design, North Carolina State University, Raleigh, NC (interview July 17, 2020); <u>https://soundcloud.com/user-551970031/elen-deming-and-the-doctor-of-design</u>

2018 "Values in Teaching Design" [working title]. Interview given for documentary film/website: **Teaching Studio: Conversations with Landscape Architecture Professors**. Interviewed by T. Carter Crawford, Landscape Architecture Program, NCA&T Greensboro, NC; (interview July 11, 2016); short film (trailer: https://vimeo.com/233116257) presented at CELA 2018

2017 "Engaging Students with the New Landscape Declaration." *LAF News* (May 18-24, 2017). Graduate students at the University of Illinois explore personal design values (recorded December 2016). https://lafoundation.org/news-events/blog/2017/05/18/declaration-teaching-materials/

²⁰¹⁶ "LAF Summit: Academic Practice Panel." *Landscape Architecture Foundation* (recorded June 11, 2016). Video features panelists Anita Berrizbeitia, Jacky Bowring, Julia Czerniak, Susan Herrington, and Anuradha Mathur, moderated by M. E. Deming. <u>https://lafoundation.org/news-events/2016-summit</u>; https://vimeo.com/173095470

Outside/In: A Show about the Natural World and How We Use it, New Hampshire Public Radio, Concord, NH (Interviewed by Sam Evans-Brown at WILL studios, Urbana IL, Nov. 7, 2016). https://_www.outsideinradio.com (available on I-Tunes)

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

As both a design research methodologist and a landscape historian, Professor Deming fulfills two distinct functions at the College of Design. First, as Founding Director of the Doctor of Design (DDes) program, she is building a new transdisciplinary distance-ed degree program that is unique in the university and in the nation. The DDes program offers doctoral-level training for industry leaders working on practice-based design research problems. Under Deming's direction, the DDes program addresses new kinds of transdisciplinary partnerships in academic, professional, and hybrid practices—including architecture, user-centered industrial and graphic design, animation, urban planning, *and* landscape architecture. As such, the DDes program allows NC State College of Design to advance professional discourse on design research and to transcend, or at least blur, its disciplinary boundaries.

To that end, Professor Deming teaches several doctoral-level courses, incl:

- DDN 740 Introduction to Practice-based Design Research
- DDN 741 Case Study Analysis in Design
- DDN 795 Ethics & Leadership in Design
- DDN 810 Literature Analysis Workshop
- DDN 810 Research Design & Development Workshop (Proposal)
- DDN 893/895 Supervised Doctoral Research/Doctoral Dissertation

Second, as Professor in the department of Landscape Architecture and Environmental Planning (LAEP), Deming teaches topics in design history and theory, and examines cultural history, values, and meaning in landscape representation. Currently, in LAEP, she teaches the graduate-level survey course: LAR 582 History of Designed Landscapes. Having taught previously at the University of Illinois, Urbana-Champaign (2008-2017), and SUNY Environmental Science and Forestry (1993-2008), her other signature courses include seminars in modernism, landscape representation, and design research. Deming's scholarship is similarly bifurcated. Past editor of *Landscape Journal* (2002-2009), Deming is author of *Landscape Architecture Research* (with Simon Swaffield, 2011), along with related articles and essays on design research in landscape architecture. She has served on the Landscape Architecture Foundation's Executive Board as Vice-President for Research (2017-2020) as well as the jury for the Deb Mitchell Research Grant.

Professor Deming is also editor of two collections of essays on cultural landscapes: *Values in Landscape Architecture and Environmental Design* (LSU Press 2015) as well as *Landscape Observatory: The Work of Terence Harkness* (ORO/AR+D 2017), on regionalism in design. Currently, she is co-editing a book on the uses and abuses of visual narrative in public places of the American South, as well as writing a book on visual codes and cultural values of the Garden City planning movement and other green utopias of the 20th century.

Name: Robin Moore

Rank: Professor of Landscape Architecture and Environmental Planning, Director of Natural Learning Initiative

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
Massachusetts Institute of Technology	2 years	Master of City and Regional Planning, 1996
Bartlett School of Architecture, London University	5 years	Diploma in Architecture, 1962

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	40 years	User Needs in Design, Community Design, Urban Ecological Design, Social Assessment of Public Environments, Design of Urban Parks and Recreation Spaces, Environmental Education, Biophilic Design: Strategies for Saving the Planet
Stanford University	2 years	Community Participation in Environmental Design, Media Development for Community Organizations
University of California, Berkeley	7 years	Landscape Planning and Design, Community Participation Techniques, Research Methods,

	Environmental Education, Environmental Needs of Young People
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Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Moore Iacofano Goltsman (MIG, Inc.)	29 years	Founding/Consulting Principal
PLAE, Incorporated	29 years	Director of Research
Inquiring Systems, Inc.	2 years	Director of Community Development
People-Environment Group	3 years	Director of Research
Land Use Consultants	3 years	Project Manager

Professional Registration: Give profession and state/province(s).

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- American Society of Landscape Architects (ASLA). 2002-present *Elected Honorary Member, 2012.*
- Children and Nature Network (C&NN)
- American Horticultural Society. Member. Educational
- North American Montessori Teachers Association. 1997-present
- International Association for People-Environment Studies
- (IAPS). 1972-present
- International Play Association. 1967-present

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• *Islam, Z., Moore, R., and Cosco N. 2016. Child-Friendly, Active, Healthy Neighborhoods: Characteristics and Children's Time Outdoors. Environment & Behavior. 48(5): 711-736. DOI: 10.1177/0013916514554694.

• Boldemann, C., Söderström, M., Mårtensson, F., **Moore, R.,** Cosco, N., Bieber, B., Pagels, P., Rasdorp, A. and Wester, Ulf. 2015. The Health-promoting Potential of Preschool Outdoor Environments: Linking Research to Policy. In Lindsay, G. and Morhayim, L. (Eds.). *Revisiting Social Factors: Advancing Research into People and Place.* Newcastle-Upon-Tyne: Cambridge Scholars Publishing, (111-138).

• **Moore, R.** 2017. *Childhood's Domain: Play and Place in Child Development.* London & New York: Routledge (originally published, 1986; republished as Psychology Library Editions: Child Development, Volume 6).

• *Cosco, N. and **Moore, R.** 2019. Creating Inclusive Naturalized Outdoor Play Environments. In Brussoni, M. (Ed.), Outdoor Play/Impact of Urban Planning. In *The Encyclopedia on Early Childhood Development*. Centre for Excellence in Early Childhood Development. Montreal: University of Montreal, Canada

• **Moore, R.** and Cosco, N. (in press). Re-Naturing Urban Childhood: A Sustainable Development Strategy. In Gallis, C. and Shin, WS. (Eds.). *Forests and Public Health.* Newcastle-Upon-Tyne: Cambridge Scholars Publishing.
Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Since 1982, in support of NC State's Land Grant Mission Robin Moore has been educating students from North Carolina and around the world to engage communities in positive, equitable, bio-social design to inspire a caring culture for people and planet, across the life span.

Since 2000 the Natural Learning Initiative lab has served 50+ graduate students who have benefited from 20 prior years of built environment knowledge to help them understand the need for policy change to address pressing health and wellness necessities of all children/families, beginning in infancy. Students are engaged in research and application of results to evidence-informed design assistance in low resource communities. NLI educates by:

- Engaging students with communities in educative design processes;
- Inspiring students to innovate bio-social settings of everyday life; Working in underserved communities;
- Conducting interdisciplinary, multi-method, environment behavior research;
- Building / translating / sharing knowledge;
- Supporting practitioners through post-professional education; Influencing public policy and governance;
- Communicating results and resources to multiple academic and practitioner audiences;
- Co-creating effective, system change models.

Recent honors include being nominated by the College of Design in 2021 for the NC State Alumni Distinguished Professorship Award. Moore was awarded the Joe L. Frost Award for Distinguished Research by the U.S. Play Coalition in 2021, in recognition of a body of exceptional research that has enhanced and expanded the study of play. In 2021 Robin Moore was awarded with the Alexander Quarles Holladay Medal for excellence, the highest honor bestowed upon faculty by the university. Moore received \$1,164,026 as grants and contracts in support of research, design projects, and continuing education training programs from 2016 to 2021.

Name: Carla Delcambre

Rank: Associate Professor of Landscape Architecture and Environmental Planning

Institution	Years Attended	Degree/Date Granted
North Carolina State University	3 years	Doctorate of Design (in progress)
University of Pennsylvania	2 years	MLA, 2001
University of North Carolina at Charlotte	3 years	BA in ARC, 1989
University of New Mexico, Albuquerque	2 years	Sudies in Arc, 1986

Education: (College and higher)

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	16 years	Urban Design Studio, Grading, Intro Design Studio, Design+Build Studio, Digital Media
Greenville Technical College	1 semester	Sketching and Design Courses

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Reynolds and Jewell, PA	1 ½ years	Project Designer
OLIN	4 years	Senior Landscape Designer
Design Workshop	1 year	Project Manager
Total Work of Art, Inc.	1 year	Intern
Marlene Salon	5 years	Landscape Architect

Professional Registration: Give profession and state/province(s).

North Carolina Registered Landscape Architect: #1667

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- American Society of Landscape Architecture (continuing)
- Council of Educators in Landscape Architecture (continuing)

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

- "Navigating an Unfamiliar Landscape". Designlife, Spring 2021
- o <u>Designlife Magazine: Spring 2021 by NC State College of Design issuu</u>
- o Book Chapter Co-Authored with Kofi Boone City of Raleigh: Testing Grounds
- Hybrid Representation by Nadia Amoroso (published summer 2016)

Scholarships, Recognitions, and Awards:

Instructor of record and principal investigator of the Landscape Architecture Design + Build Studio. The award-winning Design + Build Studio integrates a full-range of planning, site design, and construction strategies to serve the campus community. Built on an overall ethic of community, the program's efforts

advocated for sustainability and artistry in the creation of enduring designs that are socially, environmentally and contextually appropriate. Funding for the past 5 years totals \$273,960 with an allotment of \$54,792 provided by University Housing annually. During the COVID-19 pandemic, new funding sources were established through alumni and friends of the College who provided a gift totaling \$25,000 to work on Design + Build projects in underserved communities in North Carolina.

Awards Earned:

- 2020-2021 Outstanding Teacher Award, North Carolina State University
- 2020 Outcomes Assessment Award of Excellence, Department of LAEP
- 2019 Sir Walter Raleigh Award, Syme Residence Hall

Name: Celen Pasalar, Ph.D.

Rank: Associate Professor in Landscape Architecture and Environmental Planning

Institution	Years Attended	Degree/Date Granted
North Carolina State University	4	PhD in Design
Middle East Technical University, Turkey	2	MCP, 1999
Middle East Technical University, Turkey	4	BArch, 1997

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	14 years	Research Methods in Landscape Architecture and Environmental Planning; Urban Design Studio; The Rural Community Planning and Design Studio; Research and Strategic Thinking; LAR DesignWeek/Sprint; LAR Design Research Project; LAR Independent Study; Doctoral Dissertation Research; Doctoral Directed Research Study;

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include a resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Vintage Painting and Construction (USA)	1 year	Design Analyst

MNG, Gunal Co. Inc. (Ankara, Turkey)	½ years	Construction Details Intern
MNG, Targem Co. Inc. (Ankara, Turkey)	½ years	Design Intern

Professional Registration: Give profession and state/province(s).

• Architecture (The Union of the Cyprus Turkish Engineers and Architects, Cyprus - also a member of the International Union of Architects)

Professional & Academic Activities. Offices, held exhibitions, competitions, committee memberships in professional societies or boards, etc., for the last five years.

Professional and Academic Honors:

• 2020 Council of Educators in Landscape Architecture (CELA) Awards, Excellence in Service Learning, Junior (National)

- 2019 Outstanding Extension Award, NC State University
- 2019 Outstanding Extension Service Award, College of Design, NC State University
- 2019 Extraordinary Achievements Award, Department of Landscape Architecture, NC State University
- 2018 Extraordinary Achievements Award, Department of Landscape Architecture, NC State University
- 2018 Honor Award in Communications: Homeplace: A Conversation Guide for Six Communities, Recovery

after Hurricane Matthew, American Society of Landscape Architects (ASLA), (National)

• 2018 Communications Award of Excellence: Homeplace: A Conversation Guide for Six Communities, Recovery after Hurricane Matthew, NC Chapter of ASLA (Regional)

• 2016 (Faculty Advisor) Student Award of Honor in Community Service: GrowingChange Prison Flip: Reclaiming an Abandoned Prison Site (National)

Conferences, Workshops, Exhibitions Organized/Facilitated/Curated:

• Organizer & Facilitator - Sustainable and Smart Cities Workshop. 2019 University Global Partnership Network Conference, April 1-3rd, 2019, Raleigh, NC.

• *Curator and Exhibit Designer* - The Future of Equine: The Southeast Equine Research and Education Center. Exhibit designed and assembled in association with Isothermal Community College, April 23rd, 2019, ICC Polk Center, Polk County.

• *Curator - Lan*dscape Architecture Design Week 2018 Exhibition. Coordinated and organized the event including this exhibition. Brooks Hall Gallery, NC State College of Design, 2018.

• *Co-Organizer & Co-Facilitator* - Southeastern Equine Research and Education Partnership Workshop, Polk County, 2018.

• Organizer & Facilitator - Community Design and Development in Rural Communities Workshop (as part of the Ultimate Community Partnerships Meeting facilitated at NC State University), 2016.

• Organizer & Facilitator - Pop-Up Community Workshop, Reconsiderations of Riverfront Areas in Town of Williamston, Williamston, NC, March 30th, 2016.

• *Co-Chair & Co-Organizer* - 47th Annual International Conference of the Environmental Design Research Association entitled *Innovation...Shifting Ground,* May 18-21, 2016.

• Organizer and Facilitator – Pop-Up Community Workshop, Reconsiderations of Riverfront Areas in Town of Williamston, WC, March 30th, 2016.

Committee Memberships in Professional Societies or Boards:

• *Invited Scientific Committee Member* - The Second International Conference "Unspoken Issues in Architectural Education", which will be organized and held in collaboration with European Association for Architectural Education (EAAE) and the Eastern Mediterranean University, North Cyprus on 14-15 April 2022.

Invited Scientific Committee Member - 1st International Urban Design Conference: Young Researchers

- Forum@ Rediscovering Urban Design , Eastern Mediterranean University, North Cyprus 2020-2021.
- *Review Board Member* Open House International Journal, Emerald Publishing, 2020-present.

• *Review Board Member* - IJAR-Archnet: International Journal of Architectural Research, Emerald Publishing, 2018-present.

Memberships and Services in Professional and Academic Societies:

- Member The Association of the Collegiate Schools of Architecture (ACSA) since 2019
- *Member* International Association of People and Environment Studies (IAPS) since 2018
- Member Architectural Research Centers Consortium (ARCC) since 2012
- *Member* Environmental Design Research Association (EDRA) since 2012
- *Member* Council of Educators in Landscape Architecture (CELA) since 2012
- *Member* The National Honor Society of Phi Kappa Phi since 2002
- Peer Reviewer Cities Journal since 2019
- Peer Reviewer Elsevier Journals since 2019
- Peer Reviewer Urban Design and Planning Journal. ICE Publishing since 2014

Research and Extension/Engagement Grants

- 2021-present Co-Principal Investigator. \$250,806 NC Department of Transportation (Funded, Ongoing - 01/01/2021 through 07/30/2022) Proposal Title: Urban Applications of Innovative Intersections
- 2020-present **Principal Investigator. \$49,901 Spencer Foundation** (Funded, Ongoing 01/01/2020 through 06/30/2022) Project Title: Advancing Collective Diversity through Informal Learning Space Design in Higher Education: A Transdisciplinary Mixed Methods Approach.
- 2020-present
 Co-Principal Investigator. \$10,000 2020-2021 NCSU Office of Engagement
 &
 Outreach Seed Grant (Funded, Ongoing 07/01/2020 06/30/2022) Project
 Title: Enhancing Equity and
 Diverse Stakeholder Engagement in the Dix Park
 Planning Process.
- 2020-present **Co-Principal Investigator/Co-Organizer/Co-Founder. \$25,000 NCSU Office of Engagement & Outreach** (Funded, Ongoing/Rolling) Program Title: Strengthening the Impact of Research (STIR) Program
- 2020 **Co-Principal Investigator. \$40,000 National Endowment for the Arts** (Not Funded) Proposal Title: *Honoring Oberlin*
- 2019-present **Principal Investigator**. **\$35,197 Town of Angier** (Funded, Ongoing 04/01/2019 through 11/01/2021) Project Title: *Envisioning Town of Angier's Downtown Area: Design Visioning Study.*
- 2019 Co-Principal Investigator. \$4,478,137 Centers for Disease Control & Prevention (Not Funded) Proposal Title: Health Matters: Promoting Health Equity with African American and Latino
- Communities in Four NC Counties.
 - 2019 Co-Principal Investigator. \$24,647 Council of Educators in Landscape

Architecture (Not Funded) Proposal Title: *Immersive Virtual Reality as a Means of Incorporating Stress Reduction as Measurable Input in the Design Process.*

• 2018-2019 Principal Investigator. \$19,505 – Two Hawk Workforce

Services/Cumberland County (Funded, 02/01/2018 through 08/01/2019) Project Title: A Model Conceptual Design for the Fayetteville NC Works Career Center.

- 2018 **Co-Principal Investigator. \$0 (furniture donation at the amount of \$60,000) Steelcase, Inc.** (Not Funded) Proposal Title: *Active Learning Center Grant.*
- 2017-2019 Co-Principal Investigator. \$80,000 Appalachian Regional Commission and
 Isothermal Community College (Funded March 2017 through June 2019) Project Title: Southeast

Equine Research and Education Partnership.

• 2017 _____ Co-Principal Investigator. \$50,000 – UNC Chapel Hill (Funded – 04/17/2017

through 06/15/2017) Project Title: Integrative Design Assistance as a Component of the Hurricane Matthew Disaster Recovery and Resilience Initiative.

• 2017 Co-Principal Investigator. \$67,860 – State of North Carolina (Not Funded)

Proposal Title: Enabling Community Participation in Building Resilience through Design.

• 2017 **Co-Principal Investigator. \$2,945,433 – National Science Foundation** (Not Funded) Proposal Title: *VRtibles: Building Computational Thinking through Spatial Reasoning.*

2016 Co-Principal Investigator. \$797,097 – National Science Foundation (Not Funded)
Proposal Title: Coastal SEES Collaborative Research: Sustainable Use of Connected Coastal Ecosystem
Services and Society (SUCCESS).

Peer-Reviewed and Invited Presentations

• **Pasalar, C.** (2021). Invited Panel Speaker. PRS 2021 - *A Postdoc's Guide to Broadening Research Impact*. NC State University, (05/18/2021)

• **Pasalar, C.** & Hallowell, G. (2021). Invited Symposium Presentation and Panel Speaker. *The International Perspectives on the Future of Architecture and Urbanism in the Post-COVID Age Symposium,* organized and sponsored by the Epidemic Urbanism Initiative and AIA Design & Health Research Consortium.

• *** Pasalar, C.**, Boone, K., Lu, Y., Yi, DJ., Mcnally M., Hester, R. (2021). *Time's a Mess! Virtual Community Participation During Pandemic*. Annual CELA 2021 Conference: 100+1|Resilience, Virtual, March 17-20, 2021.

• Yi, DJ., Lu, Y., **Pasalar, C**., Boone, K., McNally, M., Hester, R. (2021). *To Begin with Words and End Up with Images Was a Gift!*. EDRA 52 International Conference: Just Environments - Transdisciplinary Border Crossings, As part of the Symposium focusing on the Engaging Vulnerable Communities during COVID-19: Questions, Trials, and Outcomes.Virtual (Detroit), May 19-23, 2021.

• *** Pasalar, C.** and Hallowell, G. D. (2019). *Uncovering Hidden Divisions: A Grassroots Method for Urban Visioning*. Peer-reviewed paper presented at 2019 International Seminar on Urban Form: Cities as Assemblages. July 2nd – July 6th, 2019, Nicosia, Cyprus.

• **Pasalar, C.** & Fitzgerald, A. G. (2019). *Systems Thinking and Transdisciplinary Learning through Community-Based Projects Integrated in Landscape Architecture Pedagogy*. Peer-reviewed presentation at the Council of Educators in Landscape Architecture (CELA) Annual Convention, Sacramento, CA.

• Alraddadi, A., **Pasalar, C.**, & Hallowell, G. D. (2019). *Exploring Al-Za'atari Refugee Camp:*

Developing Social Resilience and Equity through Design. Peer-reviewed presentation at the EDRA50 Annual Conference. Brooklyn, New York.

• **Pasalar, C.** *Presentation on Homeplace: A Conversation Guide to Uncover the Social and Physical Resilience of Flood-Prone Communities.* (2019). Grassroots Leadership Conference, October 9th, 2019, Kannapolis NC.

• **Pasalar, C.** (May, 2019). *Toward Human Centered Smart Communities*. Invited speaker at the Smart Cities Speaker Series organized by Southern Piedmont Technology Council, Danville, VA.

• Brookins, C., **Pasalar, C.**, Morais, D. (2019). *The Southeast Equine Research and Education Partnership: A Model of Community-Engaged Participatory Action Research.* Oral and Poster Presentations at 2019 University Research Symposium Lightning Talk, March 21st, 2019, NC State University.

• **Pasalar, C.,** Morais, D., & Brookins, C. (May, 2019). *SEREP: The Southeast Equine Research and Education Center*. Invited public presentation at the ICC Polk Center, Polk County.

• **Pasalar, C.** (October, 2018). Toward Human-Centered Smart Cities: Understanding Emerging Technologies and Their Effect on the Urban Experience. Invited speaker at the 2018 Triangle Smart Cities Summit, Raleigh, NC.

• *** Pasalar, C.** & Hallowell, G. D. (2018). *The Changing Nature of Urban Public Spaces within Sharing Economies*. Peer-reviewed paper presented at the Great Asian Streets Symposium (GASS) 2018, December 14-16th, 2018, Singapore.

• *** Pasalar, C.** & Hallowell, G. D. (2018). *Food Hubs: The Role of Placemaking in Creating Healthy Communities*. Peer-reviewed presentation at the Healthy City Design Congress, 15-16th October, 2018, London, UK. • * Mantooth, R., Radtke, R., & **Pasalar, C.** (2018). *Understanding Perceptions of the Built Environment in Higher Education Settings*. Peer-reviewed paper presented at the International Association People-Environment Studies, July 8th-13th 2018, Rome, Italy.

• *** Pasalar, C.** & Hallowell, G. D. (2018). *Toward Human-Centered Smart Cities: Understanding Emerging Technologies and Their Effect on the Urban Experience*. Peer-reviewed paper presented at the Architecture_Media_Politics_Society (AMPS) Conference, University of Arizona, Arizona.

• * Ferreira, B., Morais, D., Brookins, C., **Pasalar, C.**, Scheunemann, A., Kuss, T., Jones, B. (2018). *A Participatory Assessment of Community Assets at the Outset of a Regional Equine Tourism Economy*. Peer-reviewed presentation at the 40th Annual Southeastern Recreation Research Conference, Athens, GA.

• **Pasalar, C.** (with Dr. Sharon Joines, Dr. Wayne Place, and Dr. Soolyeon Cho). (2018). Panel discussions, Cultural Diversity in Graduate Studies, PhD in Design, College of Design, NC State University.

• **Pasalar, C.** (with Daria Fischer Page, Amber Baylor, Nicholas Benson, and Travis Kraus). (2018). Borrowing from Participatory Design to Enhance Collaborative Learning. Panel presentation and discussions at the Southern Clinical Conference and Bellow Scholars Workshop – Overcoming Division: The Role of Clinical Legal Education, Organized by University of South Carolina, School of Law, Columbia, SC.

• **Pasalar, C.** & Brookins, C. (2018). *Southeast Equine Research and Education Partnership Initiative*. Invited presentation at the Joint Meeting of College of Design and College of Humanities and Social Sciences, 26th March, 2018.

• **Pasalar, C.** (2018). *Southeast Equine Research and Education Partnership Initiative*. Invited presentation at Leaders Council Meeting, College of Design, NC State University, 26th October, 2018.

• *** Pasalar, C.** (2016). *Embracing Sustainability and Ecological Design Thinking in Underserved Communities*. Peer-reviewed presentation at the Landscape Architecture As Necessity Conference, USC Landscape Architecture Department, Los Angeles, CA.

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• *** Pasalar, C.**, Hallowell, G.D., Lu, Y. (2020). Smart Cars, Smart Cities, and Smart Sharing: The Changing Nature of Urban Public Spaces. In Doheim, R., Aboelmakarem, Kamel, E. (Eds.) *Humanizing Cities Through Car-Free City Development and Transformation*. p.71-97. IGI Global.

• *** Pasalar, C.** and Hallowell, G. D. (2020). Toward Human-Centered Smart Cities: Understanding Emerging Technologies and Their Effect on the Urban Experience. In Jonathan Bean, Susannah Dickinson, R. A., and Aletheia Ida (Eds.) *Critical Practices in Architecture: The Unexamined*. P. 317-340. NewCastle upon Tyne, UK: Cambridge Scholars Publishing.

• *** Pasalar, C.** and Hallowell, G. D. (2020). *Smart Cities and the Sharing Economy: The Evolving Nature of Urban Public Space*. In Online Proceedings of ACSA 108 Virtual Conference. June 15th - June 19th 2020.

• * **Pasalar, C.**, Demir, O., Hallowell, G. D. (2021). A Framework for Increasing Sustainability in Affordable Housing: Case Studies in Turkey. In *Ekistics and the New Habitat*. Special Issue: Turkey, Urbanism and the New Habitat. Vol.80, No.1, 23-37.

• *** Pasalar, C.** and Hallowell, G. D. (2019). Sharing Economies, Technologies, and the Changing Nature of Urban Public Space in Medium-Sized Cities. In Fabio Angeoletto (Ed.) *The Medium-Sized Cities Now and in the Future Volume I, Terr @ Plural Journal,* Vol 13, No 3.

• *** Pasalar, C.**, and Hallowell, George. D. (2019). A Grassroots Research Approach for Branding Urban Districts. *Archnet-IJAR: International Journal of Architectural Research*, <u>https://doi.org/10.1108/ARCH-03-2019-0047</u>

• *** Pasalar, C.** and Hallowell, G. D. (2019). *Uncovering Hidden Divisions: A Grassroots Method for Urban Visioning.* In Proceedings of 2019 International Seminar on Urban Form: Cities as Assemblages. July 2nd – July 6th, 2019, Nicosia, Cyprus.

• **Pasalar, C.**, Mantooth, R., Ameri, A. (2019). *Envisioning the Future Workplace for NC Works Center*, Fayetteville, NC. Raleigh, NC: College of Design, North Carolina State University.

• * Peery, J. and **Pasalar, C.** (2018). Designing the Learning Experiences in Serious Games: The Overt and the Subtle – The Virtual Clinic Learning Environment. *Informatics*, 5(3), 30, https://doi.org/10.3390/informatics5030030

• **Pasalar, C.**, Morais, D., Brookins, C. (2019). *Southeast Equine Research and Education Partnership – Envisioning the Future: The Southeast Equine Community and Research Center*. Raleigh, NC: North Carolina State University.

• Morais, D., Brookins, C., **Pasalar, C.**, Fererria, B. S., Scheunemann, A., Kuss, T., & Jones, B. (2018). *Southeast Equine Research and Education Partnership - 2nd Progress Report: Identifying Opportunities*. Raleigh, NC: North Carolina State University. DOI: 10.13140/RG.2.2.27368.16643

• Brookins, C., **Pasalar, C.**, Morais, D., Fererria, B., Scheunemann, A., Kuss, T., Jones, B. (2017). Southeast Equine Research and Education Partnership (SEREP) 1st Progress Report. Raleigh, NC: North Carolina State University.

• Coastal Dynamics Design Lab (including Fox, A., Boone, K., Hill, D., **Pasalar, C.**, Allen, T., Layton, R., Flink, C.). (2017) *Homeplace: A Conversation Guide for the Fair Bluff Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative: ISBN 978-1-38-963848-0.

• Coastal Dynamics Design Lab (including Fox, A., Boone, K., Hill, D., **Pasalar, C.**, Allen, T., Layton, R., Flink, C.). (2017) *Homeplace: A Conversation Guide for the Kinston Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative: ISBN 978-1-38-963845-9.

• Coastal Dynamics Design Lab (including Fox, A., Boone, K., Hill, D., **Pasalar, C.**, Allen, T., Layton, R., Flink, C.). (2017) *Homeplace: A Conversation Guide for the Lumberton Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative: ISBN 978-1-38-963836-7.

• Coastal Dynamics Design Lab (including Fox, A., Boone, K., Hill, D., **Pasalar, C.**, Allen, T., Layton, R., Flink, C.). (2017) *Homeplace: A Conversation Guide for the Princeville Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative: ISBN 978-1-38-963830-5.

• Coastal Dynamics Design Lab (including Fox, A., Boone, K., Hill, D., **Pasalar, C.**, Allen, T., Layton, R., Flink, C.). (2017) *Homeplace: A Conversation Guide for the Seven Springs Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative: ISBN 978-1-38-963829

• Coastal Dynamics Design Lab (including Fox, A., Boone, K., Hill, D., **Pasalar, C.**, Allen, T., Layton, R., Flink, C.). (2017) *Homeplace: A Conversation Guide for the Windsor Community, Rebuilding After Hurricane Matthew.* Hurricane Matthew Disaster Recovery and Resilience Initiative: ISBN 978-1-38-963824-4.

• Scheunemann, A., Brookins, C., Morais, D. **Pasalar, C.,** Kuss, T., Jones, B., Ferreira, B (with Simons-Rudolph, A.). (2017). *The Southeast Equine Research and Education Partnership*. Community Psychology: Social Justice through Collaborative Research and Action, Issue: Sense of Community,

https://www.communitypsychology.com/the-southeast-equine-research-and-education-partnership/

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Over the years, as a faculty with Extension appointment, I led research, community-based extension and engagement projects that built on each effort's success resulting in national recognitions, peer-reviewed publications, and impactful partnerships with scholars within and outside of NC State University, local governments, community organizations and nonprofits around the country. These efforts are centered on ways of bringing the benefits of design to communities affected by economic downturns, natural and human-made disasters. These processes not only contributed to the transformation of the communities, they also

involved students providing experiential learning opportunities that prepared them for leadership roles in the design field.

My scholarship through research, extension, engagement, and teaching are interrelated and multidisciplinary, synthesizing several academic threads from multiple areas including landscape architecture, urban design, environmental psychology, community design, and planning. My efforts focus on three main initiatives: 1) developing grassroot processes to understand diverse human perceptions and performance in the environment; 2) developing sustainable design strategies considerate of social, economic, and cultural imperatives with a special emphasis on community development, equity, placemaking, place identity, and branding; 3) supporting meaningful learning and evidence-based inquiry and practices in the design field, while engaging with and delivering design to the underserved communities in support of their residents' health, safety, and welfare. Through these participatory design efforts, students are involved to address emerging issues in the broader built environment by exploring complex societal issues to arrive at meaningful and effective solutions. Communities are also empowered to create a vision that is both transformative and insightful addressing their needs, while establishing key partnerships to create sustainable and equitable development.

Evidence of these initiatives are visible in my research, extension and engagement projects, grant work, publications and reports, conference papers, and presentations. I led various funded multi-disciplinary projects and initiatives focused on critical environmental, economic, and societal challenges that rebrand and envision the future development of urban and rural communities, in North Carolina and beyond. Through my research, extension, and engagement community-based design efforts, I always make sure that what is taught in the classroom has real-world application. I make certain that research is put in the context of its possible uses in a government agency, community, or non-profits. I am a strong advocate for research, especially when it can perfect design, improve public acceptance of our work, and expand the types of projects landscape architects and urban designers will be recruited to perform. Beyond the academic inquiry, there is growing opportunity for the design field in transforming urban/rural communities and providing leadership for impactful and smart economic and physical development as we continue to address new and pressing challenges introduced by the current pandemic conditions, climate change, rapid growth of communities, advancing technologies, and inequities. As my extension and research efforts towards helping communities continue to grow, the contributions of these efforts in building new knowledge, skills, and guidelines for future smart and healthy community development will continue to impact those both locally and abroad for years to come.

Name: Fernando Magallanes

Rank: Associate Professor of Landscape Architecture and Environmental Planning

Institution	Years Attended	Degree/Date Granted
Harvard GSD	3 years	MLA, 1981
Texas A&M	5 years	BSLA, 1978

Education: (College and higher)

Teaching Experience: (College level)

Institution	Years Taught	Subjects

North Carolina State University	34 years	First Year Experience (FYE), Embarking on Design: Foundation LAR Studio, LA Drawing, LA History, Contemporary Landscape Architecture, Site Design and Construction, Site Planning, Grading, LAR 502 Site Planning and Design Studio
North Carolina State University Prague Institute	3 years	International Studio: LAR and Urban Design
Prague Summer Studio, Czech Republic	4 years	Landscape Architecture, Architecture/Urban Design
Michigan State University	1 year	Urban and Regional Planning- visiting fellowship
University of Cantabria, Santander, Spain	4 years	International Summer LAR and Architecture Design Studio
University of Texas at San Antonio	2 years	Instructor
San Antonio College	2 years	Instructor

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Fernando Magallanes, PLA	35 years	Consultant
Thousand Trails, Inc. Resort Developers	1 year	Site planner, Project Manager
POD, Inc. Landscape Architects & Planners	1 year	Designer, site planner, Project Manager
Carol R. Johnson and Associates	2.5 years	Designer, Entry position
SWA Group, Inc. (Houston and Dallas, TX)	3 summers	Intern

Professional Registration: Give profession and state/province(s).

- Landscape Architect, State of North Carolina, No. 704
- Landscape Architect, State of Texas, No. 1028 (in---active)

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for the last five years.

- CELA (Council of Educators In Landscape Architecture)
- ASLA (American Society of Landscape Architects) (Since 2011)
- EDRA (Environmental Design Research Association)
- Member. North Carolina A&T Dept. of Landscape Architecture Board. Greensboro, NC. Fall 2020- now

• Member. NC Partners of the Americas, Urban Committee Chair. Raleigh NC. Spring 2021- now,

Board Chair. ILISS

• Hispanic Educational Summit. March 26, 2021

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• **THE LATINO ARROYO AND THE DREAM PLACE: Emerging Perspectives about Latino Identity.* (2021). Submitted abstract and written essay to CELA 2021. Accepted for Conference Presentation. Awaiting response to publication submission.

• *F. Magallanes and Dr. M. Stoskopf. LEARNING, SENSING, AND OBSERVING: WHY LANDSCAPE ARCHITECTS DRAW LANDSCAPES AND WHY VETERINARIANS DRAW BINTURONGS? (2021). Submitted abstract and written essay to CELA 2021. Accepted for Conference presentation. Awaiting response to publication submission.

• *F. Magallanes. (2021). Where to design Latino environments. Seen Social Agency. The Flaneur Project: 01. A collaborative social media project. Instagram, February 1, 2021. Watercolor drawing, photo, and statement.

• *Magallanes, F. (2020). FOR WHITES ONLY: A TIMELY COMMENTARY ABOUT LATINOS AND LANDSCAPE ARCHITECTURE. Landscape Research Record, no. 09, 77-85. Retrieved from <u>https://thecela.org/wp-</u> content/uploads/LRR v.9 FINAL 2020 Reduced-1.pdf

• Da Vinci to Drawing Wolves: Sharing Inquiry, Observation, and Communication. Paper. Drawing: *Research, Theory, Practice Journal. Submitted Feb 2020. Denied May 5, 2020

• *A Mexican American Landscape Architecture Perspective on Ian McHarg: Considering Latino/a Culture in his Sphere of Influence. Paper. Socio-Ecological Practice Research (SEPR) Journal. Magallanes, F. (2019). Submitted May 2019, resubmitted three times. Denied Dec. 21, 2019.

• *CELA poster. Magallanes, F. (2019). Going Back to The Drawing Board: Perception, the Body, the Mind in Landscape Architecture. Poster. (March 2019 Annual CELA Conference). Peer review selected.

• *CELA abstract and presentation. Magallanes, F. (2019). The Dying Hand: Between Biology, Psychology, and the Future of the Environment. (March 2019 Annual CELA Conference). Peer review selected.

• *ANFA abstract. Magallanes, F. (2018). The Struggle with Learning to Draw: Accessing What is in Your Head. ANFA (The Academy of Neuroscience for Architecture). 2018 Conference Submittal. San Diego. (Submitted. Not Accepted)

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Professor Magallanes is the foundation professor for introductory courses in the MLA curriculum and for the College of Design's First Year Experience (FYE). He mentors and transitions incoming MLA students and freshman undergraduate students in four design disciplines (Industrial Design, Graphic Design, Architecture, and Art & Design) into the traditional formal language of Design as well as the evolving thinking about Design. He pursues rigorous academic teaching by leading and engaging his students in achieving excellence through development and practice of innovative design skills.

Recently, his design teaching is being nurtured with research from neuroscience, psychology, anthropology and the social sciences. Professor Magallanes wants to advance the teaching, learning, and the practice of

the design process with decolonized perspectives. He has begun to study three areas of importance surrounding the design process. He advances the learning of the design process (especially through hand drawing, observation skills, and materials exploration) for innovative thinking application; he teaches the use of history and theoretical inquiry for inspiration and precedent; and he seeks to find professional collaborative design models to be used alongside various disciplines such as Artists, Architects, Veterinary Medical practitioners, and science researchers. Magallanes is actively involved in teaching a design inquiry based process that is sensitive to culture and place, and the evolving values developing in the Design fields and Landscape Architecture. He incorporates critical thinking and observation, documentation, and interpretive reflection for situating the problems and issues found in landscape settings. He teaches introductory design studios, drawing, and a Landscape Architecture History class to students across the disciplines at the University.

He is also mining the gap found in the lack of Latino/a/x presence, identity, design contributions, and practitioners in landscape architecture. He is developing the integration of Latino information into his history and studio classes to develop a student sensitivity who will need to address the needs of a growing Latino/a/x presence in our population in the future. His writing is seeking to uncover historical, anthropological, cultural, and art based information about Latinos. Latino's are a large group that is present in numbers but not in activity and landscape architecture literature. Traditional design programs and designers fail to see Latinos as visible citizens in landscape and environments due to this gap in information about them.

In 2018 he won a traveling fellowship to La Paz, Santa Cruz, and Cochabamba, Bolivia to present ideas about environment, cities, and design to university students, professional practitioners, and to city planners. This has once again rekindled his relationship with the international design community to discuss urbanization and design of cities. He continues to involve Bolivian academics and practitioners in his studio critiques and in his own research activity. Projects are developing that involve academics who are researching and writing about indigenous people and the relationship to eco tourism.

Name: Nilda Cosco

Rank: Research Associate Professor, Director of Programs for the Natural Learning Initiative

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
ECA, HeriotWatt University, Edinburgh, UK	4 years	PhD Landscape Architecture, 2006
Universidad del Salvador, Buenos Aires, Argentina	4 years	BS 1975

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	9 years	Early Childhood Outdoor Learning Environments Certificate (taught through NLI), Introduction to Environment and Behavior for Designers

Belgrano University, Argentina	1 year	Leisure and Recreation
		Planning

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
The Natural Learning Initiative (NLI)	21 years	Director of Programs
Center for Universal Design, NCSU College of Design	1 year	Inclusive Design Initiative and Director
MIG, Inc.	2 years	Education Specialist
Growing Up in Cities	9 years	Buenos Aires, Argentina
National Lekotek Center of Argentina	9 years	Director

Professional Registration: Give profession and state/province(s).

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- Environmental Design Research Association EDRA. Member 2002---present.
- International Association for the Child's Right to Play (IPA). IPA-Argentina Board member. Member of the IPA International Board of Directors. 1980-1998. IPA Vice President for Latin America. 1993-1999. IPA-USA member, 1999-present.
- American Society of Landscape Architects ASLA. Member. 2006---present.
- National Association for the Education of Young Children NAEYC. Member 2012---present.
- STEM Innovation for Inclusion in Early Education (STEMIE). Frank Porter Graham, UNC

https://stemie.fpg.unc.edu/ National Impact Team (NIT) Member. Supported by NSF.

• Integrating Healthy Opportunities for Play and Eating (I-HOPE). North Carolina Advisory Committee for Early Care and Education Settings, NC-DHHS. Member. 2015-present

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• *Cosco, N. and **Moore, R.** 2019. Creating Inclusive Naturalized Outdoor Play Environments. In Brussoni, M. (Ed.), Outdoor Play/Impact of Urban Planning. In *The Encyclopedia on Early Childhood Development*. Centre for Excellence in Early Childhood Development. Montreal: University of Montreal, Canada

• **Moore, R.** and Cosco, N. (in press). Re-Naturing Urban Childhood: A Sustainable Development Strategy. In Gallis, C. and Shin, WS. (Eds.). *Forests and Public Health*. Newcastle-Upon-Tyne: Cambridge Scholars Publishing.

• *Islam, Z., Moore, R., and Cosco N. 2016. Child-Friendly, Active, Healthy Neighborhoods: Characteristics and Children's Time Outdoors. Environment & Behavior. 48(5): 711-736. DOI: 10.1177/0013916514554694.

• Boldemann, C., Söderström, M., Mårtensson, F., Moore, R., Cosco, N., Bieber, B., Pagels, P., Rasdorp,

A. and Wester, Ulf. 2015. The Health-promoting Potential of Preschool Outdoor Environments: Linking Research to Policy. In Lindsay, G. and Morhayim, L. (Eds.). *Revisiting Social Factors: Advancing Research into People and Place*. Newcastle-Upon-Tyne: Cambridge Scholars Publishing, (111-138).

• Moore, R. and Cosco, N. (in press). Re-Naturing Urban Childhood: A Sustainable Development Strategy. In Gallis, C. (Ed.). *Forests and Public Health.* Newcastle-Upon-Tyne: Cambridge Scholars Publishing.

• Stevenson, KT R Moore, N Cosco, MF Floyd, W Sullivan, L Brink, et al. 2020. A National Research Agenda Supporting Green Schoolyard Development and Equitable Access to Nature. *Elementa Science of the Anthropocene 8 (1).*

• Cosco N, Moore R. Creating Inclusive Naturalized Outdoor Play Environments. 2019. In: Tremblay RE, Boivin M, Peters RDeV, eds. Brussoni M, topic ed. *Encyclopedia on Early Childhood Development* [online]. http://www.child-encyclopedia.com/outdoor-play/according-experts/creating-inclusive-naturalized-outdoor-play-environments.

• Moore R, Cosco N. 2019 Early Childhood Outdoor Play and Learning Spaces(ECOPALS): Achieving Design Quality. In: Tremblay RE, Boivin M, Peters RDeV, eds. Brussoni M, topic ed. *Encyclopedia on Early Childhood Development* [online]. <u>http://www.child-encyclopedia.com/outdoor-play/according-experts/early-childhood-outdoor-play-and-learning-spaces-ecopals-achieving.</u>

• Cosco, N., Sledge, B., Moore, R. and Bradley, L. (2020). *Gardening Activity Guide*. Natural Learning Initiative, College of Design, NC State University. Raleigh, North Carolina.

• NLI Team. (2020) <u>COVID Support we're all in this together!</u> Early Childhood Outdoor Play and Learning Resources.

• NLI Team. (2020) <u>Launching a low-cost garden in three steps:</u> "*InfoSheets*" to inspire, simple, low/no cost gardening activity at home or as first steps in childcare centers and homes.

• Cosco, N, Sledge, B., Moore, R., Bradley, L. 2020. <u>Gardening Activity</u> <u>Guide</u>. Peer reviewed by Cooperative Extension. NLI / Extension publication.

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Professor Cosco's field of research and professional interest, the relationship between the outdoors and child development, lies at the intersection of landscape design and child development. As such, she participates in design programming of outdoor environments for children with and without disabilities. Cosco is involved in research on the impact of outdoor environments on health outcomes such as obesity, sedentary lifestyles, attention functioning, and well--being.

Name: Chuck Flink

Rank: Professor of the Practice in Landscape Architecture and Environmental Planning, FASLA, PLA; Director, Initiative for Community Growth & Development, NC State University

Education: (College and higher)

Institution	Years Attended Deg	gree/Date Granted
North Carolina State University	5 years	BEDLA 1982, MLA, 2017
NW Missouri State University	2 years	Pre-Architecture

Teaching Experience: (College level)

Institution	Years Taught S	Subjects
North Carolina State University	8 years	The Landscape Imperative, Real- Estate Development

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years R	esponsibilities
Alta Planning + Design	10 years	Master Plan, Design, Project Management
Greenways, Incorporated	35 years	Master Plan, Design, Project Management

Professional Registration: Give profession and state/province(s).

• Licensed Landscape Architect: North Carolina # 524, Virginia #414

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- ASLA
- North Carolina State University Alumni Association (President, Jan 2021-present)
- Board of Visitors, North Carolina State University (Advisory to Chancellor and Board of Trustees) (2009 to present) (Chair, 2012-2018)
- College of Design Leaders Council, NC State University (2010 to present)
- Director, Initiative for Community Growth & Development, NC State University (July 2021-present)

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• Flink, Charles A., *The Greenway Imperative: Connecting Communities and Landscapes for a Sustainable*

Future. University Press of Florida, March 2020

• Greenways and Trails as Global Resilient Landscapes, Trails Around the World Magazine, Issue 3, World Trails Network, Autumn 2017.

- Homeplace, A Conversation Guide for Rebuilding After Hurricane Matthew, contributing author, NC
- State University, College of Design, Architecture and Landscape Architecture Departments team, June 2017.
- *Greenways as Resilient Global Landscape Solutions*, *Fifth Fabos Conference on Landscape and Greenway Planning*, Budapest Hungary, pp 71, July 2016

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Charles A. "Chuck" Flink is the Director of the NC State University Initiative for Community Growth and Development and also continues to operate his consulting practice as President of Greenways Incorporated, a national and international greenway and open space consulting firm based in Durham, North Carolina. Chuck is widely regarded as a national and international authority on greenway planning and design, having completed comprehensive greenway and open space plans for more than 250 communities within 37 States. He has provided consulting services to clients in Argentina, Belarus, Brazil, Canada, China, the Czech Republic, Japan, Venezuela, and St. Croix, USVI.

Chuck is the 2019 recipient of the Watauga Medal, the highest non-academic award bestowed by NC State University. He is the 2006 Outstanding Alumnus for the College of Design at NC State University. In 2003, Chuck was elected a Fellow in the American Society of Landscape Architects in recognition of his extraordinary work and achievement in landscape architecture. Flink is currently a member of the Design Leaders Council. He is a Lifetime Member of the Alumni Association, a Lifetime Member of the Friends of NCSU Libraries, a member of the Chancellor's Circle and a member of the R. Stanhope Pullen Society. He is the past Chair (2012-2018) of the NC State University Board of Visitors

Chuck has authored or co-authored three books: The Greenway Imperative: Connecting Communities and Landscapes for a Sustainable Future; Greenways. A Guide to Planning, Design and Development, and Trails for the Twenty First Century. Greenways and Trails have been translated into Chinese and are used as environmental textbooks at Peking University in Beijing and Shenzhen, China. Chuck is also a contributing author for the American Planning Association's Planning and Urban Design Standards and the American Society of Landscape Architect's Landscape Architectural Graphic Standards.

Mr. Flink teaches"The Landscape Imperative" seminar at NCSU and is teaching a newly-developed course "Real-Estate Development" in the Fall 2021 semester. The Landscape Imperative explores the complex interrelationships of population growth, resource stewardship and land development as questions, challenges and opportunities for landscape architects and designers. The course format consists of lectures, discussion, student presentations, and guest lectures. Students are expected to conduct research, author brief white papers on key subjects, discuss and debate findings, generate digital presentations, make oral presentations and work in a team. The seminar on Real Estate Development will examine traditional market factors, site development and funding/financing associated with land development practices.

Name: Dan Howe

Rank: Assistant Professor of the Practice of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	3 years	MLA, 1985
University of Virginia	3 years	BCP, 1977
Rensselaer Polytechnic Institute	1 year	1974

Teaching Experience: (College level)

Institution	Years Taught	Subjects	
NC State University JAAD Calf Evaluation	Demant Desember 2021		maga 10

North Carolina State University	8 years	City Planning and Design Seminar
Wake Technical Community College	2 years	Planning and the Environment

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Perry Street Studio, LLC	6 years	Principal
City of Raleigh	10 years	Assistant City Manager (retired)
City of Raleigh	2 years	Strategic Projects Manager
City of Raleigh Planning Department	2 years	Senior Planner
City of Raleigh	10 years	Development Projects Manager
City of Raleigh Planning Dept.	5 years	Urban Designer
Gulf Oil Real Estate Development Company	3 years	Land Planner

Professional Registration: Give profession and state/province(s).

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- College of Fellows American Society of Landscape Architects
- Certified Planner American Institute of Certified Planners
- Board of Directors Appalachian Trail Conservancy, Harpers Ferry WV
- Board of Directors (President) Hillsborough Street Community Services Corp.
- Board of Directors (Secretary) COR Museum, Raleigh, NC
- Member Bicycle / Pedestrian Advisory Commission, City of Raleigh
- Member DesignLife Board College of Design, NCSU
- Member Rocky Mountain Institute Electricity Innovation Lab
- Member Wake County Energy Advisory Commission

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Daniel Howe, FASLA, AICP is Assistant Professor of the Practice in the Landscape Architecture program at NC State University, where he offers a course entitled Community Design: Landscape Architecture, City Planning and the Public Realm, an overview of the interface of the professions of city planning and landscape architecture. He has extensive experience in city planning and municipal government, having served as

Assistant City Manager for the City of Raleigh among a variety of other planning-related roles, and currently leads Perry Street Studio, LLC, a planning, writing and public engagement consulting practice in Raleigh, NC, specializing in facilitating solutions for the physical design of public space. Dan's firm was part of a design team led by Michael Van Valkenburgh Associates that developed a master plan for Dorothea Dix Park, a 300-acre former mental hospital campus in central Raleigh. Dan led an effort to develop a Strategic Plan for the Appalachian Trail Conservancy in 2020.

Name: Travis Klondike

Rank: Assistant Research Professor at Coastal Dynamics Design Lab and North Carolina State University

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	2 years	MLA, 2017
University of Kentucky	5 years	BLA, 2015

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	3 years	Design Development and Construction Documentation Studio, 502 Site Planning Studio

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Stewart	9 months	Landscape Designer
Stewart	5 months	Landscape Architecture Intern
Design Workshop	7 months	Landscape Architecture Intern
Community and Economic Development Initiative, Lexington, KY	1 summer	Landscape Architect Intern

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk. **Select Research:**

• FloodWise: Connecting Water Quality and Flood Reduction for Farms and Communities Baldwin, M., Cubbage, F., Fox, A., Hovis, M., Klondike, T. (Collaborator), Lovejoy, M., et al. \$200,000 (\$71,723). North Carolina Department of Justice: Environmental Enhancement Grant. (2021)

- Beaufort GC Phase Two: Conservation Purpose and Public Benefit Study
- Baldwin, M., Fox, A., Klondike, T. (Principal Investigator), et al.
- **\$26,358.** Conservation Purpose, LLC. (2021)

• Institutionalizing the Graduate Certificate in Disaster Resilient Policy, Engineering and Design Fox, A., Harris, A., Klondike, T. (Co-Investigator), Smith, G., et.al.

\$198,056 (\$50,000). U.S. Department of Homeland Security: Coastal Resilience Center. (2021)

• Neuse River Basin: Evaluating Natural Infrastructure for Flood Abatement at the Watershed Scale Baldwin, M., BenDor, T., Cubbage, F., Doll, B., Fox, A., Klondike, T. (Collaborator), Kurki-Fox, J., et al. \$280,640 (\$25,000). North Carolina Policy Collaboratory. (2021)

- Pollocksville Floodprint: Strategies for Resilient and Usable Open Space
- Baldwin, M., Fox, A., Fox, R., Klondike, T. (Principal Investigator), Swink, R., et al.
- \$150,000. North Carolina Community Foundation. (2021)
- Princeville Floodprint Phase Two: Seeding Resilience through Restoration and Education Canfield, C., Fox, A., Klondike, T. (Co-Investigator), et.al.

\$403,200 (\$30,000). National Fish and Wildlife Foundation: Wells Fargo Resilient Communities. (2021)

• Lumberton Floodprint Phase Two: Meadow Branch Neighborhood and Scottish Packing Visioning National ASLA Honor Award: Analysis & Planning (2020)

• Boone, K., Doll, B., Fox, A., **Klondike, T. (Co-Investigator)**, Kurki-Fox, J., Queen, S., et al. **\$90,000.** North Carolina Community Foundation.

• This study conducted detailed analysis and design proposals for repurposing existing and expected buyout parcels along Meadow Branch, and the adaptive reuse of the Scottish Packing property in South Lumberton. Scope included hydraulic modeling, land planning, policy review, and architectural study that supports city-submitted grant applications and community engagement activities. (2020)

• Nick's Creek: Conservation Easement Programming Study Baldwin, M., Fox, A., Klondike, T. (Collaborator), et.al. \$33,768. Conservation Purpose, LLC. (2020)

• Princeville Floodprint: Resiliency Strategies for Greater Princeville

• Baldwin, M., Fox, A., Klondike, T. (Co-Investigator).

• **\$50,000.** Common Ground (Conservation Trust for North Carolina, The Conservation Fund, North Carolina Community Development Initiative). (2020)

Select Publications:

• (Ad)Just Recovery: Landscape, Climate and Adaptation in Eastern NC (in revision; chapter)

Boone, K., Fox, A., **Klondike, T. (Co-Author)** Climate Changed: Models and the Built World Massachusetts Institute of Technology (MIT Press) (2021)

• Pollocksville Charts Long Road to Recovery with Help of Coastal Dynamics Design Lab (article) Wetherington, T. New Bern Sun Journal (2021)

• In Search of Virtual Connectedness: A Comparative Essay in the Development of New Pedagogies for Remote Learning Environments (paper) Hargrove, R., Klondike, T. (Co-Author)

• Journal of Experiential Learning and Teaching in Higher Education: Volume 03, pp. 17-21.

Nova Southeastern University https://nsuworks.nova.edu/elthe/vol3/iss1/9 (2020)

• Coastal Dynamics Design Lab Continues Community Flood Work with Two New Grants (article)

Klocke, C. NC State University: College of Design (2020)

• Lumberton Mulls Flood Mitigation, Recovery Proposals (television; article) Fortin, M. WBTW News 13 (2020)

• City Council Members Received Update on Flooding-Mitigation Projec (article)

Bym, J. The Robesonian (2020)

• **Teamwork that Address Flooding Challenges** (interview; article) Hart, L. NC State University: Giving News (2020)

• Hurricane Florence: Building Resilience for the New Normal (interview; article) Norton, R., MacClune, K., Szonyi, M., Schneider, J., et al. Zurich Insurance and ISET International (2019)

• The Desk Crit: Assessing the Role of Teaching Styles on the Cognitive Development of Students (paper) Klondike, T. (Author)

• Landscape Research Record. Volume 06: Design Education & Pedagogy, pp. 36-49. Council of Educators in Landscape Architecture https://thecela.org/landscape-research-record-no-06/ (2017)

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Travis is an Assistant Research Professor in the NC State University Coastal Dynamics Design Lab and the Department of Landscape Architecture and Environmental Planning. His work blends hazard mitigation assistance and conservation planning by leveraging contemporary methods of geospatial analysis, community engagement, visual narration, and grant-writing as catalysts for public good. As Assistant Research Associate at the Coastal Dynamics Design Lab at NCSU, Travis serves as the Full-time project manager / project lead, and instructor of studio courses. Expectations include: managing the delivery of 3-6 funded projects per year, contributing to the development of 1-3 funded projects per year, presenting or publishing at least one peer-reviewed product per year, and contributing to departmental teaching, learning, and mentoring activities.

Name: Rodney Swink

Rank: Professor of the Practice of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	3 years	MLA, 1977
North Carolina State University	4 years	BA, 1973

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	25 years	Historic Preservation, Professional Practice

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
PlaceEconomics	6.5 years	Senior Associate for Planning

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		and Development
Heritage Strategies International	6.5 years	Senior Associate
Office of Rodney Swink	12.5 years	Principal
NC Department of Commerce	24 years	Director, NC Main Street
NC Division of Forest Resources	8 years	Urban Forestry and Small State Forest Program

Professional Registration: Give profession and state/province(s).

• North Carolina Landscape Architect #346

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- Landscape Architecture Accreditation Board (LAAB), past chair
- ASLA Constitution and Bylaws Committee
- Raleigh Planning Commission, Past Chair
- Raleigh Board of Adjustment, Chair
- Preservation NC, Past Chair
- JC Raulston Arboretum, Past Chair
- Marion Stedman Covington Foundation Board
- North Carolina Arboretum Board
- NCSU College of Design Leaders Council, Community Engagement Committee Chair

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• Shaping the Postwar Landscape, Edited by Birnbaum and Craver; authored chapter on Richard C. Bell

- "Treasure in the Walls: Reclaiming Value Through Material Reuse in San Antonio" PlaceEconomics contributing author and editor
- "Building on the Past for a Prosperous Future: The Impacts of Historic Preservation in Arkansas" PlaceEconomics contributing author and editor
- "Investing for Today, Preserving for Tomorrow" PlaceEconomics contributing author and editor
- "Forty Years of Main Street: Building Economies, Building Communities" PlaceEconomics contributing author and editor
- "Preservation Positive Los Angeles" PlaceEconomics contributing author and editor
- "Enhancing Paradise: The Impacts of HIstoric Preservation in Miami-Dade County" PlaceEconomics contributing author and editor
- "Miami Dade Incentives, Tools and Strategies" PlaceEconomics contributing author and editor
- "The New Nashville: A Study of the Impacts of Historic Preservation" PlaceEconomics contributing author and editor
- "Raleigh Historic Preservation Tool Kit" PlaceEconomics contributing author and editor
- "The Contributions and Impacts of Olmsted Parks" PlaceEconomics contributing author and editor
- "A Shared Table: A Study of the Impacts of Louisiana Main Street" PlaceEconomics contributing author and editor
- "The Importance of Memory and Place in Heritage Resilience," Blog. <u>http://www.usicomos.org/the-importance-of-memory-and-place-in-heritage-resilience/</u>
- "Ecosystem Services and Heritage Preservation", Blog. USICOMOS

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Through my teaching, professional and civic involvement, I have advocated for landscape architecture. Teaching has allowed me to work with those who will not only carry on the work but advance it in ways necessary to meet today's and the future's challenges. Besides exposing students to the wealth of practice opportunities available in landscape architecture, I stress the need for leadership within and across disciplines. Through my professional and civic activities, I have tried to model what leadership can be and how we, as landscape architects, are well-suited to take charge and guide our communities to better outcomes. Our involvement allows us to demonstrate our capacity, thus expanding the public's understanding of our profession.

Name: Emily McCoy

Rank: Associate Professor of Practice in Landscape Architecture and Environmental Planning; Principal, Design Workshop

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	3 years	MLA, 2008
Appalachian State University	3 years	BS Ecology, 2002
Florida State University	1 year	

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	7 years	Landscape Performance + Metrics, GIS Applications in Landscape Architecture and Environmental Planning, Design Practice Legacy as a Learning Endeavor (in Doctor of Design program)
Temple University MLA program	2 years	Public Lands Design Studio, Research Design Methods

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Design Workshop	2 years	Principal

Andropogon Associates	11 years	Principal, Director of Integrative Design Research
POD Design	7 years	Landscape Designer/Schematic Design, Design Development, Construction Documentation,
HSMM/Aecom	2 years	Landscape Designer

Professional Registration: Give profession and state/province(s).

LA: NC, SC, VA, PA, MD; USGBC SITES AP; FAA Remote sUAS Commercial Pilot; Ecological Society of America Certified Ecologist

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- Board of Directors, Landscape Architecture Foundation (Sept 2020-present)
- Member, American Society of Landscape Architects, 2008 to present
- Member, North Carolina State University Landscape Architectural Alumni Advisory Board, 2014 to present
- Member, Pennsylvania State University Stuckeman School Advisory Board
- Trustee, Awesome Raleigh Foundation (2018-present)
- Member, Landscape Architecture Foundation Education Committee, 2014 to present
- Member, University of Delaware Curriculum Advisor
- Member, International Society of Arboriculture
- Member, American Water Resources Association
- Member, Urban Land Institute
- Member, NC Green Building Council

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• 2021-present. Ecosystem and Social Services of a Campus Landscape- comparison of landscape typologies across campus. Pending publication.

- 2021 National Endowment for the Arts/ PI: Bell/ Tactile Wayfinding Tools for the Visually Impaired.
- 2021 APA Drones in Practice. PAS Report 597.*

• 2021 Coastal Resilience and Growth Management. Planetizen Coastal Resilience and Growth Management.

• 2020 McCoy, E. (2020). Planting Design: Connecting People and Place by Patrick Mooney. Landscape Journal: design, planning, and management of the land, 39(1), 99-100.*

• 2018 A Landscape Performance and Metrics Primer for Landscape Architects: measuring landscape performance on the ground. ASLA Landscape Architecture Technical Information Series.*

- 2017 US GSA Site Commissioning White Paper. Washington, DC: General Services Administration.
- 2016 Reference community: adapting native plants to North American green roofs. Journal of
- 2016 Green Building 11.4 (2016): 15-36.*
- 2016 Woodland Restoration: 30 Years Later. Arnoldia 73.3 (2016): 32-42.*

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Emily's technical expertise and experience on complex projects allow her to be a valuable asset for project teams who are collaborating together to create responsive, authentic, and inspiring places for people. Her professional practice and research interests are focused on projects which seek to blur the line between infrastructure and landscape to create immersive, equitable and just spaces for all that tell stories of place. Her joy and passion for working with teams and communities to create socially, economically, and environmentally high-performance landscapes are reflected in such award-winning work and research on the US Coast Guard Headquarters in Washington, DC; Shield Ranch in Austin, Texas; and Shoemaker Green, Philadelphia, PA.

Name: Ben Monette

Rank: Assistant Professor of Practice of Landscape Architecture and Environmental Planning

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	4 years	MLA
State University of New York College at Plattsburgh	4 years	BS, Accounting and Finance

Teaching Experience: (College level)

Institution	Years Taught	Subjects
NC State University	4 years	CDⅅ Studio, Site Design Studio, Landscape Architecture Immersion
Temple University	1.5 years	Public Lands Studio, Digital Design Graphics

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Mud	10 months	Founder, Principal
OLIN	7 years	Associate
Andropogon Associates	4 years	Senior Landscape Architect
Surface 678	3 years	Senior Landscape Architect
Greenways, Inc.	2 years	Landscape Architecture Intern

Professional Registration: PLA, NC

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- ASLA
- Awesome Raleigh-Durham, Trustee
- Sandy Hook Memorial Competition
- NC State Global Courtyard, Design Review Committee
- Philadelphia Community Design Collaborative, Project Designer
- ASLA Professional Awards, Award of Excellence in Urban Design, Dilworth Park (OLIN)
- Southeast Regional ASLA Recognition Award for Planning, The Thaden School (Andropogon)

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Ben (ASLA, PLA, LEED AP) is the founder of Mud Landscape Architecture, Planning, and Urban Design studio, and his career has focused primarily on high profile public projects of various scales where he has had the opportunity to work with many world-renowned planners, architects, and designers. He has led intense site scale urban design efforts as well as city-scale green infrastructure planning. He has had the good fortune to participate in many artist collaborations, the most meaningful of which have generated a unique and invigorating design perspective that informs his work.

In addition to his award-winning professional practice, Ben is an Assistant Professor of Practice in Landscape Architecture at NC State and has lectured at the University of North Carolina at Chapel Hill, the University of Pennsylvania, and Thomas Jefferson University. He has been inspired by the community outreach and extension while attending graduate school at NC State and he continues to seek opportunities to teach and volunteer.

Name: Jesse Turner

Rank: Assistant Professor of the Practice in Landscape Architecture and Environmental Planning, PLA

Education: (College and higher)

Institution		Years Attended	Degree/Date Granted
	North Carolina State University	4 years	MLA, 2014
	North Carolina State University	4 years	BLA, 2004

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	6.5 years	Design+Build Studio

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities	
Lift Environmental Design	2015-present Owner, Principal		
Jesse Turner Landscape Architecture	2010-present Owner		
Natural Learning Initiative	4 years	Design Project Coordinator	
Lappas & Havener	5 years	Landscape Architect	

Name: Madalyn Baldwin

Rank: Lecturer in in Landscape Architecture and Environmental Planning and Research Associate, Coastal Dynamics Design Lab

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	2 years	MLA, 2019
Warren Wilson College	3 years	BA Fine Arts, 2021
The School of the Arts Institute of Chicago	1 years	

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	1 years	Digital Media
North Carolina State University	2 years	Graduate Teaching Assistant: DD Studio, Environment and Culture Seminar

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities
Surface 678	7 months	Landscape Architecture Intern

Publications. List significant publications, projects and/or reports covering the last five years. Identify refereed publications with an asterisk.

• Hovis, M., C. Hollinger, F. Cubbage, T. Shear, B. Doll, J. Kurki-Fox, D. Line, A. Fox, M. Baldwin, T. Klondike, M. Lovejoy, B. Evans, J. West, and T. Porter. (Submitted for consideration) "Natural Infrastructure

Practices as Potential Flood Storage and Reduction for Farms and Rural Communities in the North Carolina Coastal Plain", in *Sustainability:* Special Issue "Evidence Based Solutions for an Agro-Ecological Transition".*

• Fox, A. and M. Baldwin. (2020) "North Carolina Coastal Planting Templates." *NCASLA Webinar* (CEU qualifying). North Carolina Chapter of the American Society of Landscape Architects.

Contributions. Briefly describe your involvement in advancing the knowledge or capability of the profession of landscape architecture in the last five years.

Madalyn is a Research Associate at the Coastal Dynamics Design Lab and a recent graduate of the NC State Master of Landscape Architecture program. Madalyn specializes in the assessment of large-scale landscape systems, including geospatial analytics, planning for complex environmental networks, and ecological integration of native and threatened plant communities. Her current research interests include working lands, rural landscapes and economies, and high-performing landscapes. As a student, Madalyn won the 2020 ASLA Honor Award in Analysis & Planning for her project Peat/Land: Strategies for Restoration, Design, and Planning of North Carolina Peatlands. She was also a Landscape Architecture Foundation Olmsted Scholar Program finalist.

Name: Austin Bowman

Rank: Lecturer in in Landscape Architecture and Environmental Planning, Urban Designer

Education: (College and higher)

Institution	Years Attended	Degree/Date Granted
North Carolina State University	2 years	MLA, 2019
North Carolina State University	4 years	BS in Environmental Science, 2017

Teaching Experience: (College level)

Institution	Years Taught	Subjects
North Carolina State University	1.5 years	Grading, Drainage, + Site Systems, AutoCAD Drafting Fundamentals Summer Course, Computational Design Methods in Landscape Architecture
North Carolina State University	2 years	Graduate Teaching Assistant: Intro Studio, Digital Design Media, Grading, Drainage, + Site Systems

Practice Experience: (Brief listing; however, if experience in practice is lengthy and you feel strongly about presenting such, please include resume in the Appendix.)

Firm or Agency	Number of Years	Responsibilities	
City of Raleigh Municipal Government	2018-present	Urban Designer	
Raleigh Urban Design Center	4 months	Urban Design Intern	
NC Department of Environmental Quality	9 months	Environmental Graphic Designer	
Andropogon Associates	8 months	LA and Integrative Research Intern	
City of Raleigh Municipal Government	4 months	Sustainability Intern	

Professional & Academic Activities. Offices held, exhibitions, competitions, committee memberships in professional societies or boards, etc., for last five years.

- ASLA
- NC State Sustainability Council (Co-Chair, Student Leadership Working Group) 2017-2018

FACILITIES INFORMATION

Building	Room #	Size (SF)	Max. Capacity Normal Max. Users	Type of Space (studio, office, storage, etc.)	Shared Use (S) Exclusive Use (E)
Brooks	115	353	4	Photography Lab	S
	119A	349	4	Laser Cutter	S
	119B	349	4	Laser Cutter	S
	125	575	20	Review	S
	130	625	6	Computers	S
	202	708	16	Computer Lab	S
	203C	605	18	Com. Lab/Teaching	S
	203D	604	18	Com. Lab/Teaching	S
	209	3,313	50	Library	S
	300	561	32	Classroom	S
	303	266	16	Classroom	S
	311	1,185	40	Review	S
	318	1084	56	Classroom	S
<u> </u>	322	903	30	Review	S

Kamhoefn er	G10	874	30	Review/Gallery	S
	G20	1,779	178	Classroom	S
	A200	4,448	76/80	Studio	E
	A202	368	20	Classroom/Review	E
	A204	100	1	Office	E
	A205	100	1	Office	E
	A206	100	1	Office	E
Leazar	220	7,067	40	Materials Lab/Shop	S
	310	822	45	Classroom/Review	S
	311	631	20	Review	S
	312	544	20	Classroom/Review	S
	316	482	25	Classroom/Review	S
	320	1,152	30	Review	S



Kamhoefner Hall – Second Floor



Kamhoefner Hall– First Floor





Kamhoefner Hall – Ground Floor



	Classroom
-	

Review/Gallery space

Brooks Hall – Second Floor



Brooks Hall – First Floor



Design + Build Studio
Research Space

Brooks Hall – Ground Floor




Leazar Hall – First Floor



Leazar Hall – Ground Floor

\boldsymbol{G}_{\bullet} student, faculty and alumni survey

In June 2021, a survey was undertaken targeting three distinct populations: current students, faculty members and alumni. The aim of the survey was to better understand perceptions of the curriculum, the program and the facilities. Survey instruments varied slightly among the three groups of respondents and the results are organized by respondent group below.

A. SURVEY RESULTS: CURRENT STUDENTS

Questions Related to "SKILLS" – Current Student Responses



Speaking effectively about ideas, projects, and plans	
No Opinion	3.70%
Not at All Satisfied	0
Slightly Satisfied	14.81%
Neutral	11.10%
Very Satisfied	48.15%
Extremely Satisfied	22.22%





Acquiring deep knowledge in the field of Landscape Architecture	
No Opinion	3.70%
Not at All Satisfied	0
Slightly Satisfied	11.11%
Neutral	22.22%
Very Satisfied	44.44%
Extremely Satisfied	18.52%

Strengths of the MLA Program: PROGRAM VISIBILITY/RECOGNITION

The CDDL and NLI have received a lot of recognition and visibility.

I chose this program because they care about the individuals, they would email me back promptly and cared about me before I was even a student. They made time for me before I had made a decision as if I had been here 3 years already.

Weaknesses of the MLA Program: PROGRAM VISIBILITY/RECOGNITION

Knowing about landscape architecture is great, but so is knowing about the other fields we interact with the most during a working day.

Reflection in ways the MLA program can be further improved: PROGRAM VISIBILITY/RECOGNITION

No comments



Strengths of the MLA Program: RESEARCH

Faculty research is impressive and provides great opportunities for students interested in pursuing research.

The strengths of the program, and my initial interest in attending it lie in the program's interdisciplinary focus and the broad network of practitioners and faculty that can contribute to the program. It feels like there is an expert on any topic you might deal with and so far the program has done a great job of weaving these fields together.

Faculty research

Research and its importance to professional practice is really gaining momentum within the program. I hope that continues and that there will be more opportunities for MLA student-practitioner teamed research projects

Weaknesses of the MLA Program: RESEARCH

No comments

Reflection in ways the MLA program can be further improved: RESEARCH

No comments





Mastering specialized techniques, computer programs, materials relevant to Landscape Architecture	
No Opinion	3.70%
Not at All Satisfied	7.41%
Slightly Satisfied	14.81%
Neutral	11.11%
Very Satisfied	29.63%
Extremely Satisfied	33.33%

Reflection in ways the MLA program can be further improved: TECHNOLOGY

- New, high-power machines in the computer lab.
- More emphasis on hand-rendered visuals and graphics at the beginning.



Working collaboratively with others within your field	
No Opinion	3.70%
Not at All Satisfied	3.70%
Slightly Satisfied	14.81%
Neutral	18.52%
Very Satisfied	22.22%
Extremely Satisfied	37.04%



Working collaboratively with interdisciplinary groups	
No Opinion	7.41%
Not at All Satisfied	14.81%
Slightly Satisfied	22.22%
Neutral	29.63%
Very Satisfied	18.52%
Extremely Satisfied	7.41%

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Strengths of the MLA Program: COMMUNITY ENGAGEMENT

I think it's really cool that the studio projects are based on real places and that the college has such strong ties to the surrounding community.

I like that research in the department is actively helping underserved communities.

The community engagement is fantastic. Projects are always based on a real site with real people and real data. The community is always so interesting in helping and being of assistance and excited to learn and be a part of NC State COD.

Weaknesses of the MLA Program: COMMUNITY ENGAGEMENT

Opportunities to participate in community engagement.

Reflection in ways the MLA program can be further improved: COMMUNITY ENGAGEMENT

• Use events to promote community engagement on a more human scale.



Understanding and valuing diverse people and cultures	
No Opinion	3.70%
Not at All Satisfied	11.11%
Slightly Satisfied	11.11%
Neutral	7.41%
Very Satisfied	44.44%
Extremely Satisfied	22.22%

Strengths of the MLA Program: DIVERSITY

There is more diversity of faculty in terms of age/race/gender/expertise than in many other institutions.

The diversity of backgrounds in track 3.

Weaknesses of the MLA Program: DIVERSITY

There is more diversity among faculty and staff than among students, which makes me wonder how funding opportunities could be leveraged for increased equity and inclusion.

I think some of the challenges of the program are student diversity, community engagement, and the student ASLA level organization.

We have a lot of Caucasian people in our program. We don't have a lot of Hispanic or African American people in our cohort. This means we are not learning about how people who grew up in a slightly different culture would approach their own designs.

The student ASLA organization seems disconnected from the overall program and given less importance even though it is a good networking and community outreach tool.

I also think that although my class is diverse in many ways, more cultural diversity would be a plus.

Not enough community amongst cohorts with few exceptions of certain students.

Areas to improve: student diversity

Reflection in ways the MLA program can be further improved: DIVERSITY

- Reach out to a diverse range of undergrads early on in their college careers to show people the possibilities of our field.
- Recognizing the diversity of students and their cultural backgrounds



Questions Related to "CURRICULAR OFFERINGS"- Current Student Responses

Extremely Satisfied 18.52% 22.22%

48.15%

Strengths of the MLA Program: CURRICULUM

The curriculum is very easy to follow.

I appreciate flexibility and customization of curriculum for each person's unique situation.

29.63%

The curriculum is designed to meet the needs and skill level required in the industry after graduation.

The curriculum seems very efficiently designed. I appreciate that courses support on another and we have opportunities to apply what we are learning in our current studio projects.

40.74%

7.41%

The strengths of the MLA program are that it introduces students to a broad range of concepts, ideas, theories, & the like.

3D printers and Laser

Very Satisfied

Cutters are nice tools to have access to.

School did well transitioning to online learning even though it was challenging for everyone.

School is relatively flexible with handling student's personal life problems that come up.

I also noticed that the curriculum is well rounded and organized that benefits the students outside of school and for future planning within the program (for electives, study abroad, additional workloads).

I am super excited and interested in the courses offered and proposed. I love that climate change, ecosystem services, and culture and diversity are topics on the forefront of much of the work that is being done in studios and classes.

As an undergrad alumni of the early 2000's I can see a night and day positive transformation of the program, its curriculum and direction. There has been a

tremendous improvement in the curriculum offered, its flow, and ties to professional practice, such as the design build studio. I see many attempts to engage with other programs/departments, which is so

valuable. The department's lecture series is outstanding! I am very impressed with my cohort of students. There is so much talent here.

Weaknesses of the MLA Program: CURRICULUM

The transition to online learning for Covid-19 was a rough one. SASLA and other relevant organizations were very slow to adapt and I feel like my cohort that spent most of their graduate program online due to COVID got the short end of the stick.

I would have loved to take the Materials and Grading classes before ever doing my first design. I get the sense there's a reason things are set up the way they are, but for me personally, I just feel paralyzed by questions I know would have to be asked before a design got built.

Some courses that are not useful or focused on MLA. Mostly they are heavier than main courses like studios, and it is waste of time. Like history.

Course load and breakdown of curriculum delivery is poor making the MLA program too demanding and hectic.

I think there are unique challenges concerning Covid. I wish our workspaces could be more spread out. Curriculum sometimes seems really broad and shallow as opposed to specific and deep.

I would prefer more in-depth knowledge about real world situations, such as buffers and setbacks and design requirements and dealing with architects and converting files and working with civil engineers and being able to read their plans.

Class space and availability

Some of the studio spaces are a little hectic with so many students trying to be in the same spaces at one time and they aren't set up like a typical classroom, they are much more open which can seem a little overwhelming at times but it's a balance.

The computers in the computer lab are terrible (slow and crash all of the time).

Lack of essential software training

Reflection in ways the MLA program can be further improved: CURRICULUM

- More time should be spent learning about digital media, workflow, and alternative methods of creating design documents.
- Job training, more career guidance with Katherine Fenner and real projects in the studio.
- Course load and breakdown of curriculum delivery can be improved
- Provide more situations for collaboration with civils and architects like in the real world.
- More studio space and opportunities for interdisciplinary classes.
- Offer FREE software workshops (CAD, PS, Revit, Rhino, GIS, SketchUp), outside of class time
- COVID has shown that there could be more virtual opportunities (certificate programs)
- I see a big attempt to become more interdisciplinary, but even more engagement on studios, coursework, and research that spans across departments and colleges would be wonderful.



Questions Related to "OPPORTUNITIES IN THE MLA PROGRAM"

Strengths of the MLA Program: PROFESSIONAL/PRACTITIONER ENGAGEMENT

Connections to local practitioners are strong.

Practitioners and alumni are helpful. Before applying to the program, I emailed and had video chats with alumni and practitioners who went to NC State and they were very helpful and encouraging.

Engagement with the professional community outside of the university.

Strengths include: connections to practitioners and alumni (not just within North Carolina)

Weaknesses of the MLA Program: PROFESSIONAL/PRACTITIONER ENGAGEMENT

The reviewers we get for studio sometimes don't understand our level of expertise and judge our designs by graphical standards or the level of detail not being high enough, and maybe I just take it too personally, but it hurts more than it helps.

Lack of connections to practitioners and alumni.

Connections to practitioners and alumni was disappointing. I feel like these were perks that were marketed to us as incoming students and COVID essentially erased that.

More department community building (rarely have department events or opportunities to casually network with peers outside of class)

Professional and peer mentorship has potential to be good but we don't always hear back from them.

<u>Reflection in ways the MLA program can be further improved: PROFESSIONAL/PRACTITIONER</u> <u>ENGAGEMENT</u>

• More opportunities to connect with alumni / mentors outside of NC. Increased support with connections to internships and work opportunities.

• Extend services to alumni that will be graduating as you start to offer those services again in person. It's not fair to those that had to complete their program online to not have access to practitioners, LARE support, and other face to face perks.

Strengths of the MLA Program: FACULTY EXPERTISE

I like that the faculty pushes every student to be a better designer, regardless of their current prowess. Faculty's interesting research and expertise.

We seem to have a very strong team of faculty with different

areas of expertise who all care about the well-being and learning of our students.

Madalyn Baldwins classes are the best experience I have ever had learning software.

All of our professors do a really good job making sure assignments don't overlap too much, which is extremely appreciated.

The faculty are well versed and experienced.

The faculty are well versed in the field. There are a few faculty who seem to have too much on their plates, but it is appreciated that faculty have practiced LA for years.

The faculty are all enthusiastic and knowledgeable and are committed to sharing this knowledge with the rest of the community.

Excellence of individual professors and teachers, such as Kofi Boone, Andy Fox, Travis Klondike, Madalyn Baldwin, Fernando Magallanes, and Austin Bowman.

Faculty is strong, especially younger faculty and professors of the practice who have background both in professional practice realm and research/teaching.

Strengths include: diversity of research and expertise areas offered by faculty,

The biggest strengths are the student-faculty relationship. I feel very comfortable reaching out to my professors and students in my classes with the addition of those who I have not interacted with already.

There is incredible strength in the department's exceptional faculty who all provide an outstanding level of expertise in their focus areas, but also care deeply about the success of their students.

Weaknesses of the MLA Program: FACULTY EXPERTISE

Faculty preoccupation with research sometimes results in sacrifices of instructor dedication to student learning.

I think the faculty could do a better job of relaying "big picture" information to students; I've had a hard time understanding what level of detail my designs need to be, whether I'm considering material and construction costs, whether it's okay to move so much soil...

A few faculty lack effective teaching skills.

Low attention given to students especially as program continues to expand and faculty take on other commitments outside their academic commitments to their students.

I have not a fan of the grading system in reference to students not knowing their current standing in the class throughout the semester. For instance, last semester in one of my classes my professor updated me on my grade 3 weeks before the semester ended. If I had known my standing at an earlier time I would have been able to understand better the professors expectations and where I needed to improve. Also, I understand that the virtual learning is hard on EVERYONE but there can be room for improvement in regards to understanding student-professor expectations.

Reflection in ways the MLA program can be further improved: FACULTY EXPERTISE

- Faculty should give more explicit expectations to the students.
- Collaborate with other colleges / disciplines within the school (or even schools across the country) for studios & projects.

Strengths of the MLA Program: COST OF EDUCATION

Amazing funding opportunities are available through GSSP.

The cost was cheaper than most.

Cost of the education paired with expertise of faculty are strengths of the program.

The cost of education is a deal. A couple years ago this program was ranked 3rd in the nation and it is half the cost of the other two programs I looked at.

Assistantships are very helpful.

Weaknesses of the MLA Program: COST OF EDUCATION

Cost of education seems a little high compared to other masters programs offered at NC State but I have never compared between other accredited programs for LA.

Not knowing early enough about scholarship opportunities for first year students, especially as someone from out of state. Most of the opportunities seem geared towards students after they've been there for a year. The information on the website when it comes to paying for the program feels sparse and generalized. Overall, it's not very helpful for first semester students.

Limited number of TA positions

More guidance on internships and jobs, down to nitty gritty details like salaries, negotiations, timing, portfolio expectations

No transparency about funding and how assistantships (TA/RA) are decided and dispersed, often going to younger students who have not taken courses yet that they are TA-ing for. Don't necessarily seem merit-based even though they are touted as such.

Cost of education

Reflection in ways the MLA program can be further improved: COST OF EDUCATION

• Limited TA positions and there is a large pool of equally qualified applicants, the positions should be spread out more equally among applicants.

Questions Related to "FACILITIES" – Current Student Responses



FACILITIES										
	Student work/desk space	Studio Space	Pin-Up Space	Computer Lab	Materials Lah	Lecture Space	Design Library	Informal Learning and Socializing Space	Faculty Office Space	Research Space
No Opinion	7.41%	7.41%	7.41%	18.52%	29.63%	14.81%	11.11%	18.52%	44.44%	48.15%
Not at All Satisfied	14.81%	14.81%	7.41%	11.11%	0%	3.70%	0%	7.41%	0%	3.70%
Slightly Satisfied	18.52%	22.22%	40.74%	11.11%	0.00%	11.11%	7.41%	29.63%	18.52%	18.52%
Neutral	18.52%	22.22%	14.81%	25.93%	22.22%	33.33%	18.52%	22.22%	22.22%	18.52%
Very Satisfied	29.63%	22.22%	18.52%	22.22%	25.93%	22.22%	33.33%	11.11%	11.11%	11.11%
Extremely Satisfied	11.11%	11.11%	11.11%	11.11%	22.22%	14.81%	29.63%	11.11%	3.70%	0.00%

Reflection in ways the MLA program can be further improved: FACILITIES

- Update facility.
- More space for pin-ups.
- New, high-power machines in the computer lab.

B. SURVEY RESULTS: ALUMNI and PRACTITIONERS

Questions Related to "SKILLS" – Alumni and Practitioner Responses



Speaking effectively about ideas, projects, and plans	
No Opinion	4%
Not at All Satisfied	0%
Slightly Satisfied	0%
Neutral	16%
Very Satisfied	36%
Extremely Satisfied	44%



Acquiring deep knowledge in the field of Landscape Architecture	
No Opinion	4%
Not at All Satisfied	0%
Slightly Satisfied	16%
Neutral	16%
Very Satisfied	36%
Extremely Satisfied	28%



Identifying important questions and problems in the field	
No Opinion	4%
Not at All Satisfied	0%
Slightly Satisfied	4%
Neutral	0%
Very Satisfied	40%
Extremely Satisfied	52%

Strengths of the MLA Program: PROGRAM VISIBILITY/RECOGNITION

Research

Weaknesses of the MLA Program: PROGRAM VISIBILITY/RECOGNITION

A lack of awareness among the national and international community of how good this program is and what the Triangle offers as a place to live and study. Such awareness would attract top candidates who likely seek out programs that are better known. That's a shame, given the strength of this program. The program is most visible in North Carolina which seems appropriate given its Land Grant history, but it seems to be seen as a regional school and not among the top programs of Landscape Architecture. Our visibility has risen significantly in recent years but still flying under the radar, but the right trajectory underway.

Reflection in ways the MLA program can be further improved: PROGRAM VISIBILITY/RECOGNITION



Critically analyzing, researching	
No Opinion	4%
Not at All Satisfied	4%
Slightly Satisfied	0%
Neutral	8%
Very Satisfied	40%
Extremely Satisfied	44%

Strengths of the MLA Program: RESEARCH

Use of location and region as a learning laboratory.

Cutting edge research, Coastal Dynamic Design Lab and Natural Learning Initiative and collaboration with other design and affiliated fields coursework.

Balance of research and practice.

No comments

From the standpoint of research the MLA program was quite remarkable as well. The professors within NC State practice what they preach when it comes to design through research and analysis. In particular the studio classes held all the students accountable for doing their due diligence in research.

Strengths include focusing on problems facing our society today such as social equity and natural hazards/climate change.

Weaknesses of the MLA Program: RESEARCH

Research and its importance to professional practice is really gaining momentum within the program. I hope that continues and that there will be more opportunities for MLA student-practitioner teamed research projects.

\$ for research

Reflection in ways the MLA program can be further improved: RESEARCH

- More \$ for scholarships, funded research, funded studios (underserved communities)
- Teach code research and methods for advocacy at a systems level design a political environment





Mastering specialized techniques, computer programs, materials relevant to Landscape Architecture	
No Opinion	12%
Not at All Satisfied	12%
Slightly Satisfied	0%
Neutral	20%
Very Satisfied	28%
Extremely Satisfied	28%

Reflection in ways the MLA program can be further improved: TECHNOLOGY

- Continue teaching cutting edge software: Revit and ArcGIS Pro.
- Require a digital course every semester.



Working collaboratively with others within your field	
No Opinion	4%
Not at All Satisfied	4%
Slightly Satisfied	0%
Neutral	4%
Very Satisfied	36%
Extremely Satisfied	52%



Strengths of the MLA Program: COMMUNITY ENGAGEMENT

Community engagement in Durham is the area I know from firsthand experience. I worked with Kofi and students in Black Wall Street Garden (BWSG); and Kofi, Celen, and two PhD students (Yanhua Lu and DJ Yi) to assist the Northgate Mall Neighborhood Council in developing alternative plans for the Northgate Mall site. For BWSG the students conducted good community events, did interesting fieldwork including timelapse recording of activity from a rooftop, and produced an excellent final report. The Northgate project was groundbreaking in terms of developing virtual participatory techniques during the pandemic and executing a design charrette with the Council. This work was presented at two academic conferences in spring 2021 (CELA and EDRA). The commitment on the part of the students and faculty to the Northgate project has been beyond the usual call of duty. We have continued to support the Council in various ways long past our original assignment, all of this done on a volunteer basis.

I know best its community engagement and connections to practitioners. These are off the scale great compared to other schools I know.

Many opportunities for meaningful community engagement locally and regionally;

I love the new focus on Environmental Planning and see that as an incredible opportunity for us to carve out more space for LAR's in the professional world and bring design thinking to more communities and projects in NC and beyond. I say this knowing that my personal preference is to do the fun and innovative design work of LAR, but also knowing we have to be better at creating the opportunities to do that work in the first place....

Weaknesses of the MLA Program: COMMUNITY ENGAGEMENT

Durham has a big need right now for faculty-student teams to help us think thru what equitable development means spatially. While it certainly isn't NCSU's responsibility to do this, I wish there were some way to have an ongoing engagement like the one we have had in the Northgate area. There are several historically black neighborhoods that are really under gentrification siege.

The program could integrate community engagement in at least one of the mandatory studios so that all students could benefit from the learning experience.

Studios in the community which allow multiple engagement opportunities. The University used to be the center of life in Raleigh. We've grown so much that that is no longer the case. There are invisible "walls". That means that outreach and all the associated skills are important to one's ability to work effectively.

I think there are some missed opportunities to bring student work into real world projects. I am biased, but there are so many State Park and State Trail projects that could really benefit from student work as well as provide a platform for them to get real design/planning/building experience on low cost/low-risk projects that directly benefit the public. Overall, we are a State of NC Land Grant Institution but we are not particularly well integrated with the State of NC Parks and Rec. system. This speaks to a possible need to

expand our vision for the different paths LAR's can take to an impactful and meaningful career. Not everyone can, or should, work for a typical design firm. We are too skilled to limit ourselves in that way.

Reflection in ways the MLA program can be further improved: COMMUNITY ENGAGEMENT

• More community engagement, more distinctive identity needed (like coastal initiatives + sustainability)



Understanding and valuing diverse people and cultures	
No Opinion	8%
Not at All Satisfied	0%
Slightly Satisfied	0%
Neutral	8%
Very Satisfied	24%
Extremely Satisfied	60%

Strengths of the MLA Program: DIVERSITY

The MLA program offers a solid foundation of the knowledge of landscape architecture to a diverse group of students facilitated by expert faculty.

Diverse faculty backgrounds and interests. Good personal support of students.

Weaknesses of the MLA Program: DIVERSITY

Diversity of the students seems to be a challenge.

Student diversity

Student diversity (although seems to be trending in the right direction).

Reflection in ways the MLA program can be further improved: DIVERSITY

• Funds needed to reach out to under-represented populations to interest them in landscape architecture



Questions Related to "CURRICULAR OFFERINGS" – Alumni and Practitioner Responses

Curricular Offerings							
	Studios	Seminars	Electives				
No Opinion	8%	4%	8%				
Not at All Satisfied	4%	0%	0%				
Slightly Satisfied	4%	4%	0%				
Neutral	4%	20%	12%				
Very Satisfied	36%	24%	56%				
Extremely Satisfied	44%	48%	24%				

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Strengths of the MLA Program: CURRICULUM

PhD program, community engagement and Design Build studio.

The Design Build studio was (and is) amazing, and critical to my success in the program and in finding a job post-graduation.

I would consider the interdisciplinary nature of the advanced studios as one of the biggest strengths of the program. The studios prepare the students to collaborate and learn from the allied design and technical disciplines. The curriculum offers a sound balance between design, research, and technical education to meet the needs of emerging professionals.

Design + Build studio. Ability to pursue interests within the curriculum.

General focus on practicality and preparing students to enter workforce.

I found the MLA program at NC State to be quite rewarding in many different ways. I think when it comes to technical skills such as learning software devices, the program was quite strong. The program held you accountable for constantly using and working on your production skills via different platforms (Adobe Suites, Cad, Sketchup, etc...).

Curriculum is very close to what is happening in the real world.

Learning to use the design process for problem solving -thinking about landscape on a systems scale.

I see very rounded graduates, grounded in their design approaches and computer skills. Educated in the profession and able to understand the program and site conditions of any given project. They know how to ask appropriate questions and able to take instruction well.

Good tools/resources for developing hard design skills.

Faculty expertise, design/build class, working across other disciplines, engaging with local, national and worldwide professionals in the industry.

I am super excited and interested in the courses offered and proposed. I love that climate change, ecosystem services, and culture and diversity are topics on the forefront of much of the work that is being done in studios and classes.

As an undergrad alumni of the early 2000's I can see a night and day positive transformation of the program, its curriculum and direction. There has been a tremendous improvement in the curriculum offered, its flow, and ties to professional practice, such as the design build studio. I see many attempts to engage with other programs/departments, which is so valuable.

Opportunity to connect with other disciplines at NC State.

I was also guite profoundly impacted by my experience in a joint architecture/landscape architecture studio; both groups grew and learned more than in any of my other studios. This was also true of Design Week 2018 in which engineering students also joined us. Although that kind of collaboration is only a piece of what students need, I believe it is critical in preparing us for the real world of professional design and expanding our capacity to be leaders.

The design build and materials classes are a strength- none of my current coworkers had a design build class.

NCSU has a great LAR program. Strengths of the program include: faculty expertise, community engagement, hands on learning (Design Build), access to resources (Design Library), collaboration (both peer to peer and between students and practitioners), dynamic and diverse speakers.

My experience involved a lot of work collaborating with the students in architecture. I think this is very important in the real world. Need to be able to talk and communicate with other designers.

Also think that hands on experience that the design build studio allows students. This is critical in understanding HOW things get built, assembled, and laid out.

My experience involved a lot of work collaborating with the students in architecture. I think this is very important in the real world. Need to be able to talk and communicate with other designers.

Also think that hands on experience that the design build studio allows students. This is critical in understanding HOW things get built, assembled, and laid out.

Weaknesses of the MLA Program: CURRICULUM

Speaking from 1986 - there was an undergraduate program then and I was sorry that wasn't sustainable. Design competitions and academic award distribution processes could be more transparent. Healthy competitions and rewards motivate students to perform better in their classes.

I think it's already been improved, but not much focus on landscape materials, detailing, or urban design. Not too many research opportunities or support.

I think the program reflects a larger identity issue that the profession is struggling with: we want to be humanitarians and wield the power of design for the larger good. However, in history and practice, we are a service profession bound by our clients. I bet 90% of LAs are primarily doing work that is not representative of what we spend our time and attention on in the program. University is an important place to dream big and show the next generation what the profession could be. But, first everyone need to be crystal clear on what the profession is and has been. I have discussed this with many graduates and most feel the same: that there is almost a bait-and-switch feeling once we got into the professional world. I think the program needs to do a better job of preparing students for the reality of the current profession while continuing to illustrate the big vision for how we can elevate. Without the foundation, it is too easy for students to get bitter and down on the profession and the program.

Track II students do not have enough opportunities to choose electives if they are planning to finish all the required classes in 2 years.

The practice is very different from what I learned. That said, I feel prepared to challenge the status quo, in order to do the things I was trained to do, there is somewhat of a political stance/advocacy. Code is terribly limiting. Also, code research, phew, there was a steep learning curve there. The program would benefit its students by going deeper into that.

Overemphasis on conceptual thinking and development with an utter lack of detailed instruction on graphic implementation. Development on hard graphic design skills are behind industry trends and dependent upon teaching assistants' knowledge, not faculty knowledge.

Space constraints -especially pin up and lecture spaces.

Program is not designed for independent and self-directed students. Does not allow for self-instruction in either scheduling or developing a plan of work consistent with a student's knowledge of oneself. In short, program is a degree mill. Program has not accounted for current knowledge of how post-graduate scheduling and workload impacts mental health.

I have also heard from students that they get inadequate orientation or rehearsal for professional positions.

The ability to provide high quality working practitioners for the built environment.

Needs more focus on computer programs, more electives, more computers- I remember having to fight over computer space/time.

Weaknesses include: studio space.

It would be great to have interaction or some projects with engineers. I also work heavily around the table with civil's and transportation engineers. Engineers think differently so its important to be able to communicate design intent from an LA's mind rather than the solution first approach of an engineer's brain.

I don't believe the program prepares students for the real world challenges and reality of being a landscape designer / architect - Particularly in means of some students are not designers and it's tough to force someone to design, who doesn't have the innate ability. I'd also suggest more hand drawing and computer aided design courses. Even if you're a horrible designer, you can work in the field of landscape architecture if you know CAD or RHINO.

Reflection in ways the MLA program can be further improved: CURRICULUM

- A greater emphasis on plant material.
- More rigor in foundational elements of the practice: LARE (project admin, grading, plant design, materials)
- Allow customizable curriculum for non-traditional, older students. Slow down pace of studios. Add BIM
- Add more plants/planting design/sketching/hand drawing. Incorporate into regular curriculum.
- More virtual opportunities re: graduate certificate programs for practicing professionals.
- Include more local practitioners in the curriculum
- The curriculum needs an overhaul (evaluate success of both class curricula and teacher efficacy)
- Curriculum needs more freedom/electives to choose classes in other departments and more field trips
- Increase professional practice influence on students early on (Swinks professional practice class earlier)



OPPORTUNITIES IN THE MLA PROGRAM

<u>y e l</u>	Professional/Practitioner Engagement	Involvement in Cutting Edge Research Activities with Faculty/Labs/Initiatives	The Cost of Education	
No Opinion	8%	16%	28%	
Not at All Satisfied	4%	4%	8%	
Slightly Satisfied	8%	8%	0%	
Neutral	16%	16%	28%	
Very Satisfied	28%	40%	12%	
Extremely Satisfied	36%	16%	24%	

Strengths of the MLA Program: PROFESSIONAL/PRACTITIONER ENGAGEMENT

Connections to the profession - we live in a great area and the professional community is willing to be engaged with students, the program Outreach to communities is well done either through studio projects or special work.

Strong involvement from local professional community.

Engaged alumni and mentorship programs.

Program encourages engaging with practitioners from a variety of fields of study.

When I was a student, I really appreciated the connection with the faculty as well as the connections made with outside practitioners.

I also appreciate the guest lectures, review sessions, and frequent meetings with professional practitioners a lot.

Connection and exposure to practitioners.

The connection the department had to the professional world was valuable and in a way the only real window we had into what the professional was actually like.

The department's lecture series is outstanding! I am very impressed with my cohort of students. There is so much talent here.

Including the community in lecture series that features outstanding leaders from around the world.

Opportunity to connect with local practitioners.

The guest lectures were great.

Excellent location with access to many professional firms and individuals; engaged alumni and professional community;

Excellent lecture series bringing in well-known LAs and others.

Weaknesses of the MLA Program: PROFESSIONAL/PRACTITIONER ENGAGEMENT

Opportunities to engage with the LAR community outside of class.

Restart the Mentor program after Covid. Student diversity is good but be careful of too many foreign students that will not be part of the USA workforce in the future. The profession and number of students in the profession took a hit in 2008 - 2015 and we are paying for that now with fewer available candidates to hire now.

<u>Reflection in ways the MLA program can be further improved: PROFESSIONAL/PRACTITIONER</u> <u>ENGAGEMENT</u>

- Improve social platforms for students, alumni, faculty and professional mentors to communicate
- Keep up online lecture series with professionals globally.
- Get off campus more to see NC.
- Push students to take internship.

Strengths of the MLA Program: FACULTY EXPERTISE

Faculty - both range of interests, expertise, and teaching skills.

Excellent faculty that works well as a team.

Strength of faculty and studio/student engagement.

Very personable and expert faculty.

I appreciate that the faculty represent innovative and value driven trajectories: coastal resiliency,

environmental justice, sustainable design, nature-based play and education. These 'elevated' forms of the professional practice show students what is possible within the realm of LA.

NCSU has good faculty that are focused on the students and their education, not their own personal research.

There is incredible strength in the department's exceptional faculty who all provide an outstanding level of expertise in their focus areas, but also care deeply about the success of their students.

Connecting student and faculty work with community design initiatives, environmental justice and inclusionary planning.

The strengths of the MLA program at NC State are largely built on a foundation of high quality teaching faculty. That faculty has really led to cutting edge research and engagement opportunities for students in the classroom and as research or teaching assistants.

Excellent faculty with broad backgrounds and interests;

The faculty each have their own focus and are able to share their passion with the students in a positive learning environment.

There are particular professors within the program that genuinely care about their students and the success of their students.

Weaknesses of the MLA Program: FACULTY EXPERTISE

Faculty does a good job of paying lip-service to the importance of mental health, but program lacks actionable steps toward improving overall wellness within the university framework. ie: You need to do more than simply state that recreational facilities are available and suggest people take up yoga.

Reflection in ways the MLA program can be further improved: FACULTY EXPERTISE

- Faculty/mentor advisors (similar to professional mentor program)
- Set a time to debrief between professor and each students after the semester is over
- Best professors I had were actual practicing professionals in private/public sectors. Keep things simple.
- We need to become more interdisciplinary that spans across departments, colleges, universities.

Strengths of the MLA Program: COST OF EDUCATION

The program is still affordable

Cost of education and the Graduate Student Support Plan.

GSSP for TA/RA saves a large amount of money.

Weaknesses of the MLA Program: COST OF EDUCATION

A primary weakness is limited financial support for students and faculty - scholarships, travel, special needs.

COST of education.

Limited scholarship opportunities limit requitement of some students.

Reflection in ways the MLA program can be further improved: COST OF EDUCATION

• More money for scholarships.

Questions Related to "FACILITIES" – Alumni and Practitioner Responses



FACILITIES										
	Student work/desk space -	Studio Space -	Pin-Up Space -	Computer Lab -	Materials Lab -	Lecture Space -	Design Library -	Informal Learning and Socializing Space -	Faculty Office Space -	Research Space -
No Opinion	20%	6 12.50%	12%	24%	28%	8%	12%	12%	52%	48%
Not at All Satisfied	8%	6 8%	4%	0%	0%	0%	0%	8%	4%	4%
Slightly Satisfied	4%	4.17%	12%	8%	8%	8%	4%	8%	8%	12%
Neutral	4%	8.33%	16%	12%	0%	20%	8%	40%	32%	20%
Very Satisfied	40%	45.83%	40%	36%	32%	44%	32%	12%	0%	8%
Extremely Satisfied	24%	6 20.83%	16%	20%	32%	20%	44%	20%	4%	8%

Reflection in ways the MLA program can be further improved: FACILITIES

- Invest in a learning environment: update COD studio space. ٠
- Acceptable facilities but could have more studio space, faculty office space, pin-up room and social • space.
- Outdoor/socialization space (for a LAR program the outside spaces sure do lack appeal). •

C. SURVEY RESULTS: FACULTY

Questions Related to "FACILITIES" – Faculty Responses



NC State University LAAB Self-Evaluation Report, December 2021

1% 29%

29% 14%

14%

0%

2% 14%

14%

29% 14%

Reflection in ways the MLA program can be further improved: FACILITIES

- We need more room in the studios if our program is going to continue to grow.
- Not enough pinup space.
- Explore moving to Lampe Dr. building. Our spaces need an upgrade.
- The space for faculty (offices), student work spaces, and studios are extremely outdated and not supportive of faculty's research efforts.
- There is no research space for faculty. The spaces are allocated in the College inequitably and very poorly managed.

Strengths of the MLA Program: PROGRAM VISIBILITY/RECOGNITION

Our MLA program is ranked top 20 in Design Intelligence.

Program visibility/recognition: in addition to the research comment above, the program has a number of faculty who play significant roles in national organizations (ASLA), LAF, etc.) and have been recognized as outstanding educators.

Not sure what we are known for these days as a department.

Weaknesses of the MLA Program: PROGRAM VISIBILITY/RECOGNITION

Program recognition.

The program lacks a global focus (it is very NC specific). International students are not well immersed into the program in a way that they will be engaged and recognized with their progress/achievements.

Reflection in ways the MLA program can be further improved: PROGRAM VISIBILITY/RECOGNITION

• The program can benefit from focusing on urban design with more global focus

Strengths of the MLA Program: RESEARCH

Research: the program currently consists of many highly visible and accomplished scholars across a variety of specialized research areas.

Culture of research and scholarly inquiry.

Engaged teaching and scholarship.

Weaknesses of the MLA Program: RESEARCH

Widespread research among faculty.

The stated goal of increased research activity is in direct conflict with college/departmental teaching loads. One potential model is that different categories of faculty lines could be created to improve balance (i.e., the faculty most interested in teaching could be at 100% teaching (as evaluated by SFR), while those interested in research could start at reduced loads). Administrative positions are balanced in this way, why not others?

Reliance on supporting academic programs via course buy-outs is a flawed financial model. This is a sustainability issue. We are fortunate to have many highly productive faculty at this moment, but what happens if people leave or chose to step back from chasing funded work?

Research activities (in terms of generation of new knowledge and working with PhD students) is very limited in the department but a few faculty have been very successful in establishing key partnerships and securing funding to support their research efforts (as well as their PhD students).

The department provides more emphasis on two initiatives but not much support on individual faculty who has also been successful in getting grants and publishing in peer reviewed journals.

Reflection in ways the MLA program can be further improved: RESEARCH

- Mentor our students to present at conferences, co-author papers, contribute to research
- Improve connectivity (research, teaching and engagement) with departments outside of the COD
- Focus on climate change and biodiversity depletion, front and center
- Calibrate workload (re: other forms of productivity-research and service)

Strengths of the MLA Program: COMMUNITY ENGAGEMENT

There are several community engagement opportunities in the advanced studios (design+build, coastal dynamics, superstudio, and urban design).

Community engagement: I have not experienced other programs that deliver community-engaged programs at the level of ours. Many programs may have one outstanding faculty member in this realm, but we have many (individuals and initiatives)

Community engagement opportunities.

There is strong community engagement focus that links curriculum and faculty's engagement efforts.

Weaknesses of the MLA Program: COMMUNITY ENGAGEMENT

No comment

Reflection in ways the MLA program can be further improved: COMMUNITY ENGAGEMENT

• No comment

Strengths of the MLA Program: DIVERSITY

Diversity and motivation of students.

Weaknesses of the MLA Program: DIVERSITY

We need to increase student diversity. We are losing many of our prospective students to places like Harvard GSD, which can fully fund many of these diverse students.

Process for student recruitment.

Student diversity is a critical, ongoing challenge. As the Land Grant flagship of the state, our program should more accurately reflect the state. Our graduate-only status is one of our greatest obstacles to diversity. The lack of a robust undergraduate "feeder" program eliminates our ability to recruit directly from high schools. This puts increased pressure on improving diversity through increased offerings of scholarships, fellowships and assistantships. We lack dollars and scholarships to regularly compete for top-tier students. While our program offers some opportunities, they are not competitive with peer programs.

Lack of diversity.

Reflection in ways the MLA program can be further improved: DIVERSITY

 NC ASLA needs to take an active role to promote program with underrepresented groups and rural areas

Strengths of the MLA Program: CURRICULUM

Strengths in the curriculum include a strong alignment of classes during the first 3 semesters of our program and more flexibility/options in the last 3 semesters: elective opportunities, advanced studios, and certificate programs.

Curriculum: integration of the curriculum throughout the program.

Breadth of curriculum.

Rigorous and diverse curriculum. Preparation for practice.

Engaged students.

Interdisciplinary experiences. Academic relationships.

Culture of making and building.

Curriculum and faculty are aligned in their commitment to 1) community engagement; 2) practical skills for pragmatic success; 3) strong faculty entrepreneurship vis a vis research programs (climate change; coastal dynamics; natural learning initiative; etc.

The students graduate with technical skillset which makes them very competitive in the job market.

Weaknesses of the MLA Program: CURRICULUM

Our students are requesting more interdisciplinary studios. We need to figure out ways to create interdisciplinary studios with Architecture, Art + Design, Industrial Design, Graphic Design, Civil Engineering, and Planning. Design Week and Design Sprint allow for this opportunity, but it is incredibly time-consuming for faculty. Students also feel burned out from the experience but contributed to very strong award submittals to ASLA, SE ASLA, and NC ASLA.

The curriculum needs to include GIS, Rhino, and Revit in the first year.

Improved space to adjust for program growth. The KAM 200 space, inclusive of the crit room, is not functional when multiple studios are running concurrently. Too tight on "all studio" days (Wed) and very noisy when faculty have to speak over one other to delivery content or battle over wall and/or informal crit space.

Lack of BLA

Not enough operating funds.

Curriculum generally weak in history/theory--while students are exposed in one or two courses, content/value is not typically reinforced/applied elsewhere.

Reflection in ways the MLA program can be further improved: CURRICULUM

- Start BLA program
- Offer a landscape ecology course and improve plants and planting design course
- Conduct a curriculum planning exercise: coordinate core content across classes vertically (each semester) and horizontally (by content domain) so that course content both technical and theoretical can be applied in design studio.

Strengths of the MLA Program: PROFESSIONAL/PRACTITIONER ENGAGEMENT

We have a very strong connection with local practitioners and alumni. Local practitioners (mentors) want to hire our students (mentees).

Connections to practitioners and alumni: strong base of alumni and practitioners (often one in the same) that contribute to mentorship and teaching activities.

Value practitioner relationships.

Weaknesses of the MLA Program: PROFESSIONAL/PRACTITIONER ENGAGEMENT

No comment.

<u>Reflection in ways the MLA program can be further improved: PROFESSIONAL/PRACTITIONER</u> <u>ENGAGEMENT</u>

• No comment.

Strengths of the MLA Program: FACULTY EXPERTISE

The faculty have diverse backgrounds and expertise in the design profession within the public and private sector.

Experiential learning opportunities, quality of faculty, pockets of research excellence, pockets of external partnerships, commitment to teaching how design aligns with equity, study and engagement tied to natural hazards, disasters and climate change adaptation.

Diverse and accomplished faculty.

Faculty are hardworking, collegial, and committed to success of the unit.

There is diverse faculty expertise and backgrounds.

Weaknesses of the MLA Program: FACULTY EXPERTISE

Professors of Professional Practice need mentoring and additional financial support.

Low faculty salaries.

High teaching loads.

Faculty are overworked--College workload policy stipulates 18 Credits per year or 9 credits per semester (three courses or combination of studio and additional course);

The salary for faculty is not competitive and VERY discouraging. The teaching workload for faculty is not customized to recognize the diverse backgrounds and expertise in research and engagement work.

Reflection in ways the MLA program can be further improved: FACULTY EXPERTISE

- Increasing scholarships through departmental and college advancement activities funds prioritized
- We are top heavy program that would benefit from 1-2 early career colleagues. Age/rank diversity of our faculty.
- Raise faculty salaries and reduce teaching loads

Strengths of the MLA Program: COST OF EDUCATION

Cost of education: our program is an incredible value as compared to peer institutions (both public and private)

This program is a good 'real world' value for its students;

Weaknesses of the MLA Program: COST OF EDUCATION

Funding for students.

Increasing student financial support to gain more of a competitive edge.

Lack of student support funding makes recruitment/retention more difficult.

Reflection in ways the MLA program can be further improved: COST OF EDUCATION

- Increase funding opportunities for our students through funded research and scholarships
- Increase meaningful student support