NC STATE Design

Department of Landscape Architecture
and Environmental Planning

Handbook for the Master of Landscape Architecture Program

First Professional Accredited Graduate Degree Program

Fall 2020

Contents

"The New Landscape Declaration"
Landscape Architecture Foundation

"On June 10-11, 2016, over 700 landscape architects with a shared concern for the future were assembled by the Landscape Architecture Foundation (LAF) at the University of Pennsylvania in Philadelphia. Inspired by LAF's 1966 [Declaration of Concern](#) we crafted a new vision for landscape architecture for the 21st century."

This is our call to action!"

"Across borders and beyond walls, from city centers to the last wilderness, humanity's common ground is the landscape itself. Food, water, oxygen – everything that sustains us comes from and returns to the landscape. What we do to our landscapes we ultimately do to ourselves. The profession charged with designing this common ground is landscape architecture.

After centuries of mistakenly believing we could exploit nature without consequence, we have now entered an age of extreme climate change marked by rising seas, resource depletion, desertification and unprecedented rates of species extinction. Set against the global phenomena of accelerating consumption, urbanization and inequity, these influences disproportionately affect the poor and will impact everyone, everywhere.

Simultaneously, there is profound hope for the future. As we begin to understand the true complexity and holistic nature of the earth system and as we begin to appreciate humanity's role as integral to its stability and productivity, we can build a new identity for society as a constructive part of nature.

The urgent challenge before us is to redesign our communities in the context of their bioregional landscapes enabling them to adapt to climate change and mitigate its root causes. As designers versed in both environmental and cultural systems, landscape architects are uniquely positioned to bring related professions together into new alliances to address complex social and ecological problems. Landscape architects bring different and often competing interests together so as to give artistic physical form and integrated function to the ideals of equity, sustainability, resiliency and democracy.

As landscape architects, we vow to create places that serve the higher purpose of social and ecological justice for all peoples and all species. We vow to create places that nourish our deepest needs for communion with the natural world and with one another. We vow to serve the health and well-being of all communities.

To fulfill these promises, we will work to strengthen and diversify our global capacity as a profession. We will work to cultivate a bold culture of inclusive leadership, advocacy and activism in our ranks. We will work to raise awareness of landscape architecture's vital contribution. We will work to support research and champion new practices that result in design innovation and policy transformation.

We pledge our services. We seek commitment and action from those who share our concern."

Sign the Pledge Here!
https://lafoundation.org/news-events/2016-summit/new-landscape-declaration/

Welcome to the Department of Landscape Architecture and Environmental Planning at NC State University!

I would like to extend a warm welcome to all first year MLA students. We are so glad you are joining our program! And welcome back to returning second and third year students. I hope you had a rich and productive summer.

The 2019-20 academic year was incredibly busy and successful for our students and faculty. We look forward to another year of creativity, collaboration, and "design and landscape thinking."

I am so happy to be Head of the Department of Landscape Architecture and Environmental Planning at NC State! Our faculty are accomplished and renowned for their teaching, research and community engagement. Their professional diversity is so rich, and I know they will provide you with a wonderful education in Landscape Architecture and Environmental Planning. There is a very strong practice community in the region as well – and several prominent practitioners teach courses in the Department. Our home in the College of Design offers many opportunities for interdisciplinary learning experiences along with other great Departments on campus. Lastly, I am most impressed by the dedicated, energetic and high-quality students in the Department!

It is a great time to become a landscape architect! Never has our role in society been so relevant as it is now with our profession uniquely positioned to address environmental and social challenges. Your education at NC State will provide you invaluable skills and experience as a designer, collaborator and creative thinker!

The *MLA Handbook* contains information about the MLA program mission, university and college contexts, advising curriculum and courses, and college and university resources. The intent of this Handbook is to provide our students and others interested in our department useful information about the program. Like the landscape, our program is a dynamic entity that adjusts to changes and opportunities as they arise. Please let us know if you need additional information, have questions or unique circumstances, or to report any errors in this document.

I look forward to our interactions during your education here in our program and beyond in your careers in Landscape Architecture. Please remember, my door is always open and I'm happy to meet with you anytime - just email to set up a meeting time!

Sincerely,

Meg Calkins, FASLA, SITES AP Department Head + Professor
Department of Landscape Architecture and Environmental Planning
7/12/2020
mecalkin@ncsu.edu

The Iconic Bell Tower and context. Brooks Hall is located at approximately 9 o'clock

1 | Introduction

About NC State Landscape Architecture

Our Mission Statement: NC State Landscape Architecture and Environmental Planning is committed to instruction, research, and application of evidence-based planning and design practices leading to the creation of resilient landscapes and places focused on human and ecosystem health, safety, economic wellbeing, social equity, and quality of life.

Our students learn to combine critical design and landscape thinking talents with their life experiences, creativity, and passion to engage, experiment, and solve problems and opportunities involving diverse landscape situations. The program's immediate "laboratories" are the urban, suburban, and rural landscapes of the Mountain, Piedmont, and Coastal Plain regions of North Carolina, along with our international study venue in Prague, Czech Republic. The social, economic, and environmental design imperatives resident within these landscapes are globally transferable and fuel the program's academic, scholarly, and extension agenda.

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 as it evolves in response to environmental and societal imperatives. Our goal is to prepare the next generation of landscape architects with the knowledge and tools to engage the challenges and opportunities associated with urbanization and demographic changes; environmental social equity; landscape asset performance and project life-cycle modeling; and resilient and sustainable design practices.

NC State Landscape Architecture graduate students will master bodies of knowledge, pursue evidence-based research, and hone verbal, written, and graphic communication skills. The first half of the first professional MLA program equips students with the core knowledge, skills, and abilities that form the foundation of current professional practice. This includes competencies in design,

modeling, and representation, with an understanding of history, theory, planning, research, and the tools and processes with which they are applied. The second half of the academic program propels students into the profession and discipline of the future that they will help evolve and lead. Our program positions students to pursue substantive inquiry into areas of their own choosing or those of the faculty or the larger extended professional community. NC State Landscape Architecture is dedicated to graduate students and their endeavors.

New courses developed in recent years include:
- The Landscape Imperative
- Research and Strategic Thinking
- GIS Applications in Landscape Architecture and Environmental Planning
- Environment and Culture (formerly called Landscape and Culture)
- Landscape Performance and Metrics
- Landscape Architecture Digital Media
- Computational / Parametric Modeling
- Contemporary Issues in Landscape Preservation
- Landscape Architecture Theory and Criticism
- Environmental Social Equity and Design
- Landscape Architecture Design + Build Studio
- Landscape Architecture Design Research Project
- Greenway Planning and Design
- City Planning and Design: Building Great Communities
- Landscape Architecture Professional Practice
- Disaster Resilient Policy, Engineering, and Design
- Natural Hazards, Disasters and Climate Change Adaptation Lecture Series
- Survey of Natural Hazards and Disasters
- Design for Resilient Food Systems

Collaborations have increased both inside and outside the university, as the department partners with programs in the NC State Colleges of Natural Resources, Agriculture and Life Sciences, Engineering, the Poole College of Management, UNC–Chapel Hill's Kenan Center and with public and private landscape architecture practices.

There are three categories of students seeking the Master of Landscape Architecture degree. For graduate students with undergraduate degrees in fields other than landscape architecture, architecture or related design fields, we offer the 82-hour **MLA Track III Curriculum First Professional LAAB Accredited Degree.**

For graduate students with prior degrees in landscape architecture, architecture, or related design programs that are not LAAB accredited OR graduate students obtaining concurrent degrees in Architecture, Urban Design or Urban Planning, we offer the 64-70 credit hour **MLA Track II Curriculum First Professional LAAB Accredited Degree** with Advanced Standing.

For graduate students with prior LAAB accredited degrees in landscape architecture we offer the 30-48 credit hour **MLA Track I Curriculum Post Professional Degree**.

Full curricula for each of the MLA Tracks are provided in Chapter 5.

We recognize that each of you have specific educational and career objectives and come to us having diverse educational backgrounds and experiences that might qualify for certain courses to be waived. For that reason, we will schedule individual advising appointments to discuss your unique situation.

The academic goals of the program include preparing students to:

1. Enter the rigor of professional practice, as it is presently known, competent in the core themes, skills, and practices of the profession, inclusive of Landscape Architecture Accreditation Board (LAAB) standards;

2. Responsibly engage the "landscape imperatives associated with the environmental and cultural factors and relationships that shape regionally responsive design of urban, suburban, and rural landscapes resident within the public and private realms;"

3. Develop one's ideas, convey one's values, and criticize one's work;

4. Challenge existing methods or norms of landscape architectural practice, when appropriate, with the goal of creating, developing, and providing better ways to accomplish their missions, achieve better outcomes, and enhance the knowledge and capability of the profession for dealing with the pressing landscape issues of the day;

5. Serve as a steward of the landscape, educator of clients, ethical role model, and source of inspiration to future generations; and

6. Remain connected to the Department of Landscape Architecture as NC State alumni and as professionals seeking to maintain and enhance this institution as an outstanding venue for learning and to support its students both monetarily and/or in kind.

It is within this context that NC State Landscape Architecture links theory with practice, history with change, technology with invention, and designers with their constituents.

Mark Hoversten, PhD, FASLA, FCELA, Dean of the College of Design

Dean Hoversten is a registered landscape architect who has served as Dean and Professor at the University of Idaho from 2007 to 2016. Prior to that, he served as Assistant, Associate and Professor at the University of Nevada-Las Vegas, where he also was coordinator of Landscape Architecture and Planning.

Prior to his work in higher education, Hoversten worked in the private sector for a variety of landscape architecture and architecture firms. He also managed the land planning division of the *Howard Hughes Corporation*, which had an annual budget of $63 million.

He is a Fellow of the *Yaddo Arts Community,* the *American Society of Landscape Architects* and the *Council of Educators in Landscape Architecture*. He is also a member of the *College Art Association*.

Hoversten has won numerous national, regional and local planning and design awards, including the *W.K. Kellogg Foundation Engagement Award* for the Western U.S. Region in 2010. He was named *Outstanding Educator* by the Council of Educators in Landscape Architecture in 2006.

A productive scholar and noted speaker, Hoversten authored or co-authored many refereed articles, non-refereed articles, and planning and design reports, and has made dozens of paper presentations in his field.

He served as president of Council of Educators in Landscape Architecture and has served as chair and member of committees and review teams for national organizations like the Association of Collegiate Schools of Architecture and the Landscape Architecture Accreditation Board."

Dean Hoversten received a Bachelor of Landscape Architecture and a Bachelor of Fine Arts degree in Painting and Drawing from the University of Minnesota. He completed a master's degree in Painting and Drawing from the University of New Mexico, and a Master of Fine Arts degree in Painting from the University of Iowa. He also completed his Ph.D. in Landscape Planning from Lincoln University in New Zealand.

> 'My vision for success at the College of Design includes building upon the already strong academic programs that foster student success and contribute to a resilient and enlightened world. I look forward to bringing a student-focused approach to leadership, and to developing interdisciplinary initiatives that engage students in real-world experiences.'

It is very likely that you will see Mark walking around that College particularly in the design studios. Say "Hi," and ask him to give you a "crit."

Context: NC State University + College of Design

One of the things students like most about the College is that landscape architecture resides within the diverse milieu of design creativity and excitement. Joining us are the programs in Architecture, Graphic Design, Industrial Design, and Art and Design, and the PhD in Design and Doctor of Design programs. While teaching is at the very heart of what we do, our studies are enriched and enhanced by the various forms of research and engagement activities that involve the faculty, students, college staff and the professional community. Beyond the College of Design at NC State are a vast array of other disciplines housed within the Colleges of Agriculture and Life Sciences, Natural Resources, Sciences, Management, Engineering, Education, Humanities and Social Sciences, Veterinary Medicine, and Textiles. In all, there are about 34,000 students and more than 2,000 faculty at NC State.

The Department of Landscape Architecture strives to encourage cross-discipline collaboration within NC State's Campus and the other major Universities in the UNC System and beyond. Past projects have had our students and faculty partnering with UNC Chapel Hill, Iowa State University, Louisiana State University, FEMA, UNC Coastal Studies Institute, and many more institutes and organizations. The Department of Landscape Architecture takes to heart what it means to be a part of a land-grant institution by working on real-world projects that deal with real-world issues right here in North Carolina.

To give you the broader understanding about NC State, we've lifted the following statements from the University Web page:

"NC State: "Think and Do the Extraordinary"

"NC State was founded with a purpose to create economic, societal and intellectual prosperity for the people of North Carolina and the Country. We began as a land-grant institution teaching the agricultural and mechanical arts. Today, we're a pre-eminent research enterprise that excels in science, technology, engineering, math, design, the humanities and social sciences, textiles and veterinary medicine.

NC State students, faculty and staff take problems in hand and work with industry, government and nonprofit partners to solve them. Our 34,000-plus high-performing students apply what they learn in the real world by conducting research, working in internships and co-ops, and performing acts of world-changing service. That experiential education ensures they leave here ready to lead the workforce, confident in the knowledge that NC State consistently rates as one of the best values in higher education."

<p align="center">"Design for Life"</p>

<p align="center">The mission of NC State Design is to "transform the world through design education, scholarship, and engagement"</p>

<p align="center">Our vision is "to be the leading public interdisciplinary Design College."</p>

We believe:
- Design matters
- In serving the people and state of NC
- Our disciplines strengthen one another and influence the world
- In achieving continued excellence through design, research and teaching
- In taking on grand challenges
- In inspiring aspirations
- In nurturing a creative life-long learning community
- In collaboration, critical thinking, practice and the right of inquiry
- In environmental, historical, and cultural stewardship
- In engaging our constituents
- In the cultural value of making
- In "Design for Life" ← you'll hear this phrase a lot

We Are:
- Mission driven
- Student focused and human centered
- Ethical: Inclusive, pluralistic, equitable, transparent, accountable, and respectful of diverse opinions and ideas
- Innovative makers and designers
- Scholars, leaders, and collaborators
- Inspired by evidence, aesthetics, function and context
- Committed to the rigor of professional practice and the legacy of design thinking
- Environmental stewards
- Ambitious, energetic, creative, optimistic, productive, and reflective

LAAB Accreditation

The MLA program was last re-accredited in February 2016 by the *Landscape Architecture Accreditation Board (LAAB)*. Re-accreditation reviews are scheduled every 6 years. The "official report" by the Visiting Team found the program meets and/or exceeds all LAAB accreditation standards and cites no recommendations affecting accreditation. The next reaccreditation review is scheduled for 2022.

Our MLA Degree Curriculum

Like our changing landscape, our curriculum will continue to evolve. Over the past four years, we have been busy revising the MLA Curriculum. We have a rather agile attitude about the curriculum as we necessarily experiment with new course offerings, make modifications to course delivery, and so on. Developing the revised curriculum has been an evolutionary process. We launched and tested several new courses, revised all the classes, and rearranged the order or sequence of course delivery.

Our goal is to implement a curriculum that strategically provides students with the knowledge, skills and design and landscape thinking tools that they can use and build upon once they leave the College of Design and enter practice.

The 2020 Fall LAR Course Line Up and Fall Matriculation Table are shown below. Please note that all new students have been pre-registered for classes.

FALL 2020 COURSE LINEUP

Course number	Credits	Course	Instructor	Day/Time	Room	Comments
LAR 444	3	**History of Landscape Architecture**	Magallanes	MW 10:15-11:30		Open to non majors
LAR 501	6	**LAR Intro Design Studio**	Delcambre & Bressler	M W 1:30-5:30	200 Kam	**Required:** 1st year MLA
LAR 503	6	**LA DD and CD Studio**	Klondike & Monette	M W F 1:30-5:30	200 Kam	**Required:** 2nd year MLA
LAR 507	6	**LA Advanced Topics Design Studio**	Boone	WF 1:30-5:30	200 Kam	
LAR 582.017 LAR 582.018 LAR 582.019	3	**Intro to Adobe Suite Intro to Autocad Intro to 3D Modeling**	Baldwin	M 8:30-11:15	Online	**Required:** 1st year MLA
LAR 517	3	**GIS for Designers**	McCoy	W 8:30-11:15	203D Brooks and Online	**Required:** 2nd Year MLA; Open to non majors
LAR 520	3	**Landscape and Culture**	Fox	T Th 9:35-10:50	318 Brooks and Online	**Required:** 1st year MLA; Open to non majors
LAR 528	3	**LA Construction Materials and Methods**	Calkins	T 1:30-4:15	318 Brooks	**Required:** 2nd year MLA
LAR 534	3	**LAR Theory and Criticism**	Boone	Th 6:00-8:45	Online	**Required:** 3rd year MLA; open to non majors
LAR 582.011	3	**Computational Design and Parametric Modeling**	Bowman	Th 1:30-4:15	Online	MLA Elective; Open to non majors
LAR 582.008	3	**Survey of Natural Hazards and Disasters**	Smith	T 6:00-8:45	316 Leazar	MLA Elective; Open to non majors
LAR 582.012	3	**LA Immersion**	Calkins Monette	TBD	200 Kam	**Required:** 1st year MLA
LAR 630	3	**Independent Study (MLA)**	Faculty	By appointment		Requires specific faculty approval
LAR 679	6	**Final LA Project Studio**	Faculty	By appointment		Requires Dept Head Approval
LAR 697	6	**Final Research Project**	Faculty	By appointment	Kam 200	Requires Dept Head Approval

FALL 2020 MATRICULATION TABLE

Course number	Course title	Credits
	Graduate Program Fall 2020	
	MLA First Year	
LAR 501	LA Introduction Design Studio	6
LAR 582.017-528.019	Intro to Adobe Suite, Intro to Autocad, Intro to 3D Modeling	3
LAR 520	Environment and Culture	3
LAR 582.012	LA Immersion	3
	total	15
	MLA Second Year	
LAR 503	LA DD and CD Studio	6
LAR 528	LA Construction Materials and Methods	3
LAR 582.009	GIS Application in LA + Env. Planning	3
varies	Free Electives (Student may choose LAR electives (Table 3 and Table 4 below) or courses offered by another academic unit)	3
	total	15
	MLA Third Year	
LAR 507 LAR 508 varies	Advanced Topic in LA + Env. Planning Studio OR Approved Student-Directed Project (requires department head approval), OR Approved Swing Studio	6
LAR 534	LA Theory and Criticism	3
Varies	Free Electives (Student may choose LAR electives (Table 3 and Table 4 below) or courses offered by another academic unit)	3
	total	12

FALL 2020 LAR ELECTIVES

LAR 582.011	3	Computational / Parametric Modeling using Rhino + Grasshopper	Bowman	Th 1:30-4:14	online	Free Elective
LAR 582.008	3	Survey of Natural Hazards and Disasters	Smith	T 6:00 -8:45	online	Free Elective
LAR 630	3	Independent Study	Varies	Appointment	varies	Requires faculty approval
LAR 650***	3	LAR Internship	Calkins	Varies	Varies	Elective

*** Graduate Students: If you plan to undertake an INTERNSHIP for academic credit this fall, please register for LAR 650 LAR Internship. Pick up the Internship Form in the Department Office, fill it out and return it to the Department Head.

Fall 2020 LAR Elective Course Descriptions

LAR 582.011 Computational / Parametric Modeling using Rhino + Grasshopper

Austin Bowman, Th 1:30-4:15, 3 credit hours, online delivery

This graduate level seminar will explore advanced 3D modeling techniques and their application within in the practice of landscape architecture while emphasizing the iterative nature of computational design. Through assignments and projects, students will explore 3D modeling in Rhino, parametric design with Grasshopper, and rendering/animation with Lumion and Adobe.

LAR 582.008 Survey of Natural Hazards and Disasters

Professor Gavin Smith, T 6:00-8:45 pm, 3 credit hours, *online delivery*

This course provides a graduate level introduction to the broad fields of study associated with natural hazards and disasters. Emphasis is placed on the defining characteristics of natural hazards and how their effects on human settlements can lead to a series of issues 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 (no course pre-requisite required). The course is framed using concepts of sustainable development and disaster resilience.

Landscape Architecture Lecture Series

The Department sponsors a monthly public lecture featuring presentations by local and nationally recognized leaders and "game changers".

The *Landscape Architecture Lecture Series* exposes students, faculty, alumni, practitioners and the public to the breadth of players, ideas, situations, issues, challenges, technologies and methods, controversies, collaborations, and achievements related to the profession. The lectures are held in the Burns Auditorium in Kamphoefner; they are typically scheduled for Wednesday evenings, 6:00 pm right after studio. Each lecture typically lasts for an hour, followed by Q + A and a brief discussion. Many speakers will extend their visits to campus in order to participate in design studio reviews and brown bag lunch sessions with students and faculty.

We've had over 50 such presentations during the last 12 years. Past speakers have included: Christine TenEyck (TenEyck Landscape Architects), Laura Solano (Michael Van Valkenburgh Associates), James Burnett FASLA (Office of James Burnett), Paul Morris FASLA (Atlanta Beltline), Gina Ford FASLA (Sasaki Associates), Chuck Flink FASLA (Greenways, Inc), Gary Hilderbrand (Reed/Hilderbrand, Cambridge, MA), Daniel Winterbottom (University of Washington), Annette Wilkus (SiteWorks, NY), Michelle Delk (Snohetta), Lucinda Sanders (OLIN), and Thomas Woltz (Nelson Byrd Woltz).

The speaker lineup for the 2020-2021 academic year is in process.

Following is the list of speakers in last year's LAR Lecture Series:

Lewis J Clarke Lecture:
Sara Zewde, Studio Zewde

Charles Burger Lecture:
Jennifer Guthrie, FASLA, RLA, Gustafson, Guthrie + Nichol

Women in Landscape Architecture (WILA) Lecture:
Andrea Cochran, FASLA FLA, Andrea Cochran Landscape Architects

Charles A Flink II,FASLA, Alta Planning + Design, Greenways, INC.

You are also encouraged to attend lectures delivered by other departments in the College.

SASLA + WILA

The Student Chapter of the American Society of Landscape Architects (SASLA) and *Women in Landscape Architecture (WILA)* are two student organizations with whom you should become involved.

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

SASLA, in cooperation with the external *Landscape Architecture Advisory Council (LARAC),* manages the *Department's Professional Development Mentor Program* and *the Peer to Peer program*, and plans a number of technical workshops, social events, brown bag seminars with practitioners, and provides important input and advice to the faculty about the curriculum, courses and the overall quality of the program.

The SASLA and WILA Leaders this year are:

President
+ Current - Jesse Vassos (Spring 2020)

Vice President
+ Current - Feier Chen (Spring 2020)

WILA President
+ Current- Eliza Lawdley (Summer/Fall 2020)

Professional Development Coordinators
(matching professional mentors to students and firm visits) + Current - Tong Zhang and Hunter Williams

Treasurer
+Current - Evie Dentinger

Peer to Peer Buddies (P2P)

To help our new incoming students transition to the department, SASLA will implement a buddy system wherein each new student is paired with one of our continuing second or third year students. This program is intended to connect you with someone who may be able to answer your questions and help you learn the "ropes" during your first semester in the department. You will receive an email message explaining this program to you and introducing you to your new peer buddy.

Professional Mentors

Not to be out done by the students, practicing landscape architects in the area, will "buddy up" with you. The intent is to connect you with a practitioner having firsthand knowledge of the profession. Pairing new students with new mentors is planned for early November. If you are a returning student and have already been paired with a mentor, please continue communicating with your mentor. Please contact Johnny or Stephanie if you wish to change mentors. Tong Zhang and Hunter Williams will soon contact you with information about the Professional Mentor Program.

Membership in the ASLA Student Chapter (SASLA)

All students are encouraged to join the *Student NCSU ASLA (American Society of Landscape Architects) Chapter* . Beginning this year, student fees to become a member have been waived. You will receive more information at the first SASLA meeting of the semester. For detailed information about ASLA go to ASLA.org, click on JOIN, then click on LA STUDENTS.

U.S. Green Building Council (USGBC)

The U.S. Green Building Council (USGBC) at NC State offers a multi-disciplinary, cross-campus collaboration of sustainability efforts by students and young professionals in green design, building, business, engineering, and more. NC State's student chapter of this international professional association hosts casual monthly meetings, including volunteer events (like stream clean-ups, Green Apple Day of Service, Green Schools community gardens). Involvement with USGBC at NC State also gives students access to LEED/SITES test prep, networking events with local firms and sustainability professionals, Green Drinks, a yearly Career Panel, the annual Greenbuild Conference and the Scrap Lounge in the Brooks' Hall basement. Traci Rose Rider, PhD, Research Assistant Professor of Architecture is the College of Design Faculty Advisor.

For more info: 'Like' our USGBC @ NC State page on Facebook + be on the lookout for COD emails!

Online Landscape Architecture and Design Resources

We recommend that you subscribe to email updates and/or follow the following organizations on social media. These will give you daily or weekly information about the most current projects, firms and issues related to Landscape Architecture.

- World Landscape Architecture
- LA Foundation
- Land 8 Landscape Architecture News
- Design Boom
- Dezeen
- Architecture Daily
- NCASLA
- USGBC North Carolina
- ASLA
- USGBC

- NC State Design
- Landscape Architecture Magazine
- The Dirt
- The Landscape Record
- Your favorite landscape architecture firms!

Admission Reminders to New Students the Graduate School

- You must formally accept your admission offer online to initiate the matriculation process at NC State. Informing us via email of your acceptance is not sufficient.
- All incoming graduate students must submit an official transcript to NC State showing courses taken and the grades earned through the most recent semester/quarter upon acceptance of their admission offer. Final transcripts showing all grades earned with the degree statement must be submitted no later than the last day of classes of your first semester at NC State.
- In most cases, international graduate students must complete and upload a Visa Clearance Form (VCF) and Certificate of Financial Responsibility (CFR) to fulfill their clearance requirements. Instructions for filing both are contained within your online admission decision letter.
- International graduate students with questions about their international clearance status can use this link http://www.grad.ncsu.edu/ips/oisss/

Failure to comply with any of the above (where applicable), can and will result in significant delays in your matriculation process to include access to student emails and registering for classes. Note: Landscape Architecture registers its own incoming graduate students for classes in their first semester.

The College of Design's contact for admission procedures is Tameka Whittaker

NCSU Career Development Center
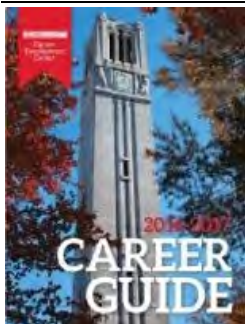
The NC State Career Development Center and the Office of International Services offers potential resources that you should learn about, especially if you are an international student and wish to have an internship during your time here at NC State

"The Career Development Center offers resources and support for your internship and job search! Success requires your active preparation, participation, and persistence. You don't need to know exactly what you want to do in order to get started. Each step you take will bring you one step closer."

https://careers.dasa.ncsu.edu/

Once you get into the system, scroll down to the section devoted to graduate students. Here are some potentially useful links and resources that you might want to check out:

Career Development Center:
https://cdc.dasa.ncsu.edu/

Career Guide:
https://careers.dasa.ncsu.edu/gain-experience/career-guide/

Epack:
https://careers.dasa.ncsu.edu/using-epack/

Campus Jobs for International Students:
https://internationalservices.ncsu.edu/student-employment/on-campus-employment/

Critical dates

- **International Graduate Student Orientation –** August 5th, *online, time TBD*
  https://internationalservices.ncsu.edu/future-students/orientation-7/

- **New Graduate Student Orientation –** August 4th, *online, 9:30-10:30*
  https://grad.ncsu.edu/students/orientation/

- **College of Design New Graduate Student Orientation –** August 10, *online, 12-1pm*

- **First Day of Classes – Monday, August 10th**

NCSU FALL 2020 Academic Calendar

August	10	Monday	First day of classes
August	14	Friday	Last day to add a course without permission
August	21	Friday	Census Date/Official Enrollment Date
September	7	Monday	Labor Day; University remains **open**, classes are held
September	30	Wednesday	Drop/Revision Deadline
October	12	Monday	Schedule for 2021 Spring and Summer terms published; Shopping Cart opens
TBA	TBA	TBA	Enrollment begins for Spring and Summer 2021 terms
November	9-13	Mon – Fri	Last week of semester
November	13	Friday	Last day of classes
November	16-20	Mon – Fri	Final Examinations
November	23	Monday	Fall grades due by 5:00 p.m.
TBA	TBA	TBA	Fall Commencement Exercises
January	19 (2021)	Tuesday	Current Term Withdrawal Deadline

2 | Administration and Staff

UNC System and North Carolina State University

The University was founded in 1887. It is one of two land-grant institutions in North Carolina and has evolved to become a nationally and internationally positioned research university. It is one of sixteen constituent institutions of the University of North Carolina. President Margaret Spellings and a thirty-two-member board of governors, chaired by W. Louis Bissette, Jr., administer the University System. Chancellor Dr. Randy Woodson, and a Board of Trustees govern NC State University.

Within NC State University are twelve colleges:

> College of Agriculture and Life Sciences
> College of Design
> College of Education
> College of Engineering
> Graduate School
> College of Humanities and Social
> Sciences Poole College of Management
> College of Natural Resources
> College of Sciences
> College of Textiles
> College of Veterinary Medicine
> Firsts Year College

College of Design

Dean Mark Hoversten is the chief executive officer of the College and is responsible for setting basic goals, mission, polices, budget, enforcement of admission and graduation requirements, and for the general efficiency of all the programs within the College.

The College of Design has six degree-granting departments:

Architecture
Graphic Design and Industrial Design
Art + Design
Landscape Architecture and Environmental Planning
Interdisciplinary Ph.D. in Design
Doctor of Design

The College of Design departments offer undergraduate professional degrees and both first-professional and advanced-studies master's degrees in their respective disciplines. The School of Architecture offers a four-year Bachelor of Environmental Design in Architecture and an additional one-year program for a professional Bachelor of Architecture degree. It also offers first and advanced professional degrees at the master's level. Graphic Design, Industrial Design, and Art + Design all offer four-year bachelor's degrees. Landscape Architecture no longer offers a bachelor's degree program, but undergraduate students can fulfill requirements to obtain a minor in Landscape Architecture and Environmental Planning. Prospective undergraduate students interested in landscape architecture might consider the following programs: Bachelor of Environmental Design in Architecture, Design Studies, or the Landscape Design Concentration offered within the Department of Horticultural Sciences.

The Department of Landscape Architecture has representation on all of College of Design standing committees: Faculty Senate; Admissions; Undergraduate Courses and Curriculum; Graduate Studies; and Research, Extension and Outreach and Retention, Tenure and Promotion. Members of the faculty serve on various University committees, including the Faculty Senate, the University Research Committee, the Extension and Community Development Committee, the Campus Planning Committee, the Physical Environment Committee, the University Open House Committee, the Tenure Committee, the University Council on International Studies and the State Employees Combined Campaign Committee.

College of Design Administration

Mark Hoversten, FASLA, FCELA, Dean of the College of Design, Professor of Landscape Architecture and Environmental Planning

Sharon Joines, PhD, Professor of Industrial Design, Associate Dean

Celen Pasalar, PhD, Associate Professor of Landscape Architecture and Environmental Planning, Assistant Dean for Research and Extension

Felicia Womack, Assistant Dean for Budget and Administration

Jean Driscoll, Executive Director of Development

Tameka Whitaker, Assistant Dean for Student and Academic Services

David Hill, AIA, School of Architecture, Department Head

Meg Calkins, FASLA, Professor of Landscape Architecture and Environmental Planning, Department Head

Derek Hamm, Associate Professor, Art + Design, Department Head
Tsai Lu Liu, Professor, Graphic Design and Industrial Design, Department Head
Soolyeon Cho, Associate Professor, Director of the PhD in Design
M. Elen Deming, FASLA**,** FCELA, Professor of Landscape Architecture and Environmental Planning, Director of Doctor of Design Program

Department of Landscape Architecture Faculty

Faculty bios are listed by last name in alphabetical order, beginning on page 31.

Kofi Boone, FASLA*, Professor, University Faculty Scholar

Gene Bressler, FASLA*, Professor Emeritus

Meg Calkins, FASLA*, SITES AP, Department Head + Professor

Carla Delcambre, ASLA, PLA, Associate Professor + Director of Graduate Program

Nilda Cosco, PhD, Affiliate ASLA, Research Associate Professor

Andrew Fox, FASLA, PLA*, Professor, University Faculty Scholar

Fernando Magallanes, PLA*, Associate Professor

Robin Moore, Honorary ASLA*, Professor + Director, Natural Learning Initiative

Celen Pasalar, PhD, Associate Professor + Assistant Dean for Research and Extension

Gavin Smith, PhD, AICP* Professor

Nikki Evans, University Program Associate

* Tenured faculty member
PLA connotes registered landscape architect in the state of North Carolina

Faculty of the Practice

Charles Flink, FASLA, PLA, Professor of the Practice and Executive in Residence

Dan Howe, FASLA, AICP, Assistant Professor of the Practice

Travis Klondike, ASLA, Research Associate, Assistant Professor of the Practice

Emily McCoy, ASLA, PLA, Associate Professor of the Practice

Ben Monette, ASLA, PLA, Assistant Professor of the Practice

Julie Sherk, ASLA, PLA*, Associate Professor of Horticultural Science

Rodney Swink, FASLA, PLA, Professor of the Practice

Jesse Turner, PLA, Assistant Professor of the Practice

Also supporting program delivery are local landscape architecture practitioners who participate as design studio reviewers, guest speakers, and mentors.

Landscape Architecture Advisory Council (LARAC)

The *Landscape Architecture Advisory Council* (LARAC), composed of alumni and friends of the Landscape Architecture Department provides input on the curriculum and direction of the program, mentors and supports students, and generates community support for the Lecture Series and other outreach programs.

The American Society of Landscape Architects (ASLA)

The ASLA web page contains information about:
- Membership in ASLSA
- Professional news
- Meetings and Events

- Education
- Advocacy

The North Carolina Chapter of ASLA (NCASLA)

Kevin Barnes, PLA, ASLA, President 2019-20
 "NC landscape architects participate in the careful stewardship, wise planning, and artful design of a wide variety of natural environments. Projects are designed and planned for the slopes of the mountains, the rolling hills of the Piedmont, as well as the sandy shores of the coastal lands."
http://www.ncasla.org/

North Carolina Board of Landscape Architects (NCBLA)

The North Carolina Board of Landscape Architects was established by legislation in 1969 to register professional landscape architects. The purpose of registration is the protection of public health, safety and welfare. To obtain a license to practice, the Board requires education, experience and successful completion of a national examination. In addition, each registrant must complete continuing education requirements prior to annual renewal of the license.
http://www.ncbola.org/

The Council of Educators in Landscape Architecture (CELA)

The Council of Educators in Landscape Architecture is composed of all the programs of higher learning in landscape architecture in the United States, Canada, Australia and New Zealand. There also are individual and institutional members from many other parts of the world who belong to the CELA family. All members of the faculties from these institutions are invited to participate in CELA as are others who possess an interest in the academic practice of landscape architecture. The Council of Educators in Landscape Architecture can trace its beginnings to 1920 and for more than ninety years it has been concerned with the content and quality of professional education in landscape architecture. CELA publishes the highest quality research conducted in the profession through its refereed publication, *Landscape Journal*.
http://www.thecela.org/

3 | FACULTY BIOS

Kofi Boone, FASLA

Professor of Landscape Architecture
NC State University Faculty Scholar
Vice President of Education, Landscape Architecture Foundation
BSNR, University of Michigan, 1992
MLA, University of Michigan, 1995
kmboone@ncsu.edu

Kofi Boone's research interests are the overlap between landscape architecture and environmental justice with a focus on democratic design and cultural landscapes. His current research explores the use of immersive design techniques and mixed reality visualization to enhance research, teaching, and extension work. He is a member of the College's Experience Design Lab. Kofi served as Director of the College's Ghana International Design Studio, is a University Faculty Scholar, and a member of the *Academy of Outstanding Teachers*. His student's works have earned various ASLA, NCASLA, and SEED Network awards.

Kofi serves on the Board of Directors of The Landscape Architecture Foundation and is a founding member of the American Society of Landscape Architects' Environmental Justice Professional Practice Network. He is active in multidisciplinary activities ranging from the *National Endowment for the Arts Designing Equity Forum*, to *The Kenan Institute of Ethics Collaboratory* featuring partnerships with researchers as Duke University and the University of North Carolina Chapel Hill. Currently, Kofi is working on the Hurricane Matthew Disaster Recovery and *Rebuilding Initiative (HMDRRI)* with dozens of faculty, students, agencies, and disaster recovery specialists.

Kofi disseminates his work broadly including in *Landscape Architecture and Urban Planning*, *PUBLIC: A Journal of Imagining America*, and *PRISM: Journal of Regional Engagement*. Kofi serves as a reviewer for Elsevier academic journals. Currently, his article "Black Landscapes Matter" can be found in Ground Up, and he authored case studies featured in the forthcoming book, Design as Democracy: Techniques for Collective Creativity (Island Press, December 2017). Kofi's work has been featured in Representing Landscapes, Landscape Architecture Magazine, and on National Public Radio.

Gene Bressler, FASLA

Professor Emeritus, Landscape Architecture
BLA, SUNY ESF, 1968
MLA, Harvard Graduate School of Design, 1970
gene_bressler@ncsu.edu

Professor Emeritus Gene Bressler, FASLA was head of the Department of Landscape Architecture from 2006 – 2018. He is currently in *Phased Retirement* status serving as the Founding Director of the College's emerging *Design Collaborative.* He co-teaches the First-Year Fall MLA Design Studio with Professor Carla Delcambre and mentors the faculty and students on their scholarly and academic projects, courses, and careers. His research and teaching focuses on urban growth, sustainable development, and the planning and design strategies for "Challenging Suburbia." In 2008, he co-

authored, with University of Colorado Professor Allan Wallis, "Oh Give Me Land, Lots of Land," in the book *Healing the West* by Professor Patricia Limerick.

His major accomplishments as department head include: working with the faculty and students to revise the MLA curriculum; leading the graduate first professional MLA program to successful re accreditation reviews; building strong relationships with the professional community; authoring the *MLA Handbook*; enhancing the research mission of the department; and initiating the department's *Lecture Series* and the department's *Professional Development/Mentor Program* that pairs landscape architecture practitioners with our students. Working with faculty, he participated in the planning and direction of *DesignWeek['17-Beta] and '18,* an all department event focused on several eastern North Carolina communities devastated by flooding resulting from the aftermath of Hurricane Matthew.

During his tenure as department head, Professor Bressler led the faculty and students in initiatives that resulted in:

- The revision of the MLA graduate curriculum and development and implementation of 12 new courses including:

  The Landscape Imperative
  Research and Strategic Thinking
  Greenway Planning and Design
  GIS Applications in Landscape Architecture
  Landscape and Culture (formerly called Landscape Dynamics)
  Landscape Performance and Metrics
  Landscape Architecture Digital Media 1 and 2
  Advanced Digital Modeling and Representation
  Contemporary Issues in Landscape Preservation
  Landscape Architecture Theory and Criticism
  Environmental Social Equity and Design

- The implementation of the award-winning *Design + Build* program delivered by Professors Andy Fox, Carla Delcambre and Jesse Turner;
- The University's awarding and naming Professors Andrew Fox and Kofi Boone *University Faculty Scholars; and*
- Numerous national and regional awards from the American Society of Landscape Architecture given students and faculty for their achievements in planning and design.

Bressler served on the Dean's Administrative Council and Steering Committee for the College's *Annual Urban Design Forum* held each spring and on numerous committees within the College and U*niversity including the Campus Review Panel,* and the Provost's Department Head Advisory Council. From 2009 to 2013 he served on *NC Board of Landscape Architects* and has been involved with the *Blue Ridge Road Corridor Alliance since 2009 currently serving as* Chair of the *Development Projects Advisory Panel.*

From 1997 to 2006, Bressler served as Chair of the Landscape Architecture Department at the *University of Colorado, Denver*. For several years, he co-taught an annual series of advanced interdisciplinary graduate design studios, "Challenging Suburbia," with Architecture Professor Keith Loftin that studied and generated alternatives to existing residential community design development paradigms. In 2003, he was named Director of the *Colorado Center for Sustainable Urbanism* and was responsible for producing the *2004 and 2005 "Colorado Tomorrow"* public forum focused on population and urban growth challenges facing the state. He was a founding member and president of the *Colorado Community Design Network* and consulting principal with the Denver-based firms *Landscape Strategies* and *Design Studios West*. In addition, he chaired the College's *Information Technologies Committee* charged with creating and implementing the College's *Interdisciplinary IT Strategic Plan* that led to the implementation of computer aided design, visualization and modeling, and GIS hardware and software technologies.

Prior to his work at Colorado, Bressler was on the faculty of the University of Oregon, Eugene, from 1971 to 1985. There, his teaching and research activities pioneered the development of computer driven landscape suitability

modeling technologies used to study and evaluate opportunities and constraints to development, infrastructural costs, environmental impacts, and alternative urban planning and design strategies. This led to his accepting a position from 1985 to 1995 with Dynamic Graphics, Inc., a developer of internationally recognized software used in numerous terrain and land use mapping, modeling, and visualization applications.

In 2006, Bressler was named recipient of the *Outstanding Administrator of the Year* by the Council of Educators in Landscape Architecture (CELA) for "his leadership and contributions to teaching." In 2007, he was elected *Fellow* by the *American Society of Landscape Architects*. At the request of Dean Marvin Malecha, Bressler delivered the Fall 2010 College of Design Commencement Address, "*Game Changing One's Way to the Main Thing*." The North Carolina Chapter of the American Society of Landscape Architects named him recipient of the *President's Council Award,* 2017 "in recognition of his major achievements for the advancement of the profession."

In 2018, in honor of Professor Bressler's achievements and contributions, the College through generous gifts from colleagues, friends, former students, and professionals, established the first funded College of Design faculty endowment, the *Gene Bressler Landscape Architecture Faculty Award Endowment* that "provides funds to ensure extraordinary research, teaching and outreach, opportunities for faculty academic enrichment."

Meg Calkins, FASLA, SITES AP

Professor and Head of the Department of Landscape Architecture and Environmental Planning

MLA UC Berkeley, 1995
March UC Berkeley 1995
BUP University of Cincinnati, 1988
mecalkin@ncsu.edu

Meg is the Head of the Department of Landscape Architecture. She has taught landscape architecture design, theory and construction for twenty-four years at the University of California at Berkeley, the University of Illinois at Urbana-Champaign and most recently Ball State University.

Her scholarship focus is on the environmental and human health impacts of site construction materials. She wrote the book *Materials for Sustainable Sites: A Complete Guide to the Selection, Evaluation and Use of Sustainable Construction Materials* in 2009 and is now working on the second edition. She edited and contributed to *The Sustainable Sites Handbook: A Complete Guide to the Principles, Strategies and Best Practices for Sustainable Landscapes* in 2012. The intent of this book is to provide information on the strategies and technologies that support the Sustainable Sites Initiative (SITES) credits.

As one of the founding members of the Sustainable Sites Initiative (SITES), Meg has taken an active leadership role on development and implementation of the Standard since 2003. In the early years of SITES, Meg collaborated with a small, interdisciplinary group of professionals on development of credits and standards for all sections. As the Standard became more detailed, she focused on development and refinement of credits related to materials, construction and waste. In 2016, Meg worked on development of the SITES Accredited Professional Exam and am currently the SITES representative to the Green Business Certification Institute (GBCI).

Nilda Cosco PhD

Research Associate Professor
Education Specialist for the Natural Learning Initiative
Educational Psychology, Universidad del Salvador, Buenos Aires
PhD in Landscape Architecture, Heriot Watt University, Scotland
Nilda_cosco@ncsu.edu

Professor Cosco's research focuses on the impact of outdoor environments on health outcomes such as obesity, sedentary lifestyles, attention functioning, and well-being. Her current research is supported by the National Institute of Environmental Health (NIEHS), the National Science Foundation (NSF), and the Buffalo Hospital Foundation. She was the Co-PI of the Post Occupancy Evaluation (POE) of Kids Together Park sponsored by the Center for Universal Design in 2005.

She is the co-author of "Well-being by Nature: Therapeutic Gardens for Children" available from *Landscape Architecture Technical Information Series*, ASLA (www.asla.org).

In January 2000, Dr. Cosco co-founded the Natural Learning Initiative (NLI), College of Design NC State University, with responsibilities for design programming and research of outdoor areas for children with and without disabilities.

Before settling in the USA, Dr. Cosco was director of the *National Lekotek Center of Argentina*, an institution that manages a national system of toy libraries and playrooms and runs programs for children with special needs and at-risk youth. She coordinated the development of the design guidelines and specifications for the rehabilitation of the headquarters in Buenos Aires and delivered national and international play-leadership training courses for children with disabilities. In 1995, she trained professional staff for the opening of the *National Lekotek Center of Brazil*, São Paulo.

Carla Radoslovich Delcambre, ASLA, PLA

Associate Professor
Director of the Graduate Program
BA Architecture, UNC Charlotte, 1989
MLA, University of Pennsylvania, 2001
cfdelcam@ncsu.edu

Professor Delcambre holds a Bachelor of Architecture from the University of North Carolina at Charlotte and a Master of Landscape Architecture from the University of Pennsylvania where she was a *Chariman's* Merit Scholarship recipient. While at Penn, she was also a design award recipient for her entry in the Institute of Contemporary Art's rooftop garden competition.

Before coming to North Carolina State University, Carla was a Senior Landscape Designer at the *Olin Partnership* in Philadelphia where she worked on a variety of project types encompassing urban design, master planning and public gardens. She has worked professionally in several states

including Oregon, Pennsylvania, North Carolina and New Mexico on projects ranging from large master planned communities to institutional work and private gardens.

Her passion in 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 and undergraduate design studios and seminars in digital media, urban design, site development and construction. When not teaching, Carla is gardening with her family and furthering her interest in promulgating environmental awareness and interest in young children.

Having traveled extensively across the United States she continues to explore places that orchestrate powerful spaces of discovery.

M. Elen Deming, **FASLA, FCELA**
Director, Doctor of Design
Professor of Landscape Architecture
VP, Research and Information, Landscape Architecture Foundation
BA, State University of New York at Albany, 1976
MLA, Harvard GSD, 1985
MA of History of Art & Architecture, Syracuse University, 1997
Doctor of Design, Harvard GSD, 2001

M. Elen Deming is the *Director for the new Doctor of Design Program* at the College of Design at NCSU. For nearly 25 years she has taught design studios, design history and theory, and research design in landscape architecture and is a sought-after graduate mentor. Most recently, Deming was Professor of Landscape Architecture and former Department Head at the University of Illinois, Urbana-Champaign and, from 1993 to 2008, she taught at SUNY's College of Environmental Science and Forestry in Syracuse, NY.

Deming's research interests are two-fold: history and theory of landscape representation and utopian thought in 20th-century urban design, as well as research design and methodology serving the needs of professional practitioners. These areas of expertise synthesize her studies in humanities, teaching, design practice, and editorial experiences.

From 1985 through 1992, Deming practiced as a professional landscape architect at Sasaki Associates (Boston). She is professionally licensed in three states, has served two terms on the Illinois State Registration Board (2009-2017), and has been recognized by the ASLA for contributions to knowledge in the profession.

Co-editor of Landscape Journal from 2002 with James F. Palmer (emeritus, SUNY ESF), Deming became sole editor from 2006 to 2009. On the basis of work published in the field, she and Simon Swaffield co-authored Landscape Architecture Research: Inquiry/Strategy/Design (Wiley 2011), a framework explaining the breadth of research strategies operating in that discipline. The book was translated into Chinese in 2013 and has been widely adopted as an international standard. Deming is currently working on a series of articles and case studies focusing more broadly on a range of interdisciplinary design research practices in professional firms and agencies.

Meanwhile, Deming has edited a volume of essays called *Values in Landscape Architecture and Environmental Design: Finding Center* (LSU Press 2015) and recently completed *Landscape Observatory* (ORO/AR+D forthcoming 2017), an edited monograph on the design work of regionalist landscape architect Terence Harkness.

Deming has served as President of the Council of Educators in Landscape Architecture (2009-2011 cycle) and twice was selected as Research Fellow for LAF's Case Study Investigation Program in Landscape Performance (2013, 2015). Currently she serves on the Board of Directors of the Landscape Architecture Foundation as Vice President for Research.

Charles Flink, FASLA, PLA

Professor of the Practice and Executive in Residence
MLA, NC State University, 2017
BLA, NC State University, 1982
chuckflink@altaplanning.com

Chuck Flink is widely regarded as one of the nation's leading greenway planners, having completed comprehensive greenway, trail and open space plans for more than 250 communities within 37 States and consulting work in Argentina, Brazil, Belarus, Canada, China, the Czech Republic, Hungary, Japan and St. Croix, USVI. Chuck co-authored two award—winning books, *Greenways: A Guide to Planning*, *Design and Development* and *Trails for the Twenty First Century*.

He has been featured for his work in national and international publications including *National Geographic, Landscape Architecture, LA China, American Planning, Good Housekeeping* and *Southern Living*. Chuck has lectured on the creation of greenways at more than 200 national and international conferences. Chuck and his wife, Marjorie, are sponsors of the *Flink Endowment in Landscape Architectur*e which supports a graduate student Fellowship. For the past four years Chuck co-delivered, with Gene Bressler, LAR 582 *The Landscape Imperative* seminar. In fall 2017, Chuck will deliver LAR 582 *Greenway Planning, Design and Development* seminar. Chuck was named the Department's *2015 Outstanding Professor of the Year*.

Chuck Flink was elected to the American Society of Landscape Architects Council of Fellows in November 2003 and is the *2006 College of Design Distinguished Alumnus*. He currently serves on the *College of Design Leaders Council* and is Chair of the *NC State University Board of Visitors,* which is advisory to Chancellor Woodson and Board of Trustees.

In recognition of a distinguished career as a greenway designer, facilitator, educator, and scholar, Chuck was named recipient the department's *2017 Extraordinary Achievements Award*.

Andrew Fox, FASLA, PLA

Professor of Landscape Architecture and University Faculty Scholar
Co-Director, Coastal Dynamics Design Lab
BGS, University of Michigan 1995
MLA, Louisiana State University, 2001
andrew_fox@ncsu.edu

Andy Fox is a Professor, University Faculty Scholar, Center for Geospatial Analytics Faculty Fellow, and Community Engaged Faculty Fellow. He is also a licensed landscape architect and a founding co-director of the Coastal Dynamics Design Lab (CDDL), an interdisciplinary research and design initiative that addresses critical ecological and community development challenges in coastal regions. Professor Fox specializes in the development and management of high-performing public landscapes, with expertise in natural infrastructure, resiliency planning, community design, and land/water conservation assessment. The programs and projects developed by Professor Fox have been published and presented domestically and internationally.

Professor Fox's work has received more than 50 awards across the realms of teaching, research, design, and engagement. Recognition for his recent projects include but are not limited to a 2018 National ASLA Honor Award for Communications, North Carolina Chapter of ASLA (NCASLA) Awards of Excellence in Analysis & Planning (2019/2018/2015), Honor Awards for Research (2019/2018/2013), and Award of Excellence in Communications (2018). Notable personal honors include election as a 2019 Fellow in the American Society of Landscape Architects, recipient of the prestigious 2016 Award of Teaching Excellence from the Council of Educators in Landscape Architecture (CELA) and the 2018 Virginia Design Medal, selection as a Landscape Architecture Foundation (LAF) 2016 Case Study Research Fellow, the NCASLA President's Council Award (2018), and induction into NC State University's Academy of Outstanding Teachers (2014) and Academy of Outstanding Faculty engaged in Extension (2012).

Daniel A. Howe, FASLA, AICP

Assistant Professor of the Practice
BCP, University of Virginia, 1977
MLA, NC State University, 1985
dahowe@ncsu.edu

Daniel Howe is Assistant Professor of the Practice in the 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 is part of a design team led by

Michael Van Valkenburgh Associates that is developing a master plan for Dorothea Dix Park, a 307-acre former mental hospital campus in central Raleigh.

He was elected to the American Society of Landscape Architects College of Fellows in 2014, and currently serves on the Board of Directors of the *Appalachian Trail Conservancy* and the *City of Raleigh Museum*. He has published articles on such diverse subjects as large landscape conservation, conditional use rezoning, solid state lighting technology and infill development for a variety of national publications and is a member of *Raleigh's Bicycle/Pedestrian Advisory Commission* and the *Wake County Citizens Energy Commission*.

Dan hiked the entirety of the Appalachian Trail, and is an avid cyclist, having completed a bicycle ride of the entire length of the Blue Ridge Parkway, as well as extended bicycle tours across North Carolina, Virginia and Colorado.
In spring semester, he delivers *City Planning and Design – Building Great Communities*, an overview of the interface of the professions of city planning and landscape architecture.

Travis Klondike, ASLA
Assistant Professor of the Practice
CDDL Research Associate
MLA NC State University
BLA University of Kentucky
tmklondi@ncsu.edu

Travis Klondike is a Research Associate at the *Coastal Dynamics Design Lab*, an interdisciplinary research and design initiative housed within the College of Design at NC State University. Travis is also an Assistant Professor of the Practice within the Department of Landscape Architecture at NC State University, and serves as a Faculty Advisor for the NC State University Student Chapter of the American Society of Landscape Architects.

Travis holds a Master of Landscape Architecture from NC State University, and a Bachelor of Science in Landscape Architecture from the University of Kentucky with a minor in Plant and Soil Sciences. Prior to joining the Coastal Dynamics Design Lab, Travis gained professional experience in North Carolina and Colorado and strives to bring that background into his current role within an academic setting.

Much of Travis' teaching, research, and engagement efforts focus on the intersection of: Land and Water Conservation Planning, Hazard Mitigation and Adaptation, Site Analysis and Description, Data Visualization and Graphic Communication, and Pedagogical Enhancement.

Recently Travis was recognized, along with affiliated faculty and students, with multiple awards at the 2019 Southeast Regional ASLA Conference. These include: Award of Excellence in Analysis and Planning: *Lumberton Floodprint*; Honor Award in Research: *Urban Water Rx*; Merit Award in Analysis and Planning: *Greater Princeville*.

Fernando Magallanes, ASLA, PLA
Associate Professor
BSLA, Texas A & M University, 1978
MLA, Harvard Graduate School of Design, 1981
F_magallanes@ncsu.edu

Fernando teaches Landscape Architecture History, Drawing, First Year Experience (Foundation year for Design students in 5 design disciplines), the summer MLA foundations workshop, and MLA design studios. He believes in "methods supporting the teaching of landscape architecture as experiential learning and fitting the societal needs of current practice and era."

He has served as a visiting design critic and juror at the Harvard Graduate School of Design, University of Arkansas, North Carolina A&T, UNC Charlotte Department of Architecture, LA Bash, Southeastern Center for Contemporary Art (SECCA), the Sir Walter Raleigh Awards, the United Arts Council of Raleigh, the NC Arts Council, and the ASLA National Student Awards Jury 2015 and 1991.

Fernando's publications and conference papers focus on various design and cultural topics including Landscape Surrealism, use of analytical drawings in understanding historic landscapes, drawing, urban landscapes, landscape architecture education, interdisciplinary and collaborative professional practice, place making and human behavior, and the works of Mexican designer Luis Barragan. His seminal paper on *Landscape Surrealism* can be found in Thomas Mical's book *Architecture and Surrealism*, 2005. Several of his drawings are published and can be found in Rendow Yee's *Architectural Drawing: A Visual Compendium of Types and Methods*, 2003, and in Uddin, M. Saleh's book *Axonometric and Oblique Drawing*, 1997. He was recently cited in several books: Herrington, S. (2017). Chapter 5 Systems Logic. In *Landscape Theory in Design* (pp. 234–244, 251). London: Routledge and Dixon Hunt, J., Crandell, G., & Hilderbrand, G. (2016). 'The Roots of PWP: Harvard and the Design Revival'. In PWP *Landscape Architecture: Building Ideas* (pp. 26–39, 33). San Francisco: ORO Editions. His most recent paper was presented at NCASLA Conference 2017, Teaching and developing a collaborative mindset: Landscape Architecture studio preparing for the practice.

He has been involved in international travel programs to Santander, Spain; Berlin, Germany; Buenos Aires, Argentina; Mexico City, DF, Mexico; and Prague, Czech Republic. He and his students engage in an empirical method for observing history, landscape environments, design spaces, and a critical basis for design decisions and the making of "place." It is through travels and discussion, experience, drawing, reading the landscape, and walking that he and his students apply developing cognitive skills that heighten the senses and site observation producing design memories.

Fernando has received 9 outstanding teaching awards including the national award for *Outstanding Educator* from the Council of Educators in Landscape Architecture and holds both titles as the *Alumni Distinguished Undergraduate* and *Alumni Distinguished Professor* in the College of Design.

Emily McCoy, ASLA, PLA, SITES AP

Associate Professor of Practice in Landscape Architecture
Landscape Architect at Design Workshop
BS of Ecology, Evolution, and Environmental Biology, Appalachian State, 2002
MLA, NC State University, 2008

Emily McCoy, PLA, ASLA, SITES AP is a landscape architect and researcher at Design Workshop. She recently moved to DesignWorkshop after serving as the Director of Integrative Research and Principal at Andropogon Associates for 11 years.

Emily's passions are rooted in both design and understanding of the natural world, which is reflected in her past educational and professional experiences in design, ecology, and horticulture. As an associate professor of practice at NC State University, Emily strives to contribute to the knowledge base of landscape architecture by exploring the interplay between professional practice and scholarly research. She has worked on such notable projects as the US Coast Guard Headquarters, Washington, DC; Shield Ranch, Austin, TX; Georgia Tech Living Building, Atlanta, GA; and the Thaden School, Bentonville, AR

Emily holds a Master of Landscape Architecture with a concentration in natural resource management and GIS from North Carolina State University; a Bachelor of Science in Ecology and Environmental Biology from Appalachian State University; and has past professional experience as a horticulturist and research assistant in both the design and biology fields. Emily also serves on the Landscape Architecture Foundation's Education Committee, the Advisory Council for the Landscape Architecture Department at NC State University, the Advisory Board of Penn State's Stuckeman School, and is an Awesome Raleigh trustee.

Ben Monette, ASLA PLA, LEED AP

Assistant Professor of the Practice
MLA, NC State University

Ben Monette's 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 is currently an Associate at OLIN in Philadelphia where he leads 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 work professionally, Ben has lectured at the University of North Carolina at Chapel Hill, the University of Pennsylvania, and Philadelphia 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.

Honorary ASLA

Professor of Landscape Architecture
Director of the Natural Learning Initiative
Diploma in Architecture, Bartlett School of Architecture, 1962
Master of City Planning, Massachusetts Institute of Technology, 1966
Robin_moore@ncsu.edu

Robin holds degrees in architecture (London University) and urban planning (MIT), and for most of his career has worked in the field of landscape architecture as educator, researcher, and consultant.

Moore is an international authority on the design of children's play and learning environments, user needs research, and participatory public open space design. His designs for children's spaces in the USA include the well-known Environmental Yard, in Berkeley, California (recipient in 1988 of the *Outstanding Contribution to the Practice of Design Research* by the Environmental Design Research Association (EDRA).

As a design consultant, Moore has been involved in the design of the *Kids Together Park*, Cary; *Blanchie Carter Discovery Park*, at Southern Pines Primary School (featured in the New York Times, October 1999); the *Playspace Family Play Center* in Raleigh; and *Playport* in the Raleigh-Durham Airport. Design projects in Argentina include the *Lekotek Play Library*; *Vilas Racket Club* child and

family center; *Friends Club Adventure Playpark*, and the *Ecological Village*. Currently, he is a public participation consultant to an interdisciplinary team working with the City of Lisbon, Portugal. He was design consultant to the *Chicago Zoological Societ*y for the programming and design and of Explore!, the new children's facility at *Brookfield Zoo*, Illinois; and for the City of Durham for the programming and design of renovations to *Duke Park* as well as the development of the *Durham Parks and Recreation Master Plan*.

As director of the NC State University Natural Learning Initiative, Moore is currently involved in the design and/or renovation of dozens of outdoor spaces for preschools, special education facilities, and schoolgrounds in North Carolina.

Recently completed works include renovation of the outdoor play and learning environments at the *Bright Horizons Family Solutions Child Development Center*, Research Triangle Park. Robin Moore has won many awards for his contributions to the field of design. Countries including Sweden, Japan, and Argentina have honored him, where his work in the design of outdoor play facilities for children and families is used as a model. Moore has many years of international experience in design facilitation and participatory design program development, including the North Carolina Botanical Garden, University of North Carolina at Chapel Hill, and the Museum of Natural Sciences, Raleigh, N.C. Robin Moore is a member of the eight-country Growing Up in Cities action research project sponsored by UNESCO and is co-director of the Buenos Aires and Jordan field projects.

He has lectured in many countries on issues of childhood and environment and responses to those issues through landscape design. Moore is the author or co-author of *Childhood's Domain: Play and Place in Child Development* (1986), *Plants for Play* (1993), *the Play for All Guidelines* (1987), the *Complete Playground Book* (1993), *Natural Learning* (1997), and numerous articles on the use of the outdoor environment by children and youth and families, and their involvement in the planning and design process. He was the principal investigator for the US Access Board update of the Uniform Federal Accessibility Standards for Children's Environments. Professor Moore is past president of the International Association for the Child's Right to Play (IPA), and for twenty years was editor of the IPA magazine, *PlayRights*.

In April of 2016, Professor Robin Moore received the *"2016, Life Time Achievement Award"* from the NC state Department of Parks, Recreation and Tourism Management for his "career long contributions to the field of landscape architecture and design of children's play environments, longstanding support of public parks and recreation, and support of PRTM, the faculty and staff found it fitting that you receive the award this year."

Celen Pasalar, PhD

Associate Professor of Landscape Architecture
Assistant Dean for Research and Extension
BArch, Middle East Technical University
MS Urban Design/City and Regional Planning, Middle East Technical University
PhD in Design, NC State University
Celen_pasalar@ncsu.edu

Dr. Celen Pasalar's expertise involves organizing and promoting numerous design and planning projects for the benefit of communities primarily throughout North Carolina. She received her undergraduate degree in architecture (1997) from Middle East Technical University in Turkey and her master's degree in urban design (1999) from the same university. She has received her doctorate degree from the College of Design, NC State University with a focus on Community and Environmental Design in 2004.

Celen serves Assistant Dean for Research and Engagement, Research and Strategic Thinking, Advanced Landscape Architecture studios and mentors PhD in Design students. In 2016, Celen and students in her advanced design studio were awarded the *2016 National American Society of Landscape Architects Honor Award in the Student Community Service Category for, the "Growing Change Prison Flip"* project. Last year, Celen directed *DesignWeek '18* event for which she was named recipient of the faculty's "Extraordinary Achievement Award."

Celen's research interests involve architectural design, urban design, the relationships between human behavior and the built environment, such as urban streets; public spaces; and educational settings (K-12 school environment, university campus environment). Her research also focuses on community design, downtown revitalization, the role of design and its impact on the quality of life and the natural environment, smart growth, new urbanism, and children's environment.

Celen has been published in the proceedings of conferences such as *Environmental Design Research Association (EDRA)* and *International Association for People-Environment Studies (IAPS).* She also collaborated on research publication "School Building Assessment Methods" (2004) sponsored by *National Clearinghouse for Educational Facilities*, Washington. She is a recipient of the *First Prize Environmental Design Research Association Student Award for Research Project Design* as well as the *College Level Nomination for Nancy Pollock Dissertation Award*.

Pasalar is a registered architect in her home country, Northern Cyprus and active member of the Union of the Cyprus Turkish Engineers and Architects, which is also a member section of UIA (The International Union of Architects). She has practical experience in Turkey, Northern Cyprus, and United States where she worked for various architectural firms and construction companies. Pasalar is an active member of The Honor Society of Phi Kappa Phi (serving also in various committees) since 2002. She also serves as an active member in Appearance Commission at Town of Apex, North Carolina.

Julieta Trevino Sherk, ASLA, PLA
Associate Professor of Horticultural Sciences
MLA and Minor in Horticulture Science, NC State University, 1992
BS in Biology, Meredith College, 1985
jtsherk@ncsu.edu

Julieta earned her Master of Landscape Architecture from NC State University and has been practicing since 1993 and received a Bachelor of Science in Biology degree from Meredith College. She is a licensed landscape architect and an associate professor teaching at the NC State University department of Landscape Architecture in summer session and at her main appointment in the department of Horticultural Science. She was recently named recipient of the prestigious *J. William Fulbright Foreign Global Scholar Grant in Science and Technology Scholarship Award to Mexico* where she will be this academic year.

Julieta teaches studios and lecture classes in Hand and Digital Graphic Communication, Grading and Drainage, Construction Materials and Methods, Plant Identification, and Planting Design. She has chaired and served as a graduate committee member for Master of Horticultural Science and Master of Landscape Architecture at NCSU and for a Master of Science at the UNC School of the Environment and Ecology. She has worked with her graduate students by infusing an evidence–based approach and environmental design research strategies to a variety of landscape studies with local and global impacts, which were documented and published in peer refereed journals. She has coordinated community engagement by executing a variety of service-learning projects with her students across communities in her state, and internationally. This effort has resulted in awards such as the City of Raleigh *Sir Walter Raleigh Awards for Appearance* and the *NC Association of Landscape Architects Merit Award.*

Julieta served on the City of Raleigh Appearance Commission for 6 years and was chair during 2014/15 where she helped to promote community dialogue and foster design excellence that better contributes to the public realm. In her practice JTSLA, she is focuses on the use of artful land form and plants as design elements and believes in the critical role they play in improving and enhancing the human/natural experience. To this end, she is interested in opportunities to improve natural and cultural resources while incorporating living infrastructure such as bioretention gardens, edible and ornamental landscapes that provide co-benefits in people's day to day quality of life.

Gavin Smith, PhD, AICP
Professor of Landscape Architecture
PhD in Urban and Regional Planning, Texas A&M University
Gsmith5@ncsu.edu

Dr. Smith joined the Department of Landscape Architecture at North Carolina State University in January 2019. He holds three degrees from Texas A&M University including a Ph.D. in Urban and Regional Planning, a Master's degree in Sociology and an undergraduate degree in Sociology.

Smith teaches courses focused on natural hazards, disasters and climate change adaptation as part of a new certificate program located in the College of Design. In addition, he will help to coordinate a university group focused on coastal resilience to include identifying interdisciplinary partnerships to

undertake research, teaching and engagement initiatives. Prior to joining the faculty in the College of Design, Smith was a Research Professor in the Department of City and Regional Planning and Director of the Coastal Resilience Center of Excellence, a consortium of more than 25 universities located at the University of North Carolina at Chapel Hill. During his ten years at Chapel Hill, Smith also created and led a 10-credit hour Graduate Certificate in Natural Hazards Resilience and taught at the University of Hawaii at Manoa, Venice International University and served as a guest lecturer at numerous universities in the United States and abroad, including Australia, New Zealand, South Korea, Indonesia, and Hong Kong.

Smith's career has emphasized blending practice, applied research, community engagement, and education. Previous work includes serving as an Assistant Director in the North Carolina Division of Emergency Management where he led the acquisition and relocation of more than 5,000 flood-prone homes, developed a state-wide hazard mitigation planning program that ultimately informed the creation of the national Disaster Mitigation Act of 2000 and served as an advisor to Governor Hunt on policies and programs associated with long-term recovery in North Carolina.

Following Hurricane Katrina, Dr. Smith worked in the Mississippi Office of the Governor, serving as the Director of the Office of Recovery and Renewal. While in this position, he led the development of the concept and wrote policy guidance associated with the 400 million-dollar Alternative Housing Pilot Program, an initiative intended to test the construction and deployment of improved emergency housing alternatives following Hurricane Katrina.

Dr. Smith was appointed as a Senior Recovery Advisor to Governor Cooper and the North Carolina Division of Emergency Management following Hurricane Matthew. In this role, he led the Hurricane Matthew Disaster Recovery and Resilience Initiative, a team comprised of faculty and students from the University of North Carolina at Chapel Hill and North Carolina State University focused on assisting six hard-hit rural communities to tackle planning and design challenges that are not traditionally addressed by federal and state agencies.

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 role, he has served as an advisor to three US Governors, multiple states, more than 100 local governments, and several nations.

Dr. Smith has published numerous book chapters, peer-reviewed journal articles, and technical reports addressing a range of topics including hazard mitigation, disaster recovery, and climate change adaptation. In 2011, Dr. Smith completed the text, *Planning for Post-Disaster Recovery: A Review of the United States Disaster Assistance Framework* (Island Press) as well as several book chapters addressing the linkage between hazards analysis, planning, and sustainable development.   Dr. Smith is the co-editor of the text, *Adapting to Climate Change: Lessons from Natural Hazards Planning* (Springer 2014). His current research focuses on assessing the state of disaster resilient design curricula at US Universities and the role of gubernatorial leadership in disasters.

Rodney L. Swink, FASLA, PLA
Professor of the Practice
MLA, NC State University, 19
Rodney.swink@att.net

Rodney Swink, FASLA, PLA, is a licensed landscape architect and Professor of the Practice in the Landscape Architecture Program. In private practice, Swink is Senior Associate for Planning and Development with *PlaceEconomics*, (www.placeeconomics.com) and its international arm,

Heritage Strategies International (www.hs-intl.com) a Washington, DC-based real estate and economic development consulting firm. *PlaceEconomic*s specializes in services to public and nonprofit-sector clients who are dealing with downtown and neighborhood commercial district revitalization, the reuse of historic structures, and the rigorous analysis of preservation's economic impacts. Heritage Strategies International is a Washington DC-based consulting firm offering international services on the economic evaluation of historic resources and integrating heritage buildings into economic development strategies. Clients include local and national governments, international non-governmental organizations, international development banks and others.

Swink specializes in helping local governments, non-profits, individuals and firms interested in creating better community futures built around a thriving central city and utilizing their historic assets. Having directed the *North Carolina Main Street Program* for twenty-four years, he has first-hand knowledge of the issues facing not only cities and towns but also community organizations concerned about growth and development.

Swink has provided consulting services and guidance to communities and organizations throughout the United States as well as in Bolivia, China, Chile, Abu Dhabi and Saudi Arabia. He led a number of community workshops and provided detailed planning assistance to a series of towns in Cochabamba, Bolivia and he lectured on strategic planning at the Universidad de San Simon. In China he was a member of a team investigating heritage and cultural tourism opportunities in the Kunming Province on behalf of the US/China Arts Exchange. He worked with the Inter-American Development Bank in Chile, the Ministry of Culture and Tourism in Abu Dhabi, and the World Bank Urban Group in Saudi Arabia.

Swink served as *President of the American Society of Landscape Architects* and *Chair of the ASLA Council of Fellows*. He is past Chairman of the Board for Preservation North Carolina and past chair of the *JC Raulston Arboretum Board of Advisors*. Swink is active in other community-based organizations, serving as Vice-chair on the City of Raleigh Planning Commission. He has won numerous state and national awards for his leadership and public service, including the *American Society of Landscape Architects (ASLA) President's Medal* and the *ASLA LaGasse Medal* in recognition of management and conservation of natural resources and public landscapes. An adjunct faculty member of the College since 1997, Swink is a 2004 recipient of the College's *"Wings on Wings"* award and was recognized as its *2004 Distinguished Alumnus*. He also sits on the College of Design Leaders' Council.

Swink serves as *Chair of the Landscape Architecture Accreditation Board (LAAB)* and is active in the Urban Land Institute. He is a member of the American Planning Association, National Trust Preservation Forum, and North Carolina Partners of the Americas.

Jesse Turner, ASLA, PLA
Assistant Professor of Practice in Landscape Architecture
BLA, NC State University, 2004
MLA, NC State University, 2014
jturner@ncsu.edu

Jesse is a landscape architect with more than a decade of professional design experiences built upon the foundation of having grown up in the landscape design and construction industry. He has worked at almost every scale, across two continents, and with a broad range of clients. Throughout his career he has consulted with many nationally known design firms, artists, and institutions in capacities ranging from construction coordination to programming for children's gardens. In North Carolina, Jesse's work is known to be "stunning and environmentally conscious." He was the first designer in the state to work on a certified Sustainable Sites project and is an active member of the Triangle design community. Jesse is a past member of the Cullowhee Native Plants Conference steering committee, which is dedicated to deepening the knowledge of natural systems in efforts to protect and create ecologically sustainable landscapes.

Jesse's professional works include multiple awards and highly visited public landscape architecture projects in places such as Duke Gardens at Duke University, the North Carolina Museum of Art, North Carolina State University, the North Carolina Botanical Garden, and the Minnesota Landscape Arboretum at the University of Minnesota.

His firm, *Lift Environmental Design*, combines design excellence with ecologically sensitive design and evidence-based approaches to problem-solving. His firm's work has been the topic of sustainability case studies, most recently by the *Landscape Architecture Foundation's Case Study Investigation Program* and is known to exhibit high standards of quality and performance.

Jesse has been involved in the delivery of several advanced design studios *including Design Development and Design + Build*.

4 | Accreditation Statement and Degree Requirements

The Landscape Architectural Accreditation Board (LAAB) requires accredited programs to provide reliable information to the public. This information is intended to help potential students make informed application decisions.

Accreditation

The Master of Landscape Architecture program in the Department of Landscape Architecture in the College of Design at North Carolina State University is an accredited professional program and academic unit of the University of North Carolina System. In order to maintain this status, the curriculum is designed to meet both the requirements of the NCSU Graduate School and the Landscape Architecture Accreditation Board (LAAB).

The MLA program successfully completed its last scheduled LAAB accreditation review in January 2016 when the program was awarded a full 6-year re-accreditation through May 2022. The BLA program successfully completed its last scheduled LAAB accreditation review February 2009. The BLA program was phased out over a 5-year period with the last class graduating May 2016.

For more information regarding accreditation and the LAAB, see:
http://www.asla.org/accreditationlaab.aspx

Student Achievement

Degrees Awarded: The program has awarded the following number of degrees over the past five years: (2015-2020).

	2019-20	2018-19	2017-18	2016-17	2015-16
BLA	n/a	n/a	n/a	n/a	8
MLA	15	23	16	14	24

Demographics

Ethnic group/diversity rates and enrollment totals over the past five years: (2014-19)

MLA Race/Ethnicity	2019-2020	2018-19	2017-18	2016-17	2015-16
American Indian/Alaska Native	0	0	0	0	0
Asian	12	20	18	12	25
Native Hawaiian/Other Pacific Islander	0	0	0	0	0
Black/African American	1	0	1	2	2

Hispanic/Latino	2	2	1	3	3
White/non-Hispanic	35	29	32	28	21
Mixed (Two or more races)	0	0	0	2	0
Minority/Unknown	6	2	4	0	0
Total	56	53	56	47	51

MLA Enrollment	2019-20	2018-19	2017-18	2016-17	2015-16
Males	15	24	25	22	24
Females	41	29	31	25	27
Total Enrollment	56	53	56	47	51

Prospective Student Information

Information for prospective students can be found on the following websites:

Master of Landscape Architecture Program Admissions Information:
https://design.ncsu.edu/admissions/masters/

Landscape Architecture Homepage:
https://academics.design.ncsu.edu/departments/academics/landscape-architecture

Financial Aid and Scholarship:
http://studentservices.ncsu.edu/your-money/financial-aid/

NCSU Graduate School Requirements

The NCSU Graduate School administers graduate education at NC State University. The MLA program conforms to the requirements and policies of the NC State Graduate School. Students and faculty are directed to the Graduate School's Administrative Handbook.
https://grad.ncsu.edu/students/rules-and-regulations/handbook/

Chapter 3, Matriculation to Graduation of the Graduate Handbook describes requirements for a Master's degree in a designated field such as Landscape Architecture as follows:

A number of departments and programs offer Master's degrees in designated fields. These are professional degrees and do not require a thesis.

Requirements include the following a minimum of 30 semester hours of graduate work in the degree program (unless the specific program requires more hours).

MLA Program Degree Requirements

In order to meet accreditation standards, the MLA curriculum exceeds the minimum 30 semester credit hour requirement for a master's degree from of the NCSU Graduate School. The MLA curriculum requires from 30-82 credit hours depending on the Track you are in.

- MLA candidates must successfully complete an *Oral Examination*.
- A comprehensive written examination is <u>not</u> a requirement for the MLA degree.
- A thesis is <u>not</u> a requirement for the MLA degree, but the department does require a final advanced studio, either faculty led or self-directed.

5 | Curriculum

Overview

(Please refer to Introduction, "About NC State Landscape Architecture" that describes the mission and goals of the MLA curriculum.)

The curriculum is designed to fulfill the program's mission and each of the following objectives:

1. To develop excellence in design processes and skills that lead to the creation of landscapes of benefit to society and the environment;

2. To learn, develop and apply the core content of the profession that includes landscape architectural history, theories and precedents, technologies and materials, natural and cultural systems, and communications and inquiry media;

3. To learn and apply methods to engage independent research and design investigations based upon rigorous, original, and creative thinking, which lead to the completion of a definitive self-directed design project or advanced design studio project;

4. To acquire a working knowledge of the institutional framework within which the design process occurs;

5. To engage in service activities using methods that apply to and extend course work, research and creative work to real world situations; and

Within the context of NC State University's land grant mission, the MLA program fosters an individual's sense of responsibility to society as a steward of the cultural and natural environment. Graduates of the MLA program understand the profession of landscape architecture, its role in society, and their potential role in the profession.

Core Values

Our Core Values reflect the passions of students, faculty and the design community concerning interdependence of human health, wellbeing, and the ecological health of the land.

- We are committed to understanding the consequences of human action on the land and responding with community-based design strategies and solutions;
- We are dedicated to teaching, research, and engagement activities that inspire design processes respectful of human interdependence within social, ecological, and economical systems; and
- We share a sincere appreciation for each student and for one another predicated upon understanding that students learn to design in different ways based upon each student's unique interests and capabilities.

Program content

Influencing program content, delivery, and the lenses through which outcomes are assessed are the views of the faculty along with those of our students, alumni, local practitioners, the external advisory

council, and other constituents. The faculty, however, is ultimately responsible for identifying the knowledge, skills, and abilities that students are expected to possess upon graduation. Specific curriculum and course content and its delivery are continually evaluated and revised in response to new knowledge and practices that evolve from research activities and professional practices, and our relationships with external constituents and stakeholders.

The current curriculum builds upon previous experiences and iterative changes. 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 be agile. Curriculum integration occurs because of deliberate internal coordination efforts by the program faculty and student input. The structure of the curriculum provides opportunities to collaborate, offer, and test new courses that respond to timely interests of faculty, students, the college, and the university.

The curriculum is divided into two parts:
- The first year and a half is highly structured to ensure that students are grounded in: the fundamentals of landscape design; site planning and design; design development and construction documentation; landscape dynamics; grading, drainage and site systems; plants and planting design, history of landscape architecture; design research and strategic thinking; drawing and digital media; and GIS applications in landscape architecture.

- The second half of the curriculum provides opportunities for advanced study and research in the core areas that include:
    - landscape architectural theory and criticism,
    - advanced digital media
    - landscape performance and metrics
    - environmental social equity
    - international studies
    - planning
    - contemporary issues in landscape preservation
    - professional practice and ethics,
    - internships,
    - independent studies,
    - advanced inquiry based topical design studios
    - design studios and/or courses offered by other academic units in the College and University, and free elective courses. In addition, all MLA students are required to undertake *MLA Oral Examination* in their last semester of study.

As nice and neat as the curriculum appears to be, not all students matriculate in exactly the same way depending on when they actually entered the program, and, if prior course work qualifies them for advanced standing. We therefore provide recurrent advising to help guide students with their individual matriculation path in concert with their professional and scholarly interests.

In addition, in the fall of their second year, students participate in a required *Progress Towards Degree Advising Review* with the Department Head/Director of the LAR graduate program (DGP) to reflect upon their academic performance and discuss both immediate and longer-term academic matriculation and career plans. Rising third year students are required to meet with the Department Head/DGP to review procedures required for graduation such as their specific *Plan of Work* and other documents.

MLA Track III Curriculum

First Professional LAAB Accredited Degree

82 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 + Environmental Planning Studio
	LAR 520 (3)	Environment + Culture	LAR 527 (3)	Landform, Grading + Environmental Site Systems
	LAR 582.017, LAR 582.018, LAR 582.019	Intro to Adobe Suite, Intro to AutoCad, Intro to 3D Modeling	LAR 582.001 (3)	LA History Graduate Seminar
	LAR 582.012 (3)	Landscape Architecture Immersion		
	15 credit hours required		**12 credit hours required**	
Second year				
LAR 523 (2) Landscape Architecture Plant Identification	**LAR 503 (6)**	**Design Development + Construction Documentation Studio**	**LAR 506 (6)**	**Design + Build Studio**
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 Env. Design and LA
	Varies (3)	Free Elective(s)		
4 credit hours	**12 credit hours required + 3 free electives**		**12 required**	
Third year				
Open for free electives	**LAR 507 (6)**	**Advanced Topics in LA + Env. Planning Studio**	**LAR 507 (6)**	**Advanced Topics in LA + Env. Planning Studio** or **Independent Project**
	LAR 534 (3)	Landscape Architecture Theory + Criticism	LAR 545 (3)	City Planning + Design
	Varies (3)	Free Elective(s)	Varies (3)	Free Elective(s)
	9 credit hours required + 3 free electives		**9 credit hours required + 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 Standing, 48-70 credit hours*

This curriculum is designed for:

1. *Graduate students with prior degrees in landscape architecture, architecture, or related design programs that are not LAAB accredited.*
2. *Graduate students obtaining concurrent degrees in Architecture, Urban Design or Urban Planning.*

*IMPORTANT NOTE: This is a sample curriculum. The actual required courses, number of studios (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)	**Landscape Architecture Introduction Design Studio**	**LAR 502 (6)**	**Site Design + Environmental Planning Studio**
		LAR 520 (3)	Environment + Culture	LAR 527 (3)	Landform, Grading, + Environmental Site Systems
		LAR 517 (3)	GIS Applications in Landscape Architecture +Env. Planning	LAR 582.001 (3)	LA History Graduate Seminar
		LAR 582.012 (3)	Landscape Architecture Immersion		
		15 credit hours required		**12 credit hours required**	
Second year					
LAR 523 (2)	Landscape Architecture Plant Identification	**LAR 503 (6)**	**Design Development + Construction Documentation Studio**	**LAR 507 (6)**	**Advanced Topics Studio in LA + Env. Planning or Independent Project**
LAR 524 (2)	Landscape Architecture Planting Design	LAR 528 (3)	LA Construction Materials and Methods	LAR 550 (3)	Landscape Architecture Professional Practice
		Varies (3).	Free Elective(s)	LAR 545 (3)	City Planning + Design
				LAR 540 (3)	Landscape Architecture Research Methods
4 credit hours required		**12 credit hours required**		**15 credit hours required**	
Third year					
Open for free electives		**LAR 507 (6)**	**Advanced Topics Studio in LA + Env. Planning**		
		LAR 534 (3)	Landscape Architecture Theory + Criticism		
		Varies (3)	Free Elective(s)		
		12 credit hours required			

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

MLA Track I Curriculum

Post Professional Degree

This curriculum is designed for graduate students <u>with</u> prior <u>LAAB accredited</u> degrees in landscape architecture.

Curriculum A

This program is for graduate students with an LAAB Accredited degree in landscape architecture who are <u>not</u> licensed landscape architects.

48 Credit Hours

<u>Studios, 18 credit hours</u>

LAR 507.001	Advanced Topics Studio in LA + Env. Planning	6 credit hours
LAR 507.002	Advanced Topics Studio in LA + Env. Planning	6 credit hours
LAR 508	LAR Design Research Project	6 credit hours
OR		
LAR 507.003	Landscape Architecture Advanced Topics Studio	6 credit hours

<u>Seminar Courses, 30 credit hours</u>

LAR 540	Research Methods in Env. Design + LA	3 credit hours
LAR 630	Independent Study	3 credit hours
varies	Curriculum area, advised and/or free electives	24 credit hours

Curriculum B

This program is for graduate students with an LAAB Accredited degree in landscape architecture who <u>are licensed landscape architects</u>.

30 Credit Hours

LAR 540	Research Methods in Env. Design + LA	3 credit hours
LAR 508	LAR Design Research Project	3 credit hours
Varies	Curriculum area, advised and/or free electives	24 credit hours

Grading Policies

Grading is based on each student's sincere, consistent, productive, and positive effort. Students will be graded using a letter scale and determined on the basis of attending each field visit, actively participating in class discussion sessions, and the completeness and quality of all assignments. 400 and 500 level courses are letter graded A through F; 600 level courses are pass/fall. Please refer to specific course syllabus for detailed explanation of how grades are determined.

Attendance and active participation are mandatory. Unless prearranged with the instructor, all absences will be considered *unexcused*. Each unexcused absence may constitute a reduction of one (1) letter grade from your final course grade; habitual tardiness will lower your grade at the instructor's discretion. Excessive absences (3) and/or tardiness may result in an automatic failing grade in the course.

Please notify your instructors if you have a medical condition or extenuating circumstances (i.e. death of an immediate family member) that results in your absence from a class meeting. Students are expected to attend all studio classes and are responsible for all material covered during class meetings.

Distractions

Use of cell phones and other communication devices is prohibited during class time unless the professor states otherwise. Students using any chat or peer-to-peer software or text messaging will be asked to leave class, and you will be counted as absent for the entire class session.

Academic Integrity

Graduate studies require intellectual rigor, honesty, and creative processes. All work must be original and created by you. Citing all references (with proper credit given to the author) is mandatory. Cheating of any kind and failure to adequately cite references is a serious offence and will be treated as such. Familiarize yourself with the *NC State Code of Student Conduct* and with

academic integrity standards in America, as they may differ from those in other universities or countries.

Any student who violates the *NC State Code of Student Conduct* i.e., plagiarism (including design plagiarism), cheating, etc. will automatically receive a failing grade (F) for the semester, will be immediately removed from the course, and will be reported to the appropriate departmental, college and university authorities where they may be subject to additional disciplinary actions.

For more on this, and the Code of Student Conduct, please review North Carolina State University's policies in your student handbook, or at the following websites:

https://studentconduct.dasa.ncsu.edu/academic-integrity-overview/

and

https://studentconduct.dasa.ncsu.edu/code/

Supporting Fellow Students with Disabilities

"Equal opportunity is the foundation for success. The *Disability Services Office* works collaboratively with students, faculty, and staff to help create an inclusive educational environment for students. Reasonable accommodations are provided by faculty to access course content and/or demonstrate learning when the design of the educational environment prevents equal participation." -DSO Website

We want to ensure that you get the help that you need to succeed in the MLA program. For more information about your rights and resources available to you, please contact the Disability Services Office: https://dso.dasa.ncsu.edu/

Supporting Fellow Students in Distress (NC State CARES)

As members of the NC State Wolf Pack Community, we share a personal responsibility to express concern for one another and to ensure that this classroom and the campus as a whole remains a safe environment for learning. Occasionally, you may come across a fellow classmate whose personal behavior concerns or worries you. When this is the case, you are encouraged to report this behavior to Student Behavioral Case Management at NC State (also known as NC State Cares): https://prevention.dasa.ncsu.edu/nc-state-cares/about/. Although you can report anonymously, it is preferred that you share your contact information so they can follow-up with you personally.

Student Evaluation of Faculty

Students are given the opportunity to formally evaluate course instructors at the end of each semester. Online evaluations will be available for students to complete during the last two weeks of class. Students will receive an email message directing them to a website where they can login using their Unity ID and complete evaluations. All evaluations are confidential and anonymous and, therefore, have no impact on your final grades.

Evaluation website: https://oirp.ncsu.edu/classeval/

More Information about ClassEval: https://oirp.ncsu.edu/classeval/about-classeval/

You are also encouraged to speak to us at any time with responses, suggestions or feedback – positive or negative, but always constructive. It is important to maintain good communications. Please bring up any concerns privately, or, if necessary, publicly with the entire class.

Student Help Desk: classeval@ncsu.edu

6 | Curriculum Areas and Course Sequences

This section describes the MLA curriculum areas and the required and elective courses within each area. Please refer to the curriculum Tracks presented in Chapter 4, Curriculum.

The Department maintains an official syllabus for each course. Included are the course description, statement of learning outcome objectives, course schedule and requirements, performance/grading policies, and readings. In addition, each semester a descriptive, more specific, and updated syllabus is prepared for each course and distributed to the entire faculty and student body. Courses are continually revised and improved in response to changes in practice, departmental resources and opportunities, and student needs.
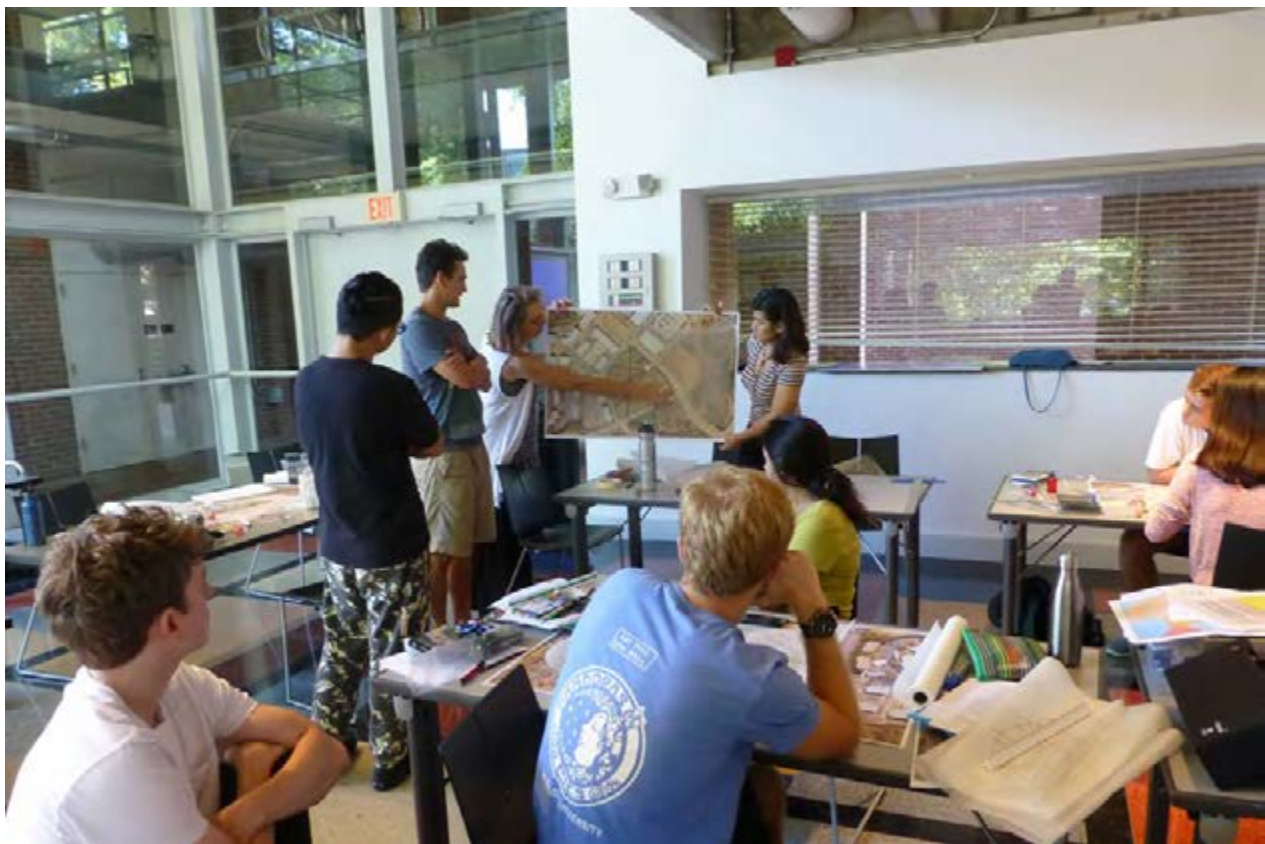
1 | The Design Studio Sequence – 24 - 36 credit hours required

The MLA curriculum requires students to complete 4-6, 6-credit hour studios. For the typical student, this means taking a studio in each of the four to six semesters in the Tracks II and III programs. Design studios are hierarchically sequenced. They 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 placed 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. Design media, history and theory, site works, research and professional practice are integrated threads woven within all studio venues at levels appropriate to specific studios.

Core Studios:

LAR 501, 6 credits, Landscape Architecture Introduction Studio: first year, fall semester.

Introduction to landscape architectural design thinking processes and applications that include: site analysis, post occupancy user studies, programming, site planning, elementary site grading, graphic representation (drawing, model making, digital graphics), verbal communication, and criticism and reflection.

By the end of this course, students will be able to:

● Study, describe, and evaluate how people use landscapes;

● Produce a Project Definition Study that identifies and describes design issues, affected constituents, and situations/problems to be addressed in the planning and design of landscapes;

● Analyze non-complicated, 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 non-complicated sites and considers sustainable design practices, and strategies for site development including grading, drainage, planting and landscape dynamics;

- 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 in which students explore and experiment with many alternative ways to solve design problems, evaluate their ideas, learn from their successes and errors, and develop their own approaches to design. Students are strongly urged to work in the studio. "Design is something you cannot do in isolation."

LAR 502, 6 credits, Site Design and Environmental Planning Studio, first year, spring semester.

Strategies, principles, and methods for designing and evaluating resilient ways and means to fit an intensive development program(s) on challenging, regionally specific sites. This design studio is integrally linked with courses LAR 527- Landform, Grading, and Environmental Site Systems.

By the end of this course, students will be able to:

- Identify and model site development program requirements and inter relationships for a given design situation;
- Analyze site specific and contextual conditions within and surrounding subject site(s) that includes: collecting and managing appropriate data, and analyzing/modeling potential development opportunities/constraints as related to various program elements, their relationships, and other site planning and design considerations;

- Design and evaluate alternative general development plans considerate of public health, safety, and well-being including but not limited to: program functionality; environmental and cultural conditions; sustainable design practices, and implementation (grading, drainage, storm water management, planting and landscape dynamics);

- Refine and test site planning and design ideas at higher levels of resolution;

- Deliver competent verbal and graphic presentations (including computer modeling/rendering, hand drawing, and physical models) that effectively communicate one's ideas; and

- Receive and deliver constructive criticism from and to peers, faculty, practitioners, and other constituents.

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

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

Site planning design refinement from conceptual schematic design through to the preparation of technical landscape architectural construction plans and details.

Building upon previous coursework, students are given a relatively small site, typically less than one acre, on which to develop a design for an urban open space. Students will learn to refine their respective design proposals to a level sufficient to generate construction documents including grading, layout, and planting plans and an array of construction details. Landscape architecture practitioners are invited into the studio on several 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. Students apply both hand drawn and computer-generated methods in design and presentation.

By the end of this course, students will be able to:
- Demonstrate knowledge of landscape architectural construction materials, methods, and implementation to actual project situations;

- Develop a landscape architectural site planning and design project through various phases including conception and schematic design, design refinement and preparation of industry standard construction document;

- Research landscape construction material fabrication, dimensions, and finishes, and how to convey precise instructions to the contractor/craftsman

- Recognize and evaluate inter relationships between existing site conditions, proposed program functions, site grading, drainage, planting, and construction methods associated with the design built works of landscape architecture;

- Define principles of sustainable landscape architecture construction and green building practices and technologies, including life cycle analysis of materials and products;

- Apply various communication and representational methods including written, oral, drawing, physical and digital modeling and representation to explore, test, develop, and communicate design ideas;

- Identify simultaneous processes of evaluation during project development including but not limited to: governmental approvals, permitting, cost estimates, construction sequencing, written specifications, contracts, and construction administration;

- Receive and deliver constructive criticism from and to peers, faculty, practitioners, and other constituents; and

- Explain the value of built works of landscape architecture in the context of public health, safety, and well-being.

Concurrent courses delivered this semester include: LAR 528 LA Construction Materials and Methods and LAR 514, GIS Applications in Landscape Architecture and Environmental Planning.

LAR 506, 6 credits, LA Design + Build Studio: second year, spring semester

"Design and implementation of sustainable construction practices for low-impact system landscape installations that respond to degraded environmental conditions."

By the end of this course, students will be able to:

- Create environmentally responsive solutions through project conception, design development (refinement and detailing), and installation;

- Utilize research resources to inform the everyday decision-making processes found within the practice of landscape architecture;

- Integrate technical considerations within functional and attractive design solutions in order to satisfy all related project requirements (course/code/regulatory);

- Evaluate various Design + Build viewpoints, approaches, and research found in related fields of study and/or professional practice(s);

- Accurately evaluate, apply, design, construct, and maintain sustainable site features;

- Increase both performance proficiency and efficiency related to the successful completion of project goals and deadlines; and;

- Explain the value of built works of landscape architecture in the context of public health, safety, and well-being.

LAR 507, 6 credits, Advanced Topics Studio in LA and Environmental Planning, fall or spring semester

> "Advanced engagement, emphasizing research, development and application of experimental and best practices, on current and emerging landscape architectural topics of increased complexity. LA Advanced Topics Studios integrate, apply, and reinforce materials including history and theory, site works, modeling and representation, research methods, and professional practice delivered in LAR subject area courses."

LA Advanced Topics Design Studios are inquiry focused. Upon completion of these courses students will be able to apply important professional practices, venture into emerging areas, test and evaluate known practices, and literally experiment with emerging design theories or technologies that advance knowledge and capability of the profession. These studios 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, brown field re-development, sustainable design, 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.

The LA Advanced Topics Design Studios require 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.

By the end of the course, students will be able to:

- Design, apply, and evaluate strategic research methods applicable to landscape architecture project situations of varying types, complexities, and scales;

- Apply skills to formulate, experiment, and test alternative design strategies and evaluate potential resultant outcomes;

- Receive and deliver constructive criticism from and to peers, faculty, practitioners, and other constituents;

- Deliver competent verbal and graphic presentations (including computer modeling/rendering, hand drawing, and physical models) that effectively communicate one's ideas;

- Evaluate and apply lessons learned from the study of relevant case study precedents;

- Apply various communication and representation skills, including written, oral, and analog and digital media, as appropriate, to develop, test, present, and exchange their work; and

- Explain the value of built works of landscape architecture in the context of public health, safety, and well-being.

Elective Design Studios:

LAR 504, 6 credits, LA International Design Studio: third year, fall semester

"Application of design thinking processes in landscape architectural design situations resident within a host international urban venue. This is a studio course for Landscape Architecture students studying abroad."

In 2005, the College of Design Prague Institute in the Czech Republic was founded. It has since become the *NC State European Center in Prague* open to other academic units. Students, coming from the United States, Asia, South America, and the Middle East, will experience landscapes of a unique European city rich in history that offers countless examples of urban design encompassing several centuries' growth from which to study and learn.

This urban design-oriented studio engages students with the complex environment of Prague, the "stone city," with its dense historic central core surrounded by large parks and planned communities from the communist era. Students will develop their design thinking and research capabilities to synthesize, generate, and evaluate alternative design interventions and precedents that address "landscape imperatives" associated with environmental and cultural factors and relationships shaping urban landscapes.

Studio subjects may address current significant urban issues such as:

- Integration of green urban infrastructure into the urban environment such as integration of existing large park lands with the business, residential, and historic fabric of the city;
- Development of an accessible waterfront as an open space resource;
- Development of pedestrian networks within the city; and
- Connections of the city to the surrounding open space resources;

By the end of this course, students will be able to:

- Identify customs, mores, and places resident within host venue; and describe landscape design problems and the issues that confront a designer when working in a culture other than their own;

- Apply skills to interpret and depict the structure and relationships of the environment and formulate strategies to visualize, design and evaluate potential design outcomes;

- Apply methods to examine how contemporary interventions may become part of the cultural fabric and the natural systems of the city;

- Apply representational methods and verbal skills that communicate planning and design concepts and solutions; and

- Navigate and live within a foreign land.

The studio instructor(s), conversant in the cultural and natural factors and relationships influencing urban design, will engage students in situations that challenges them to apply and expand their research, design thinking, analysis, ideation, representation, and critical evaluation knowledge and skills.

LAR 508, 6 credits, Design Research Project (DRP), fall, summer or spring semesters: requires Department Head approval <u>and completion of LAR 697, Design Research Project Independent Study.</u>

"Independent research in a specific area of landscape architectural design with the requirement that the research be integrated and applied within a landscape architectural design context; provides opportunities for a student or team of students (up to 4 people) to engage in independent inquiry leading to the completion of a definitive scholarly, research-oriented landscape architectural design project. Requires consent of department head or DGP."

The expectation is that the research be integrated and applied within the context of a landscape architectural design application. 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 eager to continue their education at a PhD level or possibly pursue a career as a university instructor should consider undertaking this option.

By the end of this course, students will be able to:
- Define the central problem, question, or situation to be examined through design inquiry and application;

- Identify a substantial body of supportive materials that will inform the project;

- Formulate and implement a strategic plan for design inquiry including timelines, resource, and expected deliverables;

- Reflect and adjust the research strategic plan as new information such as data, criticism, theory, and/or finding informs the situation;

- Explain inquiry methods, design processes, and outcomes addressed and derived from design inquiry utilizing written, graphic, and verbal methods and media, as appropriate;

- Deliver public presentation(s) and respond to questions/comments to and from professional peers, constituent stakeholders, and others utilizing diverse media as appropriate;

- Evaluate the usefulness and efficacy of design inquiry theory, methods, and tools in landscape architectural design situations;

- Receive and deliver constructive criticism from and to peers, faculty, practitioners, and other constituents;

- Evaluate and apply lessons learned from the study of relevant case study precedents;

- Explain the value of landscape architecture in the context of public health, safety, and wellbeing.

LAR 508, Design Research Project (DRP) requires 3 courses over 3 semesters consisting of:
- LAR 540 (3), Applied Research and Strategic Thinking, required of all students, typically taken in the fall 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.

Eligibility:
- The completion of <u>design studio</u> courses totaling a minimum of 30 credit hours, or as approved by the department head.

- An accumulated GPA of 3.50 or greater.

Procedure to initiate a Design Research Project (DRP):
- Students wanting to pursue the DRP are required to submit an *Application of Intent* to the department head 30 days prior to start of the semester in which the LAR 697, <u>DRP Independent Study</u> is planned to commence. The LAR faculty member who agrees to mentor the student during this subsequent Independent Study must sign the *Application of Intent*.

- Within 10 days of receipt of the *Application of Intent*, the department head will call a meeting with the student and the faculty mentor to discuss the student's scholarly intentions and the department's expectations for the DRP. The faculty member and department head and, if appropriate, other faculty will discuss any concerns about authorizing the student to proceed with the DRP Independent Study. Granting approval to proceed with the Independent Study does not automatically constitute the Faculty's automatic approval of the DRP. The student must satisfactorily complete DRP Independent Study as described below:

LAR 697, DRP Independent Study is a prerequisite for undertaking LAR 508. This involves the preparation of a written *Project Proposal* that:

- Defines the central problem, question, or situation to be examined through design inquiry and application;

- Identifies a substantial body of supportive materials (research) that will inform the project; and

- Delineates the strategic plan of action for undertaking the design research project including timelines, resources, and expected deliverables.

The *Project Proposal* is to consist of the following contents:

- An <u>Abstract</u> of no more than 200 words that succinctly states the principal question or questions to be studied in the DRP.

- A <u>summary of the research</u> to date including field work, data gathered, analyses, listing of maps and photographs of the site, as well as other relevant site or project information supporting the validity of the inquiry, etc. Key contacts or reference persons outside the University should also be listed with their area of expertise.

- A <u>bibliography</u> of references.

- A<u> detailed description</u> of the proposed DRP scope of work including:

  o The topic and the imperatives motivating this work.

  o The problems or themes to be addressed, hypotheses to be tested, question or questions, and/or design project to be undertaken.

  o The intended <u>scope of work and milestones</u> with anticipated dates and products to be completed in the DRP.

The DRP Committee will consist of 3 faculty members: the chair, (a landscape architecture faculty member) and two other faculty, who may include part time faculty from within the university and professional practice. The chair of this committee must approve all proposed committee members who reside outside the Department of Landscape Architecture.

Approval to proceed with the DRP:
The chair of the student's DRP Faculty Committee and the department head (and other LAR Faculty, if appropriate) will review *DRP Project Proposal* at the end of the semester in which the DRP Independent Study is undertaken and notify the student of its findings and recommendations. If approved, the *DRP Project Proposal* will stand as the document guiding subsequent work unless it is modified in progress with the consent of the student's DRP Faculty Committee. It is expected that engagement of the DRP begins in the semester immediately following approval of the DRP Proposal. DRP Proposals requiring additional work will be reviewed on an individual case basis up to the beginning of the next semester when the DRP begins.

Students whose proposals are not approved will be advised to register for another design studio option in order to meet graduation requirements.

The DRP Faculty Committee is responsible for monitoring the student's progress during the semester in which the DRP is undertaken. Students are required to meet with the DRP faculty committee at least three times during the semester during dates to be specified by the committee chair. The committee chair may require the student to make formal presentations during these meetings.

Upon completion of the DRP (typically at the end of the semester) the student(s) will make a formal public presentation to faculty and peers. The DRP Faculty Committee will evaluate the work and issue a final grade. The grade of I-Incomplete (IF/IW) may be given only in the event of extenuating circumstances such as illness of the student or in the family, death in the immediate family, national emergencies, and the like, as specified in grading policies delineated by the NCSU Graduate School.

The final product, including graphic materials, must be submitted in a hard copy form and signed by the student and each member of the DRP Faculty Committee prior to Commencement. Within 10 days thereafter, the student shall submit 5 bound copies of the DRP (committee members, department, college library) to the DRP Faculty Committee chair.

2| The Representation and Modeling Sequence

Verbal, hand drawn, and digital graphics communications, as well as history and theory, site works, research and professional practice are integrated threads woven throughout the MLA curriculum. All design studios and seminar courses incorporate and assist students with learning and applying written, verbal, and graphic (both hand drawn, and computer generated) communication skills.

Required courses include:
- LAR 582.017, .018, .019 (3 credits) Intro to Adobe Suite, Intro to AudtoCad, Intro to 3D Modeling
- LAR 517, (3 credits) GIS Applications in Landscape Architecture

Additional elective courses:
- LAR 515, (3 credits), Advanced Digital Design Media
- LAR 582.011 (3 credits), Computational Design and Parametric Modeling
- Students may take various modeling and representation courses including those delivered by other academic units (architecture, graphic design, industrial design) in the College.
- LAR 582: Special Topics courses, TBA

Required Courses:
LAR 582.017-.019, 3 credits, Intro to Adobe Suite, Intro to AudtoCad, Intro to 3D Modeling, first year, fall semester

"Digital modeling and representation methods, applications and production using two and three-dimensional digital design media; this course is integrally linked with LAR 501, Landscape Architecture Introduction Design Studio."

By the end of the course, students will be able to:
- Apply various 2D and 3D digital design tools such as AutoCad, Rhino, and the Adobe Suite in elementary landscape architectural design situations;
- Manage file structures;
- Critically evaluate distinctions between technical and illustrative graphics for use in different representational application contexts;
- Produce elementary image animations; and
- Deliver verbal and visual presentations using the digital applications.

LAR 517, 3 credits, GIS Applications in Landscape Architecture and Environmental Planning

second year, spring semester

"This course introduces GIS analytical tools and methods as an integral part of the creative iterative design process from initial due diligence through conceptual design."

Topics for this course include social and demographic analysis, terrain modeling, hydrological modeling, view shed analysis, map overlay analysis, network modeling and how to relate it to Landscape Architecture, 3D visualization, and rapid prototyping.

Topics are taught utilizing applications in ArcGIS and AutoCAD Civil 3D. QGIS will also be reviewed for raster-based analysis.

By the end of this course, students will be able to:

- Apply GIS principles and technologies pertaining to modeling and analysis in two and three dimensions as an integral part of the creative design process;
- Design conceptual and logical models to structure and generate landscape architectural design solutions that link creative abstraction, computational exploration, structured decision-making, and expression; and
- Create GIS workflows as part of an iterative design process linking 3D GIS, 3D modeling, and visualization.

LAR 515, 3 credits, Advanced Landscape Architecture Digital Design Media: third year, fall and/or spring

> "This is an elective course in the curriculum's digital media sequence that builds upon and expands knowledge of and capability with principles and applications in 3D modeling and representation, digital rendering, and other forms of representation for visualization of existing and proposed site conditions and design concepts in diverse landscape architectural applications."

Advanced Digital Media for Landscape Architects provides access to tools and techniques that will help students develop a relationship between their design work and their ability to communicate cohesive, illustrated, design perspectives, and theory. The course will expand existing knowledge of software interoperability and focus on creating/refining routines to be used in preparation of graphics for landscape architecture visualization. By engaging multiple forms of written and visual representation, students will explore methods that facilitate describing and representing their design ideas.

Students will refine graphics prepared in previous courses and integrate current project work as the semester progresses. Precedent studies will: focus on building understanding of the variety of graphic conventions used in current practice; develop a library of graphic styles and conventions; and develop/apply new skills in our own work. New trends in computer interface technology including the use of touch screens and virtual reality will be discussed. Class meetings will be half forum and

half lecture/instruction. Each student will create a portfolio of work organized in a "clean and concise document" that can be used for job interviews after graduation.

By the end of this course, students will be able to:

- Utilize digital design media to define, articulate, and illustrate the student's design concept
- Increase proficiency with hand graphics and digital graphic software applications
- Evaluate strengths/weaknesses of digital media programs in landscape architecture applications; and
- Understand workflow and select appropriate digital media software to be used for desired outcomes.

LAR 582: Special Topics courses, TBA

3| The Site Works Sequence – 13 credit hours required

Site Works refers to the array of courses traditionally associated with the core of landscape architectural practice in the areas of site analysis, ecological design, site planning, 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' 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 knowledge of these areas. Material covered in Site Works is explicitly applied and reinforced in the design studios at all levels.

Required courses in the Site Works sequence include:
- LAR 520, (3 credits) Environment and Culture
- LAR 523, (2 credits) LA Plant Identification
- LAR 524, (2 credits) LA Planting Design
- LAR 527, (3 credits) Landform, Grading, and Site Systems
- LAR 528, (3 credits) Construction Materials and Methods

Elective courses include:
- LAR 582, Special Topics TBA
- Students are also encouraged to seek Site Works related courses offered in other academic units in the university.

Required courses:

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

"An integrative approach to human + natural systems, specifically the dynamic forces that act upon, alter, and give meaning to landscapes. The dynamics of ecological scale, function, spatial structure, and human ecosystems interaction will be examined through lectures, field trips, case studies and theories that operate at a variety of scales."

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 includes 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.

By the end of this course, students will be to:

- Interpret ecological design principles according to landscape systems as required to develop socio-environmentally responsive designs;

- Critique and evaluate landscape architectural design from an ecological perspective;

- Identify and utilize research methods in topic areas that connect: theory to practice, large-to small-scales, and initial site assessment to life-cycle management; and

- Formulate wide-range of questions and issues related to landscape dynamics.

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

> "Introduction to the vocabulary and methods necessary to identify ornamental plants in the built landscape. The course is structured around the understand of the taxonomic tools necessary to identify plants. "

Students will develop a 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 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.

Over 100 plant species and cultivars, most of which are within walking distance of the College of Design, will be introduced. Several off-campus field trips will be 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.

By the end of this course, students will be able to:
- Identify the common cultivated, native, and introduced plants species found in the built landscape;

- Create a reference plant list to be used as a planting design palette;

- Explain the morphological characteristics of plants in the landscape, in order to identify specific plants;

- Identify scientific and common name of approximately 160 plant species;

- Identify a plant using botanical keys and other botanical references for plant identification; and

- Utilize reference resources for plants identification.

LAR 524, 2 credits, Planting Design Applications in Landscape Architecture: summer following first year.

"Introduction to theories, practices, and implications associated with the diverse uses of plants in landscape architectural design applications considerate of functional, ecologic, aesthetic, economic, maintenance, health, safety, welfare, and other factors."

By the end of the semester, students will be able to:
- Apply design processes including analyzing existing conditions, developing programs, and applying the appropriate planting design process, grounded in the art as well as the science principles of horticulture, that are sensitive to the expression of place, and the evolution of plant material changes over time;

- Identify general types of plants and their use in design (ground covers, and small, medium and large shrubs and tree);

- Identify general plant cultural characteristics such as hardiness, growth rate, sun exposure requirements, soil requirements, habit, and other key design characteristics like scent, light quality, texture color, scale, space, proportion, form, massing and seasonal changes;

- Apply a level of artistic expression in the landscape using plants as elements for an overall ecological artful composition;

- Apply research skills which enable appropriate response to planting design project scale and scope;

- Apply the skills necessary in the preparation of professional level planting plans, planting construction details and specifications using design strategies on projects with varied scopes and scales with the primary goal of protecting the safety, health and well-being of the general public; and

- Distinguish the methods necessary for the management and evaluation of designed landscapes and natural processes that impact them, and be familiar with landscape management practices that ensure long term success of the landscape

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

"An introduction to site grading and drainage, slope analysis, landform representation and processes, and site development best practices required for landscape architectural site planning and design applications."

The course is structured around case studies examples 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. Discussed will be the immediate and longer-term issues, practices, and consequences associated with balancing land use and functionality needs with landforms, soils, and surface water hydrologic conditions as critical factors affecting the long-term resilient site design.

By the end of this course, students will be able to:

- Apply theories, current and emerging technologies, and best professional practices required for grading and drainage processes used to reshape the earth's surfaces, influence functionality, and water infiltration and runoff in landscape architectural applications including, but not limited to:

- Landform representation and interpretation

- Site analysis

- Fundamental principles of watersheds and surface water runoff

- Contour manipulation

- Slope calculations formulas and their applications

- Cut and fill calculations

- Preparation of technical documents in accordance with best management practices

- Environmental and functional constraints and opportunities that determine site development decisions

- Relationships involving site design and site grading and drainage

- Approaches to storm water management

- Horizontal and vertical road, trail and path alignments

- Production of plans, cross sections, and 3 dimensional physical models that represent proposed grading practices.

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

> "An introduction to landscape architectural construction materials, methods and documentation, and implementation practices including best professional practices, current and emerging technologies, strategies, and applications."

LAR 528 is offered during the fall semester in tandem with LAR 503, Design Development/Construction Documentation Studio and before the spring LAR 506 Design + Build Studio. Together, these 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.
By the end of this course, students will be able to:

- Select and specify one or a combination of materials, based on aesthetic and structural considerations, from the vast array of currently available products as well as recycled material for use in landscape architectural applications;

- Make specific decisions about fabrication, dimension, texture, and finishes, and how to convey precise instructions to the contractor/crafts people;

- Identify and evaluate relationships between site grading and drainage and the built environment and understand how to perceive design in an integrated way;

- Interpret simultaneous processes of evaluation during the development of a project; governmental approvals, permitting, cost estimate, construction sequencing, written specifications, contracts and construction administration; and

- Integrate principles of sustainable landscape architecture construction and green building techniques, including life cycle analysis of materials and products.

Elective courses:

LAR 582: Special Topics courses, TBA

4| The History, Theory and Criticism Sequence – 6 credit hours required

History, theory, and criticism are pervasive threads woven throughout the entire MLA curriculum. It is a central element of all design studios and subject area courses.

Two courses are required:
- LAR 582.001, (3 credits) History of Landscape Architecture Graduate Seminar
- LAR 534, (3 credits) Landscape Architecture Theory and Criticism.

Available elective courses:
- LAR 634, (3 credits) Contemporary Issues in Landscape Preservation
- LAR 582.xx, (3 credits) Special Topics: Contemporary Landscape Architecture
- LAR 582.xx, (3 credits) Special Topics: Environmental Social Equity in Design
- LAR 582.xx, other special topics courses.

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 Graduate Seminar: first year, spring semester

"Students learn the range of landscape styles and historical thinking within landscape architecture. Course requirements include exams and papers in which students demonstrate growth in their understanding of history. The course requires a final paper and physical model of an historic landscape. Upon completion of this course students will have a mastery of historic landscape styles, vocabulary, and significant concepts and figures of each era."

LAR 534, 3 credits, Landscape Architecture Theory and Criticism: third year, fall semester

"This course introduces the pervasive principles, concepts, movements, and applications influencing landscape architectural planning and design. Utilizing a case study approach the course explores various theoretical underpinnings of the profession. The final project requires students to critically examine an "iconic" work of landscape architecture, submitting a written paper and delivering a formal presentation."

By the end of this course, students will be able to:
- Identify, evaluate, and apply theories, bodies of knowledge, and places informing landscape architectural practice; and

- Demonstrate understanding of landscape theory and criticism through the use of oral, and visual presentations;

- Engage in debates to demonstrate ability to critique built works of landscape architecture and design from various points of view.

Elective Courses:

LAR 535, 3 credits, Environmental Social Equity and Design, second/third year, spring semester, open to non-majors

"This course explores disparities in social mobility, equity, and environmental justice and how design thinking operating in the built environment can bridge these trends. This seminar will increase student experience with the principles of environmental justice and social equity in the context of design and community engagement while focusing on trends affecting environmental and human health in the built environment with an emphasis on emerging issues in Durham, North Carolina."

This course will use blended educational strategies including include lectures, small group activities, field study, community engagement, individual assignments, and peer-reviews of course work. Major topics framing course themes will occur in class through lectures and discussions. As needed, in-class workshops will be conducted by the instructor and others to build technical skills and project capacities.

By the end of this course, students will be able to:
- Describe historic and contemporary environmental and social equity issues in the built environment;

- Communicate issues and opportunities presented by existing frameworks and methods for evaluating design engagement impacts on issues of environmental and social equity;

- Use archival research tools for evaluating built environmental issues;

- Gather original data and utilize analytical tools for evaluating built environmental issues; and

- Demonstrate the ability to utilize democratic design tools for engaging stakeholders in evaluating and transforming the built environment.

LAR 582: Special Topics courses, TBA

5| The Research Sequence – 3 credit hours required

Research is a pervasive thread woven throughout all courses in the MLA curriculum. The faculty are expected to pursue a rigorous research/scholarly agenda as part of their tenure and post tenure appointments. Their research is reflected in the courses they teach.

One course is required:
- LAR 540, (3 credits) Research and Strategic Thinking

Available electives include:
- LAR 582.601, (3 credits) Environment and Behavior for Designers
- LAR 543, (3 credits) Landscape Performance and Metrics
- LAR 630, (3 credits) Independent Study
- LAR 697, (3 credits) Design Research Project Independent Study

Students are also encouraged to seek research-oriented courses offered by other academic units in the college, the university, and from other universities in the area (UNC Chapel Hill and Duke University.)

Required:

LAR 540, 3 credits, Research and Strategic Thinking: second year, fall semester, open to non-majors.

"This course introduces students to the basic research tools used in landscape architecture situations and explores a variety of historic, current, and emerging research methodologies applied in landscape architecture and other areas of graduate studies and professional design practices."

By the end of this course, students will be able to:
- Interpret and evaluate the physical environment in relation to its social, political, economic, environmental, cultural and scientific contexts. Research and critical reflection are integral part to achieve this learning outcome;
- Assess the strength and weaknesses of various methodological approaches and field research techniques relevant to landscape architecture; and
- Students will know how to apply various research tools systematically in a range of situations and places.

LAR 543, 3 credits, Landscape Performance and Metrics, Second/third year spring, open to non-majors.

"Concepts of tools and methods to measure and integrate considerations of landscape performance including environmental, economic/life cycle, management, social, and aesthetic factors in landscape architectural applications."

By the end of the course, students will be able to:

- Evaluate and utilize concepts, tools, and methods of landscape performance including environmental, economic/life cycles, management, social, and aesthetic considerations in landscape architectural design situations;

- Integrate concepts of sustainable/resilient design, from concept design to landscape management, in landscape architectural design situations; and

- Conduct a landscape assessment.

LAR 582: Special Topics courses, TBA

LAR 630, Independent Study, (3 credits), all semesters

LAR 697, Design Research Project Independent Study, (3 credits), Third year all semesters. Please course description under LAR 508, Design Research Project.

6| The Planning Sequence – 3 credit hours required

The required course in this sequence is:

- LAR 545, (3 credits), City Planning and Design – Building Great Communities

Elective courses offered by the Department of Landscape Architecture include:
- LAR 544, (3 credits), Contemporary Issues in Landscape Preservation
- LAR 546, (3 credits), The Landscape Imperative

Required course:

LAR 545, 3 credits, City Planning and Design – Building Great Communities: third year, spring semester, open to non-majors.

"This course explores the history and heritage of city planning and design in an ever-urbanizing world, the legal underpinning and practice of the tools of planning in the US - comprehensive planning, zoning, infrastructure planning and design guidelines, environmental and social challenges for an urban planet, and the procurement of planning and design services, both from the perspective of the hiring entity as well as from that of the consultant."

By the end of the course, students will be able to:

- Analyze the historical context in the wake of the Industrial Revolution during which the professions of landscape architecture and city planning were created and evolved through the Twentieth Century, and identify the key figures and movements in the professions over this time;

- Illustrate one's knowledge of the American philosophical, legal and procedural framework that governs the use of land in urban environments, how it is changed and altered in growing urban areas;

- Demonstrate an understanding of the concepts used by planners such as Frederick Law Olmsted and others through the development of physical solutions in public spaces that address not only aesthetic and functional, but broader social, legal, political and symbolic objectives; and

- Interpret how community design works in contemporary cities, how development is governed, how a vision of the future city is created in a democratic process and embedded in its policies and regulations, and how design professionals and public managers can navigate this world to have powerful impact on the future urban realm

Elective courses:

LAR 544, 3 credits, Contemporary Issues in Landscape Preservation, offered fall semester, open to non-majors.

> "An examination of how local governments organize themselves to deal with the conservation and protection of areas of acknowledged cultural value or scenic/aesthetic character as well as the respective roles of federal, state, and local governments in these efforts. Particular attention will be given to understanding the recent past in preservation efforts. "

This lecture/seminar course features class discussions, guest lecturers and out of class assignments supplemented by readings. Students will have the opportunity to meet professionals across the preservation and development disciplines. There will also be field trips to observe and discuss preservation practices in a contemporary setting.

By the end of this course, students will be able to:
- Identify historic preservation and conservation laws, policies and practices as applied to the local, regional and national levels;
- Evaluate opportunities to become engaged in historic preservation and conservation efforts;
- Explain how local and state preservation programs function;
- Interpret contemporary preservation and conservation issues relevant to the design and development professions; and
- Consult with professionals involved in preservation and conservation efforts in government and non-profit positions.

LAR 546, 3 credits, The Landscape Imperative, offered spring semester, open to non-majors:

> "This course explores the 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 consists of lectures, discussions, and student presentations. Students will write short papers, participate in debates, and deliver oral/visual presentations."

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. The population, currently at 9.7 million, is projected to increase to more than 13 million by 2030. The impact of this population growth on North Carolina's natural and constructed resources will be significant, affecting land and water resources, air quality, transportation, and urban footprint. Projected growth and impact will not be uniform across the state, as some geographic areas will see dramatic physical changes, while others may remain unchanged despite the population surge."

By the end of this course, students will be able to:

- Demonstrate understanding of research that defines and informs findings and recommendations for addressing future land planning, design, and development strategies;
- Evaluate and synthesize complex information pertaining to demographics, natural systems, gray and green infrastructure and urban form;
- Define the complex topics addressed in the seminar in both oral and written form in a concise and coherent manner; and
- Demonstrate the importance of landscape architecture's role in addressing the public's health, safety, and welfare through oral presentations.

7| The Professional Practice Sequence – 3 credit hours required

Considerations of professional practice weave through the entire curriculum by virtue of the participation of landscape architect practitioners in all studio and subject's courses. Practitioners from the both the private consulting and public realms serve as critics, present lectures, deliver a number of core and elective courses, and meet with students and faculty in many informal contexts.

The required course in this sequence is
- LAR 550, (3 credits) Landscape Architectural Professional Practice

Available electives are:
- LAR 650, (3 credits) LA Internship
- Students may also take Professional Practice related courses offered by other academic units.

Required course:

LAR 550, 3 credits, Landscape Architecture Professional Practice: third year, spring semester, open to non-majors.

"Exposure to the full range of practice opportunities in landscape architecture with an overview of career opportunities in the public (federal, state, and local) and private sectors as well as in non-

traditional and emerging roles. The course emphasizes landscape architecture practice, primarily in the U.S. but also abroad, professional ethics, business practices, regulatory issues, and the legal framework within."

By the end of this course, students will be able to:

- Identify the range of opportunities to practice landscape architecture in the public, private and non-traditional settings;

- Apply ethical concepts to landscape architectural professional practice;

- Explain professional licensure, legal responsibilities, and liability issues as related to the practice of landscape architecture; and

- Distinguish, analyze, and discuss various forms of professional landscape architecture management and business practices.

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. The major areas covered by this course include development of the profession's core values, related theories and a survey of the techniques and methods of their development. The course format includes lectures, discussion, student presentations, guest speakers, possible office visits and topical site visits. Students receive an overview of U.S. landscape architecture history, professional ethics, the language and jargon of the profession, business practices, and the legal framework within which landscape architects practice. Students will write short papers and deliver short oral presentations as a means to reinforce and practice written and verbal communication skills.

Elective courses:
LAR 650, 3 credits, Landscape Architecture Internship: any semester

"Supervised field experience in landscape architecture office, related design office, or governmental agency. Students work in an office or agency for up to 12 hours per week. A daily work journal and final paper summarizing the work experience are required."

The department encourages students to complete an internship within a professional landscape architectural, architectural, or civil engineering (private or governmental) organization. Students will gain knowledge of and appreciation for the practices of landscape architecture.

By the end of this course, students will be able to:

- Evaluate and apply various procedures and processes of professional practice, where appropriate, in their future work endeavors;
- Explain the value of landscape architecture practices from the points of view of health, safety, and welfare;
- Identify areas of personal professional strength and weakness;
- Generate examples of their own professional accomplishments for future reflection and portfolio use.

Students seeking an internship experience are instructed to initiate a relationship with a potential (landscape architectural) practice. The student and the prospective employer should discuss the potential internship experience with the goal of identifying and defining the work to be undertaken and performance expectations. <u>It is the responsibility of the student to develop and submit to the department head a Work Plan that describes the work to be performed and the anticipated products or outcomes during the internship.</u>

Internships may be paid or unpaid. Any question about remuneration must be resolved between the student and prospective employer. The University shall in no way become party to or be involved in remuneration issues. An internship earning 3 credit hours in one semester requires a minimum of 112 hours of work. The student is required to maintain log sheets documenting hours worked.

Internships are graded Pass/Fail. 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.

International students wishing to complete an internship, for credit or just for experience, must contact the Office of International Services. During the academic year, students wishing to complete an internship will likely need to get approval for their Visa Status. Optional academic semesters, such as summers, may also require additional authorization. If you are an international student, you should always contact OIS for more information regarding how work may affect your immigration status. For more information about the typical approval process for F-1 students, visit the following website.

https://internationalservices.ncsu.edu/curricular-practical-training/

LAR 582: Special Topics courses, TBA

7 | MLA Oral Examination

MLA students, in both the First Professional and Post Professional MLA programs, are required to pass the *MLA Oral Examination* in their final semester of matriculation. The exam is administered by the faculty of the Department of Landscape Architecture in accordance with the policies of the Graduate School. Written by the landscape architecture faculty, the exam is intended to validate the students' understanding and competence in applicable situations requiring critical design thinking processes. Responsibility for implementation and compliance of the *Oral Examination* with the NCSU Graduate School resides with the Department Head/Director of the LAR Graduate Program (DGP). Prior to taking the exam, students must complete, submit, and receive Department and Graduate School approval on their *Graduate Plan of Work*. Once approved, the Graduate School authorizes the Department to proceed with conducting the examination.

Purpose:
The purpose of the *Master of Landscape Architecture (MLA) Oral Examination* is to prepare graduating MLA students in their final semester to clearly and persuasively communicate their design approaches as they move on into post-graduation work.

MLA students are required to make a verbal presentation of their own project work to the faculty summarizing how their work reflects mastery of inquiry, landscape architecture theory, history, and practice through responses to faculty-derived questions.

Learning Objectives:
The specific learning objectives driving the *MLA Oral Exam* includes positioning students to:

1.   Define a <u>landscape architecture imperative</u>:
Successful *MLA Oral Exams* clearly communicate a landscape architecture imperative that drove the student's final 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.* <u>This emphasizes the student's work to date, but</u> also <u>anticipates work to be completed in the future.</u>

> **<u>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</u>**.

2.   Communicate <u>landscape architecture design strategies</u>:
Successful *MLA Oral Exams* clearly communicate landscape architecture design strategies 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 result in effective landscape architecture-led strategies present in their own project design work**.

> **<u>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.</u>**

Outcomes:
The outcomes of the *MLA Oral Exams* are based on the quality of student presentations. Students will make brief presentations in response to the questions (below) and respond to questions from the faculty.

Potential outcomes include:

Unconditional Pass: The student successfully responded to both questions and demonstrated mastery of key concepts experienced in the MLA Curriculum.

Conditional Pass: The student was partially successful responding to both questions, will be required to respond in writing (maximum one-page justification of changes) to committee criticism of their presentation, and submit their revised *MLA Oral Exam* presentation to the committee chair within 5 days of their initial Oral Exam. Review of the revised presentation and written statement by the committee chair will determine satisfactory student response to faculty feedback and will provide evidence demonstrating mastery of the key concepts experienced in the MLA Curriculum and result in a Pass.

Fail: The student unsuccessfully responded to one or both questions and did not demonstrate a mastery of the key concepts experienced in the MLA Curriculum. In the case of a Fail, the MLA student will be dismissed from the MLA Program.

Preparation and *MLA Oral Exam* Process
Students are strongly encouraged to a) create a one page outline of their proposed oral exam and b) schedule a meeting with their committee members and/or other advisors for feedback prior to making their final presentations.

Successful *MLA Oral Exams* require professional oral and visual presentations that are delivered clearly and within the time allowed. Students are strongly encouraged to rehearse their presentations in advance with colleagues, faculty, and others.

Students are allocated a total of 20 minutes to deliver to the faculty a formal verbal/graphic presentation that responds to both questions.**; time management is up to the student**. A 20-minute question and answer period will follow. At the end of 40 minutes, the student presenter will be dismissed to enable faculty to discuss and evaluate the student's performance. The student will then be recalled to receive the faculty's findings.

Within 24 hours of passing the exam, students are required to submit a digital copy of their presentation to the MLA Director of Graduate Programs.

Following are the two *MLA Oral Examination* questions.

Question #1: What is Your Landscape Imperative?

Landscape architects have developed a body of knowledge with design theories and concepts that address important societal imperatives.

Identify one imperative as well as related theories or concepts that you find particularly important to historic, contemporary, and future research and practices. Choose a topic about which you are passionate—the imperative should be an area of landscape architecture that you believe is a potential pathway toward your continued career development.

Explain how this imperative, and its associated concepts have been applied in your design project work. Use your final project work to illustrate your experience with attempting to pursue landscape architecture design through the lens of the driving imperative. Provide and appropriately document evidence that describes the potential outcomes of the application and reflect on its value. Speculate on how the theories or concepts related to the imperative could be modified through future exploration, testing, and/or application.

Question #2 What is Your Landscape Architecture Design Strategy?

Communicate to a lay audience (a group having little understanding of a specialized profession like landscape architecture) the process/strategy by which you pursue your current design studio 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: How has the body of knowledge of landscape architecture informed your strategy?

Explain how your process reflects a defensible approach to the design situation, issues, and mission addressed.

Evaluation Rubric for Spring 2020 LAR Oral Exams

The student demonstrates…	*none*	*weak*	*adequate*	*strong*	*excellent*	*Notes field*
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 processes						
Professional comprehension of design process, technical skill, and representation						
Empathy for users and stakeholders evident in principles of diversity, equity, and inclusion						
Understanding of landscape performance based on imperative and/or studio work						

8 | Computer Requirements

NOTE, MAY 2020: Due to COVID-19 response, students need to be prepared for the potential of all courses being online. Expect some courses to be online anyway. Minimum specifications are required to complete course assignments off-campus.

Landscape Architecture graduate students must have their own computer by the Fall Semester of their first year.

The Department of Landscape Architecture requires all students to own a computer that, at a minimum, meets the specifications listed below. We strongly recommend students purchase a Windows computer and Windows-associated hardware.

Students who already own a Mac or choose to purchase a Mac need to consider the following—**Mac computers require dual-boot capabilities to run software commonly found in our curriculum** (i.e., AutoCAD, ArcGIS Pro, Rhino, etc.). In this circumstance, students should 1) increase the size of the hard drive be-cause it is partitioned (split) to accommodate both Mac and Windows operating systems and 2) complete the following steps:

- Learn how to dual boot.
- Learn how to move back and forth between operating systems.
- Learn how to manage files in a dual-operating-system environment.
- Acquire and mount the Windows-based software that will be required to complete their degree requirements.

WolfPack Outfitters sells some computers based on Design IT staff recommendations here. The benefits of purchases from Wolfpack Outfitters ensure education discount pricing, optional third party warranties and the fact that profits go to university scholarship funds.

Please read the College's Student Computing Requirements Information page for general information before spending money on computer hardware or software.

We recommend that your computer meet or exceed the specifications below. A computer with greater ca-pability (processor speed, RAM, disk capacity) and expandability will be more likely to continue to run required software in later years of college.

This chart provides minimum recommendations for students purchasing new computers. Software re-quirements are listed at the bottom of the chart. Additional specialized software may be required in other courses, as determined by the instructor. Students may consider the purchase of other software to support their particular goals and learning styles.

Windows Computers

Components	Windows Desktop	Windows Laptop
CPU (Processor) or Model	Any model using Intel Core i7 or newer processors. Should meet current Lumion system requirements.	
System RAM	16 GB minimum. Students who intend to pursue coursework in advanced GIS or 3D modeling courses should upgrade to 32 GB minimum.	
Hard Drive (Storage)	512 GB SSD or 750 GB/7200 RPM minimum, more preferred	
Monitor/Display	21" or larger, 1920×1080 resolu-tion or better.	15" or larger (second external monitor recommended)
Graphics Processor Unit (GPU) *Should have a discrete GPU.*	Should meet current Lumion system requirements. 6GB video memory or more. No integrated graphics processors.	

Components	Windows Desktop	Windows Laptop
Operating System	Windows 10 Pro Edition 64-bit (Not "Home" version)	
Audio	100% Windows compliant sound card	
Network Adapters	Wi-Fi adapter may be included. Built-in RJ-45, CAT 6 cable rec-ommended for faster connections in studio.	Wi-Fi normally included. Wired ethernet adapter and CAT 6 ether-net cable recommended for faster connections in studio.
External Hard Drive for Back-ups	An external drive at least as large as your computer's internal drive for backing up your computer	
Warranty Service	Minimum 3-year onsite parts and labor or third-party loss/ damage coverage	

Components	Windows Desktop	Windows Laptop
Software Be sure to check for educational discounts through the College of Design or Wolfpack Outfitters. Many Autodesk products are available free through Autodesk's Education Community. Information for obtaining a free student license of Windows 10 Pro is available here. Additional software may be required for certain courses.	• **Microsoft Office 365** (free for NCSU students) • **Autodesk AutoCAD 2020 or late** • **Adobe Creative Cloud**	

Macintosh Computers

Components	Macintosh Desktop	Macintosh Laptop
CPU (Processor) or Model	iMac, iMac Pro, or Mac Pro, any current model	MacBook Pro, any current 15″ or 16″ model
System RAM	16 GB minimum, more preferred	

Components	Macintosh Desktop	Macintosh Laptop
Hard Drive (Storage)	512 GB SSD or 750 GB/7200 RPM minimum, more preferred	
Monitor/Display	21" or larger (Monitors from oth-er vendors will work with Apple computers.) iMacs include a built-in 5K monitor.	15" or 16" (second external moni-tor optional, but recommended) Monitors from other vendors will work with Apple computers.
Graphics Processor Unit (GPU) *Should have a discrete GPU.*	6 GB VRAM or more. Avoid integrated graphics processors.	
Operating System	Mac OS X version 10.14 or later	
Audio	Standard on Macintosh	
Network Adapters	Wi-Fi and Wired ethernet adapter included. CAT 6 ethernet cable recommended for faster connec-tions in studio.	Wi-Fi is included. Wired ethernet adapter and CAT 6 ethernet cable recommended for faster connec-tions in studio.
External Hard Drive for Back-ups	An external drive at least as large as your computer's internal drive for backing up your computer	
Warranty Service	3-year AppleCare Protection Plan or third-party loss/damage coverage	

Components	Macintosh Desktop	Macintosh Laptop
Software Be sure to check for educational dis-counts through the College of Design or [Wolfpack Outfit-ters](). Many Autodesk products are avail-able free through [Autodesk's Educa-tion Community](). [Information for ob-taining a free student license of Windows 10 Pro is available here](). Additional software may be required for certain courses.	• **Microsoft Office 365** (free for NCSU students) • **Adobe Creative Cloud** **If you want to run both Mac OS X and Windows on a Mac, you will also need:** • **Microsoft Windows 10 Pro Edition** (in addition to Mac OS X) and Windows compatible software of your choosing. (You do not need to have the same software applications for both operating systems.) • **Autodesk AutoCAD 2020 or late** *Autodesk AutoCAD for Mac is available, but does not have all the fea-tures of AutoCAD for Windows.*	

Questions?

The College's Information Technology staff will be glad to go over purchase choices or answer any relat-ed questions. You can send an email to design_help@ncsu.edu or use [this form to contact the College In-formation Technology staff]() with specific information about your problem.

9 | Distinctive Educational Opportunities

Students are encouraged to work closely with the Department Head/DGP, and the faculty to pursue an area(s) of expertise related to their special interests and background. Opportunities to concentrate one's studies in a particular area extend to elective coursework, graduate certificates programs, graduate minors and dual/concurrent degrees, independent study with a specific instructor, and the final advanced studio.

Graduate Minors and Certificates

Graduate Minors and Certificate programs are available through many departments in the NCSU Graduate School.

Graduate minors are available to all students and consist of nine credit hours of courses in 400-level or above in another graduate degree granting discipline. A member of that degree's faculty may serve as a third member of the student's final project committee.

Graduate Certificate Programs offered in GIS, Public Policy, and Horticultural Science may be of particular interest. Please visit the Graduate School website for more information.

http://www.ncsu.edu/grad/degree-programs/degree-links.php

There is also a Certificate of Accomplishment in Teaching (CoAT) that is offered through the Preparing Future Leaders programs. See the website for more details.

http://www.ncsu.edu/grad/preparing-future-leaders/index.php

The following describes two interdisciplinary Graduate Certificate Programs presently offered in the College of Design that are specifically targeted for landscape architecture and architecture students:

- The Graduate Certificate in Disaster Resilient Policy, Engineering and Design
- The Graduate Certificate in City Design
- The Graduate Certificate in Public Interest Design

Graduate Certificate in Disaster Resilient Policy, Engineering and Design

The imperative motivating the *Graduate Certificate in Disaster Resilient Policy, Engineering and Design* 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 to adapt to a changing climate. The aims of the certificate reflect the NC State vision of "Think and Do", to include using evidence-based information, assessing existing policy constraints and opportunities, and visually depicting examples of policy achieved through good planning, engineering and design.

Program Coordinator

Professor of Landscape Architecture Gavin Smith, PhD, AICP
North Carolina State University
(919) 606-5578
gsmith5@ncsu.edu

Program Overview:

 The aims of the certificate reflect the NC State vision of "Think and Do", to include using evidence-based information, assessing existing policy constraints and opportunities, and visually depicting examples of policy achieved through good planning, engineering and design.

Technical knowledge to be obtained and applied by students in this graduate certificate program include:

- Visualization of varied policy options;

- The critical assessment of existing and proposed natural hazards, disaster and climate change adaptation policies

- The development of scenario-based governance strategies, interdisciplinary problem solving spanning architecture, building sciences, engineering, landscape architecture and land use planning

- Understanding hazard mitigation (risk reduction) and disaster recovery, to include its connectivity to climate change adaptation

- And applying policy, design and engineering concepts to these issues.

Graduate Certificate in City Design

The *Graduate Certificate in City Design* is a joint certificate program between the School of Architecture and the Department of Landscape Architecture in the College of Design at North Carolina State University. Professor Robin Abrams, FAIA, ASLA coordinates this Certificate Program.

Program Coordinator:
Professor of Architecture Robin Abrams
Brooks Hall 214
North Carolina State University
(919) 513-4841
robin_abrams@ncsu.edu

Program Overview:

"We have reached a significant turning point in the planning and design of American cities. It is now an accepted fact that American culture has moved into the post-automobile era, which has major ramifications for the design of cities. This is largely due to three factors: 1) a major study published in the New England Journal of Medicine linking the high rate of cardio-vascular disease in America to the way American cities are designed - to discourage walking and failing to promote healthy lifestyles; 2) the sprawl of American cities has reached a point where it is no longer possible to develop raw land within a reasonable commute to the city center; and 3) a significant shift in American lifestyles away from the nuclear family, requiring increased diversity in housing provision. These factors have caused a widespread renewal of interest in center city redesign/ redevelopment on the part of architects, landscape architects, urban designers, city planners and the property development community. Revitalization of the nation's urban infrastructure is a key element of the federal administration's incentive package."

The *City Design Certificate* requires students to undertake a nine-hour course sequence comprised of a theory and skill-based workshop (3 hours) and a city design studio (6 hours). They will take an additional six hours of elective courses, as described below.

Intent of Graduate Certificate Program:

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 at an urban scale. This is accomplished through a 15-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 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 program's objectives are to:

- Engage the human condition, particularly in making significant urban places;

- Design integrated systems of movement, with increased accessibility;

- Promote a greater mix of and association of uses and amenities within a well-scaled urban fabric, bringing a fuller sense of equity to the city;

- Foster new opportunities for energy production, collection, and saving at the local scale;

- Define new means of "greening" the city;

- Capture greater senses of identity, meaning, and quality within the city fabric; and

- Promote interdisciplinary and inter-university studies between departments at NC State and between NC State and the Department of City and Regional Planning at UNC Chapel Hill.

Full requirements for the Certificate in City Design can be found at:
https://design.ncsu.edu/academics/architecture/city-design-certificate/

Public Interest Design Certificate

Introduction:

Public Interest Design is a participatory and issue-based design practice that places emphasis on the "triple bottom line" of sustainable design that includes environmental, economic, and social challenges across the world. Public Interest Design seeks to broaden access of the benefits of design to all of the general public. By connecting the design process to global issues, *Public Interest Design* helps further establish the public value of design to a broader audience and provides designers with a larger platform to affirm the value of all the design disciplines.

The built and natural environments, including the spaces in which we live and work, the products we consume, and the messages we receive, have a powerful impact on how we function in society. Good design requires attention and sensitivity to social, economic, political, cultural and behavioral issues. The aim of all curricula at the College of Design is to develop the designer's perception, knowledge, skills and problem-solving abilities in order to prepare students for a successful career – and life. *Public Interest Design* provides one area of study that links design education and professional practice with the knowledge and skills to address global issues.

The strength of *Public Interest Design* at the NCSU College of Design extends back into the late 1960's, with a recognized history of community-based service through the teaching legacies of many faculty. This certificate would allow the College of Design to build on past leadership in public service and to strengthen the institution's role as a global leader in Public Interest Design. Both the millennial generation and current practitioners desire the knowledge of how to use their design education and professional skills to serve the public meaningfully.

This certificate allows the College of Design (COD) to further align its research, education and outreach activities with the strategic plans of the university. The proposed certificate aligns with the following stated goals from *Pathways to the Future, NCSU Strategic Plan*, 2011-2020: "We see an educational institution that nurtures graduates ready to enter productively into society with skills, an inquiring mind, global awareness, and a sense of social responsibility." The Plan includes:

- o Applying innovative solutions to societal problems at the local, state, national and global levels.
- o Facilitating interactions among extraordinary minds engaged with complex real-world problems.
- o Promoting an integrated approach to problem solving that transforms lives and provides leadership for social, economic and technological development across North Carolina and around the world.

Program Intent:
The graduate level certificate program in *Public Interest Design* will provide education in this rapidly emerging field. The curricular content, which is research, classroom and field based, educates students and professionals in how to use design to address a range of critical challenges that communities face in the world. This is an opportunity to further align the teaching, research and outreach of all the design departments of the College of Design with the mission of the University. This certificate would capitalize on NCSU's past leadership and current faculty, as well as join the growing cultural momentum to provide expanded public service.
The programs objectives are to educate students to:

- analyze precedents of how Public Interest Design is and can be a meaningful part of professional practice;
- describe one model of professional practice in public interest design;
- identify public need for design that can address community challenges;
- determine a design project's social, economic, environmental impact on a community;
- document stakeholders and assets that can address project challenges;
- use a step-by-step process of working with a community as a design partner; and
- apply a collaborative process with multiple stakeholders.

Market for Graduates:

Public and pro bono services are an integral part of the Architecture and Landscape Architecture professions. The motivation to "improve quality of life in communities" has been documented as the second main reason that people enter the profession of architecture. In 1996, Ernest L. Boyer and Lee D. Mitgang conducted a survey of architecture students and asked the following:[1]

Please rank the most important reasons for entering the architecture profession:
- o Top reason given: *Putting creative abilities to practical use:*
  44% gave as first reason for entering the profession of architecture.
- o Second most often reason given: *Improving quality of life in communities*
  22% gave as first reason for entering the profession of architecture.

If we combine these top two reasons, we arrive at a working definition of Public Interest Design: "the desire to improve quality of life in communities" by "putting creative abilities to practical use."

Two more recent surveys, one of American Institute of Architects members and another of a sample of students at the Harvard Graduate School of Design, document the current strong interest for a public-based practice.

Certificate Program Coordinator:

Bryon Bell, Associate Professor
College of Design
North Carolina State University
919-637-2804
bbell@ncsu.edu

Full requirements for the Public Interest Design Certificate can be found at: https://design.ncsu.edu/public-interest-design-certificate/

Research and Extension Opportunities

Students have many opportunities to apply their academic experiences and work on projects associated with faculty research and the College's Extension office. The LA department has a long-

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[1] *Building Community: A new future for architecture education and practice;* Ernest L. Boyer and Lee D. Mitgang; The Carnegie Foundation for the Advancement of Teaching, Survey on Education of Architects, 1996; p. 9.

standing history and tradition of Service-Learning. MLA students work together with faculty, and local citizen groups to address planning and design situations pertaining to economic development, eco-tourism, streetscape design, overall land use and transportation planning, historic preservation, downtown rejuvenation, and recreational development.

NLI - The Natural Learning Initiative
http://naturalearning.org/

The Natural Learning Initiative (NLI) is a research and development, community engagement, and professional development unit of the College of Design.

Founded in 2000, embracing the overall land grant mission of NC State University, the NLI mission focuses on design applications to support the health of children, their families, and the outdoor spaces of daily life:

"Creating environments for healthy human development and a healthy biosphere for generations to come."

The Natural Learning Initiative directed by LAR professors Robin Moore and Nilda Cosco have employed a number of LAR students as research associates.

- Research and development approach. NLI applies design thinking at the community level as a preventative health research and development intervention. The aim is to create demonstration sites modeling best practices to educate local professionals about how to enhance quality of life in underserved communities.

- A trans-disciplinary field. Using design inquiry strategies, NLI participates in multiple fields to create the evidence base and metrics to inform sectors of design practice, including the urban public realm, parks and recreation, non-formal education, formal education, and early learning. Research support includes the National Institute of Environmental Health Sciences, the Robert Wood Johnson Foundation, Blue Cross and Blue Shield Foundation of North Carolina, US Fish and Wildlife Service, and currently the US Forest Service.

- Professional collaboration. NLI collaborates with architects, landscape architects, urban planners, educators, environmental educators, play workers, public officials, and all professional groups working with or on behalf of children and families. For many years, NLI has for example collaborated nationally with Michael Van Valkenburgh and Associates, and regionally with Frank Harmon Architect, on evidence-based, award-winning urban landscape architecture/architecture projects.

- Research into practice. NLI works with allied professionals to translate and transfer scientific knowledge into practice through a variety of activities, including education sessions at national and regional professional conferences (ASLA, NRPA, NAAEE, NAEYC, ALR, CEFPI), NLI professional development events (Growing In Place, Annual Design Institute), customized professional training courses (University of Cincinnati, College of Design, Architecture, Art, and Planning), and customized research methods training (Toledo Zoo/Bowling Green, Arlitt Center/University of Cincinnati).

- Early childhood focus. NLI's contribution is best represented by specialized work with the Partnership for Children (Smart Start) who are leading Shape NC, a three-year effort tied to the Clinton Global Initiative, funded by BCBS, including the UNC Gillings School of Public Health and Be Active North Carolina. Thirty demonstration outdoor learning environments are being developed across the state to model best site development and management practices aimed at increasing children's daily physical activity and experience of edible landscapes (from year one, children will understand where food really comes from).

- Healthy childhood leadership partner. At the 2012 Smart Start National Conference, Shape NC symposium, federal and state leaders noted that North Carolina leads the nation in tackling health issues through early childhood preventive strategies. NLI is participating in a unique state effort through the NC Institute of Medicine, to implement a preventive strategy targeting young children, families, and the communities where they live. NLI has helped pioneer a cost-effective "naturalization" approach to improving the quality of outdoor learning environments, as a more feasible option for the 5000 childcare centers in NC, mostly located in under-served communities.

- Professional development and training. A critical component of the strategy to fulfill the NLI mission is professional development and training. NLI is in the final stages of launching a NC State Certificate Program in Intergenerational Design. Supported be Blue Cross and Blue Shield of North Carolina Foundation, NLI is also preparing educational modules for outdoor learning environments to be adopted by programs in early childhood, landscape design, landscape architecture (A&T), landscape contracting, and horticulture, to be delivered through the NC Community College system.

- Creating a new subfield of practice. NLI's long-term goal is to help promote and develop intergenerational design as a new landscape architecture subfield and to train practitioners to contribute to its growth and development.

Conferences

- **"Institute for Emerging Issues Forum"**
  https://iei.ncsu.edu/
  "The Institute for Emerging Issues (IEI) is a public policy, think-and-do tank that convenes leaders from business, non-profit organizations, government and higher education to tackle some of the biggest issues facing North Carolina's future growth and prosperity. Through research, ideas, debate and action, we prepare leaders to address North Carolina's future challenges and opportunities. North Carolina has long been a model state in the Southeast, with a legacy of forward-thinking leadership and effective collaboration, and IEI seeks to mirror and encourage these values."
  Past forum topics have included energy, growth and development, and creativity and innovation. This year's topic focuses on healthcare. The forum is held in February.

- **"Urban Design Forum"**
  The Annual Urban Design Forum, coordinated by NC State University College of Design and the Raleigh Department of City Planning/Urban Design Center is held in Mid February or early March. This past year's 15th Annual Urban Design Conference, themed, "Urban Disruption and the Equity Challenge" featured keynote presentations and several case study tracks. Last year several LAR courses required students to attend the conference and were given free admission

- **"Growing in Place Symposium"**
  http://www.naturalearning.org/training/gip2010/about.html
  This annual Symposium, sponsored by the *Natural Learning Initiative,* takes place on the same week as the Urban Design Forum. Last year, the symposium "stimulated discussion about how planners and designers can meet the challenge of enhancing the wellbeing of urban families in North Carolina, across the nation, and the world. As cities grow and develop, opportunities to support family life in a healthy public realm should multiply. European design innovations such as "home zones" together with community participation processes and design guidelines will serve as triggers for discussions about how cities can grow in harmony with the needs of their citizens across the life span."

- **"National ASLA Annual Meeting"**
  http://www.asla.org/annualmeetingandexpo.aspx
  More than 6,000 landscape architecture professionals from across the U.S. and around the world will gather in Philadelphia, October 19-22, for the annual ASLA Conference.

- **NCASLA Conferences**
  The NCASLA professional chapter produces one conference each year, typically in May or early June. Our students are encouraged to attend and will receive special registration discounted rates if they are also members of the Student American Society of Landscape Architects (SASLA). The conferences are primarily educational events where in practitioner attend and participate in a number of continuing education courses. Doing so enables practitioners to accumulate the required number of Continuing Education Units required by law to maintain their professional licenses.   Our students and faculty participate in the

delivery of some of these courses. Faculty and students from our program participate making presentations covering the work developed in our academic, research, and service/extension areas by students and faculty.

10 | Teaching Assistantships and Internships

Qualified students may be hired as teaching, research, or extension assistants. The hands-on experiences offered through the following assistantships enables students to extend and enhance the material learned in their "regular" courses. The opportunities to work under and with faculty and student colleagues provides NC State MLA students unique and challenging venues and opportunities to advance the profession. Assistantship funding is set in accordance with College of Design policies. *The number of available assistantships is dependent upon available funding.*

Teaching (TA) and Research (RA) Assistantships

Teaching and research assistantships are awarded to MLA students who are typically in their second and third years, and first year students who might have appropriate prior education and experience in a particular area. Teaching assistants may participate in the process of developing course syllabi, course materials, delivery, grading, and other tasks assigned by the instructor.

There are three kinds of teaching and research assistantships:

- **Simple paid assistantship:** In this case the TA is assigned to a specific class, paid a flat rate based upon a predetermined number of hours worked per week, and works under the instructor of record for the course. (Example: For a semester TA appointment requiring about 8 hours per week, the TA earns approximately $1500).

- **Graduate Student Support Plan (GSSP):** In this case the TA or RA is assigned to both a specific class or research project and the department, paid a flat rate based upon a predetermined number of hours worked per week, receives tuition for the semester (fees not included) and health care benefits, receives no academic credit for the course, and works under the instructor of record for the course and the department head. *(Example: For a semester GSSP appointment requiring 12 hours per week assisting the instructor of record with course delivery and 4 hours per week assisting the head of the department, the GSSP TA receives approximately $3100 plus tuition for the semester (fees not included), and health care benefits.)* <u>The GSSP is highly competitive and based on the student's academic performance and available funding.</u>

- **Master's Supervised Teaching:** In this case the TA registers for LAR 685, Master's Supervised Teaching, and acquires teaching experience under the mentorship of a faculty member who assists the student in planning for the teaching assignment, observe and provide feedback to the student during the teaching assignment, and evaluates the student upon completion of the semester. For this, the student is graded, receives academic credit that is documented on the official transcript, and may be paid if funding is available. If interested in this option, please discuss with the department head and the particular faculty member who you'd like to have as your mentor.

Students interested in pursuing teaching assistantships are required to complete and submit an application form. Decisions will be made by the department head on the basis of the applicant's past academic performance in the program, recommendations of the instructors of record, funding and budget resources.

http://www.ncsu.edu/grad/financial-support/index.php
http://www.ncsu.edu/grad/support-plan/

Internships

The Department encourages students to complete an internship within a professional Landscape Architectural, Architectural, or Civil Engineering (private or governmental) organization. The purpose of the internship is to enhance and broaden the student's knowledge of and appreciation for the practice of landscape architecture. The local Triangle metropolitan area is the home of many diverse firms and agencies that offer internship opportunities. Students may also pursue internships elsewhere, nationally or internationally. Many firms advertise for full time summer interns, while local firms may employ part time interns during the fall and spring. Internships with a registered Landscape Architect are eligible to accrue hours that may count towards fulfilling state licensure requirement.

There are two kinds of internships:
- For academic credit when the student registers for **LAR 650** (new course number)
- Not for academic credit. This is essentially a job.

To receive academic credit students will:

- Work in an approved professional office or governmental agency for up to 12 hours per week. The student may work more than 12 hours per week during the summer or during a semester when the student takes a low course load.
- Maintain a weekly journal that documents their work tasks and time.
- Submit to the LAR department head a binder containing representative examples of the work generated during the internship, a critical reflection about their internship experience including the skills and methods of practice learned, areas of strength and weakness, and how well the internship met their personal expectations.
- Ask their internship supervisor to write and submit to the department head an evaluation of the student's performance.
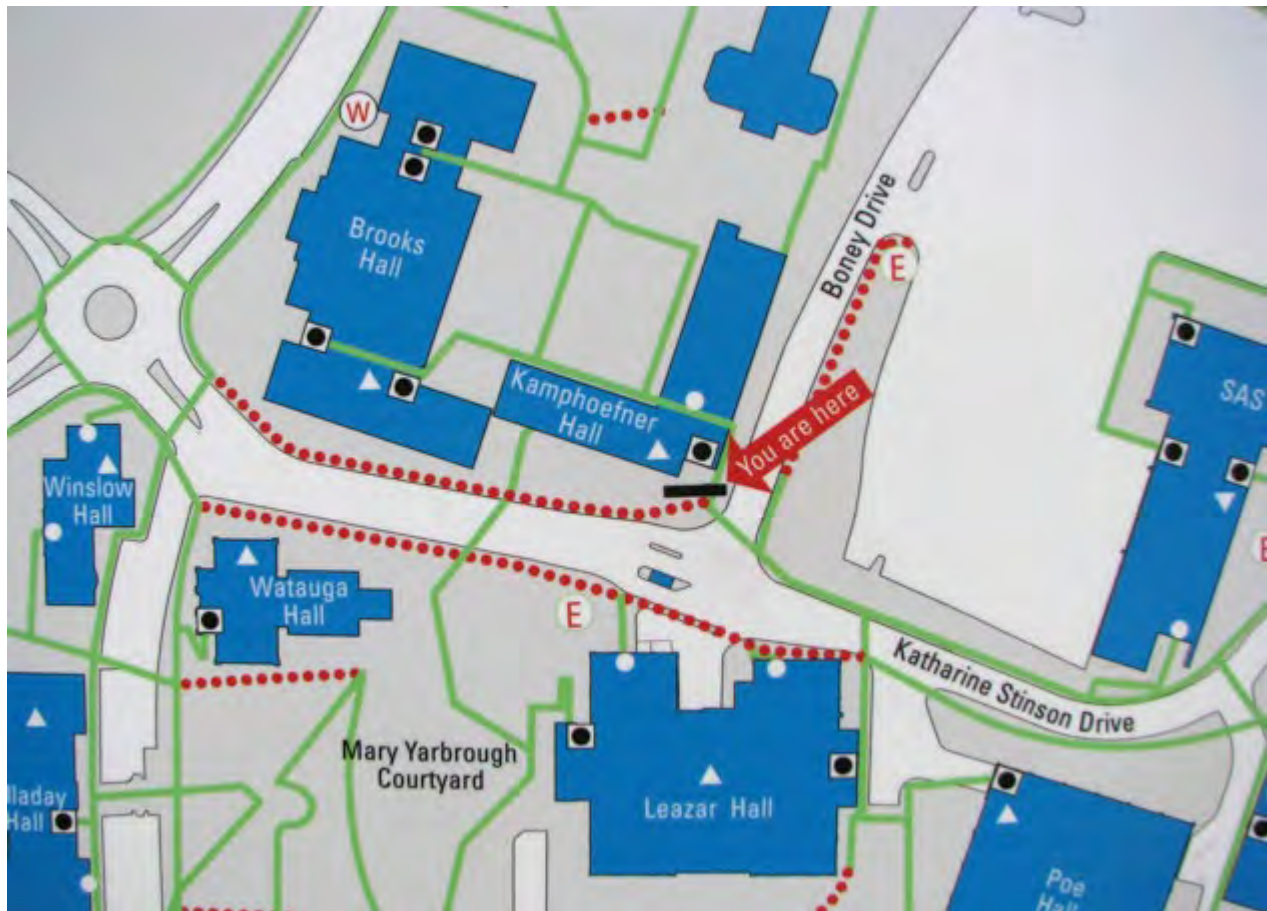
Students seeking an internship experience for credit are responsible for initiating the relationship with a prospective design practice. The student and the prospective employer should discuss the potential internship experience with the goal of identifying and defining the scope of work to be undertaken and performance expectations. The department head will discuss this opportunity with the student and prospective "employer," if necessary and grant approval to proceed

Internships may be paid or unpaid. Any question about remuneration must be resolved between the student and prospective employer. *The University shall in no way become party to or be involved in remuneration issues.*

International students wishing to complete an internship, for credit or just for experience, must contact the Office of International Services. During the academic year, students wishing to complete an internship will likely need to get approval for their Visa Status. Optional academic semesters, such as summers, may also require additional authorization. If you are an international student, you should always contact OIS for more information regarding how work may affect your immigration status. For more information about the typical approval process for F-1 students, visit the following website.

https://internationalservices.ncsu.edu/curricular-practical-training/

11 | Facilities

Overview of College of Design Facilities

The College of Design is housed in three adjacent buildings: Brooks Hall, Kamphoefner Hall, and Leazar Hall. Brooks Hall, built in 1925 as the original library of North Carolina State College, has been the central building of the College of Design since 1956, when a new north wing was added. To accommodate the College's rapid growth, a south wing was added in the 1960s. The College of Design Addition (now known as Kamphoefner Hall) was completed in 1978.

Leazar Hall houses the College of Design's materials lab (the shop), loom, design basics studios, painting and sculpture studios, seminar spaces and faculty offices. Leazar Hall was built in 1912, and has undergone three renovations, in 1922, 1983 and 2006. During its 96-year history, Leazar has served as a dining hall, student store, print shop, housing rental office, and payroll benefits office.

Kamphoefner Hall, built in 1977, has four floors of studio and lecture space. It also houses the College's largest auditorium space (seating about 250). Landscape Architecture studios, two faculty offices, a review room, a 9-station computer cluster with scanners and large format plotter are located on the second floor. Architecture studios are located on the third and fourth floors; graphic design studios occupy the first floor.

Together, these facilities create a physical community blending traditional and modern architectural styles. The buildings house the College's library, gallery, auditorium, resource centers, laboratories, classrooms, and offices, and provide all students with a desk space of their own.

LAR Studio Space

Landscape Architecture studios are located on the second floor of Kamphoefner Hall. Joint studios delivered with Architecture faculty and students are also delivered in Brooks Hall. The studios are air conditioned. Access is controlled with key codes. Each student in the Department who is enrolled in a studio is provided with a desk and chair. Each desk has lockable storage and serves as the student's home base "work station." Studios infrastructure includes: high speed WIFI, ceiling mounted electric extension access, and a **digital equipment cluster** consisting of several desk top workstations

loaded with licensed software applications as the machines in the College's computer labs, small and large format printers, and happy design memories.

Materials Lab

The Materials Lab for wood and metal applications is a resource available to all College of Design students and faculty. Landscape architecture students use the Lab to build site models. This facility provides space, equipment, and trained personnel to assist students in working with wood, metal, and plastic. It includes an extensive range of power equipment, hand tools, and large scale CNC router.

Students are encouraged to use the lab resources to explore form, materials, and construction methods. The Lab is staffed with highly trained specialists who

provide instruction and "check out" students in the safe and proper use of the equipment.

In addition, there are three laser cutters in a separate room with their own specialized filtration and exhaust ventilation systems, capable of cutting up to 1/4 inch in cardboard, cardstock, wood or certain specified plastics. Usage of the laser cutter by landscape architecture students has dramatically increased during the past two years as students discover the ease of being able to produce models.

William Bayley Information Technology Laboratory

The *William Bayley Information Technology Laboratory* provides computer-based and communications-related equipment and facilities in support of an orchestrated professional design education. The facility provides three central computer lab/classrooms, 10 distributed departmental computer "clusters," and a lending service of computing, audio-visual, and photographic and video equipment. Students are permitted to check out equipment and return it normally within 24 hours. The Central Labs are open for use ninety-one hours a week. Use of these facilities is limited strictly to students currently enrolled in College of Design courses.

All students are introduced to the *William Bayley Information Technology Laboratory* as they enter the Landscape Architecture program. They are expected to make full use of the equipment, software, and expertise that is available through the lab. Application of computer and information technology is a requirement of most of their curricular courses.

Library and other Information Systems Resources

"*The NCSU Libraries has earned an international reputation for an intense and sustained focus on how students learn and how faculty create and share knowledge in an age of digital technology and collaboration. The **James B. Hunt Jr. Library** builds on all we have learned to create an iconic building that captures the spirit of NC State University's strengths in science, engineering, technology, and textiles.*

https://d.lib.ncsu.edu/myhuntlibrary/ima SEQ

Designed to be a major competitive advantage for the university, the Hunt Library is a signature building that both enables and reflects NC State's vision as a preeminent technological research university recognized for its innovative education and research addressing the grand challenges of society. Its bold design is a visual statement of its bold purpose: to be a place not of the past but of the future, a place where our students, faculty, and partners can gather to research, learn, experiment, collaborate, and strengthen NC State's long tradition of leading transformative change. A great research library is more than collections, technologies, and comfortable workspaces--a great library inspires. Its architecture and technology create spaces that encourage collaboration, reflection, creativity, and awe. At the core of the vision for the Hunt Library is the ability for our students, faculty, and partners to immerse themselves in interactive computing, multimedia creation, and large-scale visualization—tools that are enabling revolutionary ways to see and use information.

In bringing together a state-of-the-art research library with the Institute for Emerging Issues, the Hunt Library is an international destination for those who seek to explore how collaborative spaces and innovative applications of technology can inspire the next generation of engineers, designers, scientists, researchers, and humanists.

The Hunt Library, in short, is the proud face of NC State University in the 21st century."

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 and houses a comprehensive collection of design-related books, periodicals, slides, videos 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. An attempt is also made to consider the needs of the whole university and the local community. As a result, some books are bought for the main collection in the general arts area.

The *D. H. Hill Library*, the main library at NC State University, is located within 10 minutes' walking distance of the college. Patrons can use the main library reference service twenty-four hours a day, five days a week; reference service is also available through chat, text messaging, email, and instant messaging from early morning until midnight most days. The NCSU Libraries is ranked forty-first among research libraries in the nation. The Libraries' collection comprises 4.3 million volumes and 69,223 print and electronic serial subscriptions. Library policies and information are available on both the Libraries' website at www.lib.ncsu.edu and the Design Library website at: www.lib.ncsu.edu/design .

Electronic Access

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 check 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 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.

The NCSU Libraries is a member of the Triangle Research Libraries Network, and NC State University students and faculty may use the libraries at Duke University, the University of North Carolina, and North Carolina Central University. They may also have materials delivered from Triangle libraries or from libraries across the nation through interlibrary loan.

Other Resources

The University Visual Arts Center has established a classroom for studying art objects and architectural drawings in its collection. It also has major exhibits for classroom visits.

There are several arboreta available for students to study. The Horticulture Department maintains an extensive plant collection arranged in garden form on six acres, known as the J. C. Raulston Arboretum. The arboretum contains a variety of demonstration and theme gardens (designed by students, including landscape architecture students), a substantial lath house, and a Japanese Garden. Nearby UNC-Chapel Hill is home to the North Carolina Botanical Garden, an extensive

arboretum collection of native plant communities and herb, and medicinal gardens sited on a large farm property, as well as the smaller Coker Arboretum located on the main Chapel Hill campus. At nearby Duke University in Durham are the Sarah P. Duke Gardens, which includes an extensive woodland garden and an Asian arboretum.

12 | Where to find out more information about...

Who to contact about...

	Jessica Jackson, CoD Graduate Student Services	Nikki Evans, University Program Assistant	Allison Whaley, Business Service Coordinator	Carla Delcambre, Director of Graduate Program	Meg Collins, Department Head	Individual LAR Faculty Member	Individual Certificate Coordinator
ADMISSIONS							
Application process/required materials	X						
Dates and deadlines	X						
Financial Aid	X						
New Graduate Orientation				X			
Informational meetings and tours				X			
Individual interests						X	
Deferred Admission	X						
COURSE ENROLLMENT and RESISTRATION							
Problems with registering for courses		X					
Questions about minimum enrollments		X					
Schedule Revisions after Census Date		X					
Leave of Absence		X					
Withdrawal		X					
ADVISING							
Graduate Plan of work (POW)		X					
General questions on how to enter courses in POW		X					
POW needs to be reset		X					
System error messages while entering the POW		X					
Waiving a class				X	X		
Semester by semester advising				X			
Curriculm path advising				X			
Pursuing a certificate							X
Optional Practical Training (OPT International Students)	X						
TA and RA JOBS, GRADUATE STUDENT SUPPORT PLAN (GSSP)							
Applying for TA and RA Jobs					X		
Eligibility requirements	X						
Tuition and health insurance benefits	X						
Allowed semesters of GSSP	X						
New TA workshop	X						
Job paperwork		X					
Payroll, I-9 Verification			X				
Manging FTE (International students 20 hr limit)			X				
SCHOLARSHPS							
National (LAF, ASLA)				X			
Departmental				X			
INTERNSHIPS							
Referrals to firms				X			
Letters of recommendation						X	
Internship registration for credit	X						
Internship completion documentation						X	
Portfolio, Resume and Cover letter advising						X	
ORAL EXAMS							
Advisory Committee policies		X					
Committee structure		X					
Understanding committee member roles		X					
Schedule an Exam (forms required)		X					
Discuss exam topics						X	
Advising on exam content						X	
GRADUATION							
How to apply to graduate	X						
COD and Grad School graduation requirements	X						
Award Ceremony				X			

Carla Delcambre
LAR Director of the
Graduate Program (DGP)
KAM 206

Jessica Jackson
College Graduate Student
Services Coordinator
Brooks Hall 225

Nikki Evans
University Program
Associate
Brooks Hall 215

Graduate Student Policies:

http://www.ncsu.edu/grad/

This web page contains information about:

- NC State University
- The Graduate School
- Admissions
- Financial Support: See: https://grad.ncsu.edu/students/fellowships-and-grants/
- Graduate Programs
- International Students\Research opportunities and
- Student Life:
  - Student Health,
  - Women's Center,
  - Counseling,
  - Student Organizations
  - Sports and Recreation
  - Arts and Activities
  - Community Services
  - Housing
  - Food
  - Diversity and Safety

Financial Aid:

Courtney Hughes
Graduate Fellowship Specialist
chughes5@ncsu.edu
919-513-1635

Myke Dunstan
rmdunsta@ncsu.edu
919.515.8841
Assistant Director
North Carolina State University
Office of Scholarships and Financial Aid
Box 7302, 2016 Harris Hall
Raleigh, NC 27695

University Registrar:

http://www.ncsu.edu/registrar/

This web page contains information about:
- MyPack Portal
- Academic calendars

- Course information
- Registering for classes
- Course forms
- Registration information
- Transcripts
- Veterans Affairs
- Transcript requests

Living in Raleigh:

- University Housing + Amenities:
  - University campus housing for graduate students: http://www.ncsu.edu/housing/index.php
  - University Dining: https://dining.ncsu.edu/
  - Student Employment: https://studentservices.ncsu.edu/your-money/financial-aid/types/student-employment/

- NCSU and Raleigh:
  - Transportation: https://goraleigh.org/ , https://www.lyft.com/ , https://www.carmax.com/stores/search?keyword=27603
  - Arts and culture: http://www.newsobserver.com/entertainment/arts-culture/
  - Things to do in and around NCSU: https://getinvolved.ncsu.edu/events , https://www.visitraleigh.com/events/

- City of Raleigh:
  - Neighborhoods of Raleigh: https://www.movoto.com/guide/raleigh-nc/raleigh-neighborhood-guide/
  - Residential real estate: https://www.trulia.com/NC/Raleigh/
  - Guide to Downtown Raleigh: https://www.downtownraleigh.org/
  - Nightlife, restaurants, entertainment, culture: https://www.downtownraleigh.org/explore/bars-nightclubs
  - Grocery Stores: Cameron Village Harris Teeter, Cameron Village Fresh Market, Wade Ave Whole Foods, Avent Ferry Food Lion, Holly Park Trader Joe's, Around the World Market, Grand Asia Market, El Mandado Supermarket
  - Car Repairs: https://www.villagemotorworks.com/

Emergency Contact Numbers:

Campus Police
- Emergency: Dial 9-1-1
- Non-emergency: 919-515-3000

https://police.ehps.ncsu.edu/

Raleigh Police Department
https://raleighnc.gov/police

Raleigh Fire Department
https://raleighnc.gov/fire

This is where you will hang out for a few years. It may be an old building, but it's rich in student achievement, experiences, and great moments in design. And, it has provided thousands of students over the past 65 years, or so, an incredibly supportive environment for bringing out our best creative ideas.

Welcome to your academic and scholarly home in NC State Landscape Architecture and Environmental Planning!