

LSU | College of Art + Design

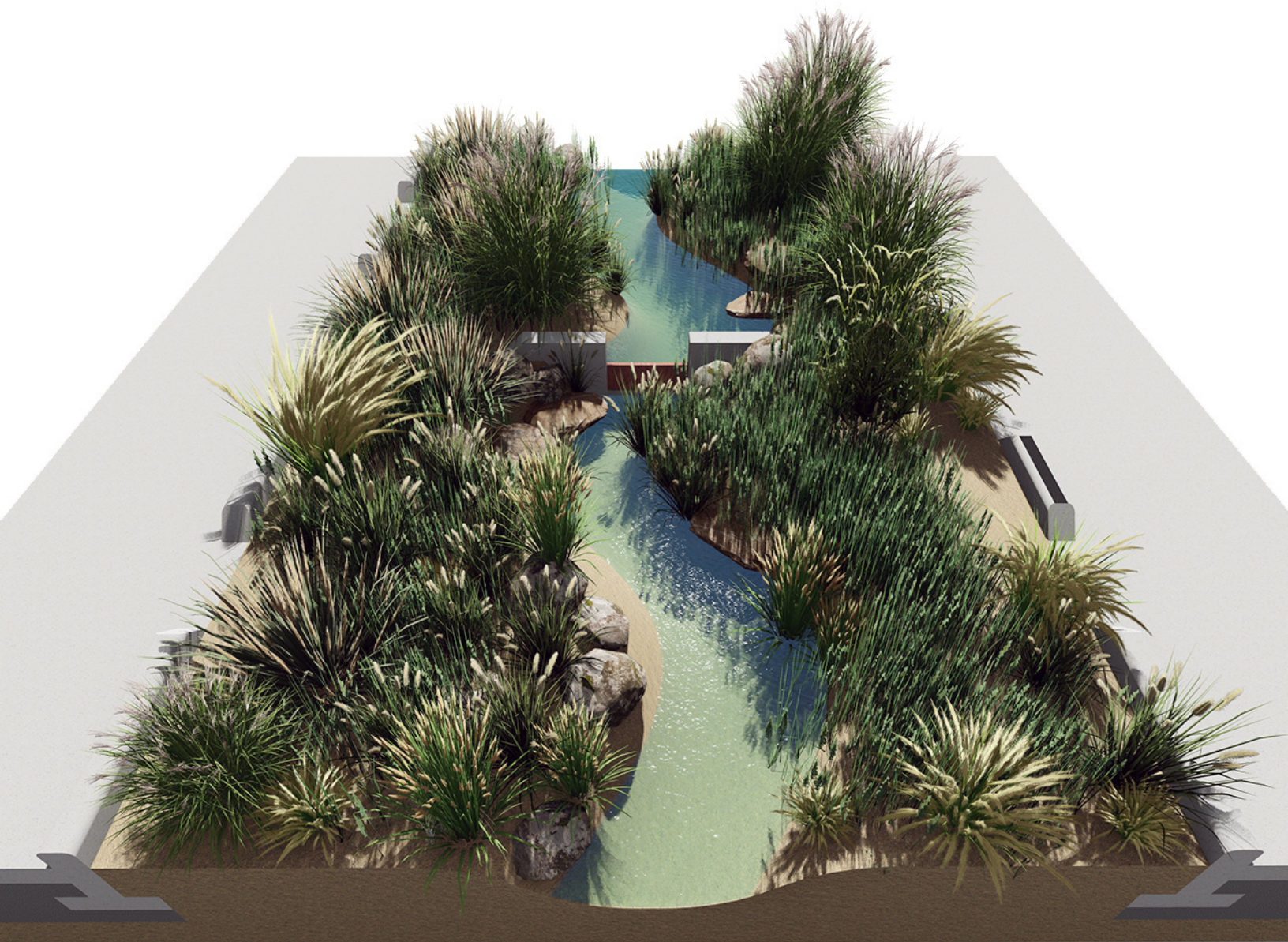
LA 2101 & 7012 | **Digital Landscapes**

Brendan Harmon

baharmon@lsu.edu

Spring 2020. Design 217.

Monday, Wednesday, & Friday 10:00am–11:30am.



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Course Description

This course is an introduction to methods and styles for the digital representation of landscape. In this course you will develop a solid foundation in 3D modeling by modeling and rendering streetscapes with green infrastructure. You will learn a range of 3D modeling techniques including 3D drafting, solid modeling, surface modeling, and mesh modeling. You will learn how to digitally fabricate physical models using laser cutting.

Online

Lectures will be recorded and posted on Youtube and Vimeo. Please watch before class. During class we will have discussions hosted on our Discord server. Please check Notion for news, announcements, and logistics.

Notion | <https://www.notion.so/Classroom-Home-d06cbc3c1c5f4096884071af442aebb8>

Discord | <https://discord.gg/BA39uFt>

Youtube | <https://www.youtube.com/channel/UCmGEF6Bf1S092oLQoGCPDTw>

Vimeo | <https://vimeo.com/baharmon>

Topics

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|---------------------|----------------------|-------------------------|
| 1 Virtual Reality I | 6 Typography | 11 Surface modeling II |
| 2 2D drafting I | 7 Solid modeling | 12 Surface modeling III |
| 3 Photomontage | 8 Surface modeling I | 13 3D rendering II |
| 4 2D drafting II | 9 3D rendering I | 14 Drone photography |
| 5 Laser cutting | 10 3D printing | 15 Virtual reality II |

Projects

As a class you will design and build a toolkit for the participatory design of complete streets. Individually you will design, model and render streetscapes and green infrastructure in 3D to compliment to the toolkit. Upload your working files and finished work to the course drive.

Participatory Design Toolkit Characters Collect photos of your classmates during a greenscreen photoshoot. Use Photoshop to cut the people out of the photos for use in photomontages. Use Illustrator to vectorize the cutouts for laser cutting. Deliverables include raster and vector cutouts and laser cut models of people and trees. *Due: 02/14/2020*

Participatory Design Toolkit As teams design and build a module for a toolkit of laser cut models for participatory design workshops on complete streets. Deliverables include a CAD or illustrator drawing and a laser cut model of your module. *Due: 03/13/2020*

Green Infrastructure 3D model and 3D render a green infrastructure design such as a bioswale, flow through planter, or infiltration bosque. Your model should include 3D plants, topography, hardscape, and water. Layout a poster of your green infrastructure design to go with the Participatory Design Toolkit. Deliverables include 3D renderings and a poster. *Due: 04/08/2020*

Participatory Design Toolkit Manual As teams layout, compose, and publish a manual for your toolkit. Your manual should include instructions or rules for assembling and using the toolkit. Consider presenting your toolkit as a serious game with rules, objectives, and scoring. Deliverables include a pdf document. *Due: 04/29/2020*

Portfolio Collect your work in a course portfolio for the school's accreditation archive. *Due: 05/08/2020*

Grading

Toolkit Characters	25%	Green Infrastructure	25%
Participatory Design Toolkit	25%	Portfolio	5%
Participatory Design Manual	20%		

Software

Autocad | www.autodesk.com/
 Adobe CC | <https://www.adobe.com/>
 Rhinoceros | <https://www.rhino3d.com/>
 Thea Render | www.thearender.com/
 Lumion | <https://lumion.com>
 Sketchfab | <https://sketchfab.com/>

Network drives

Windows for undergrads: \\desn-knox.lsu.edu\Landscape-Classes\LA2101-S2020
 Windows for grads: \\desn-knox.lsu.edu\Landscape-Classes\LA7102-S2020

Mac for undergrads: smb://desn-knox.lsu.edu/Landscape-Classes/LA2101-S2020
 Mac for grads: smb://desn-knox.lsu.edu/Landscape-Classes/LA7102-S2020

Readings

- US Environmental Protection Agency. *Green Infrastructure*.
- Liptan, T.W., and J.D. Santen. 2017. *Sustainable Stormwater Management: A Landscape-Driven Approach to Planning and Design*. Timber Press.
- Officials, N.A.C.T. 2017. *Urban Street Stormwater Guide*. Island Press.
- Kennen, K., and N. Kirkwood. 2015. *Phyto: Principles and Resources for Site Remediation and Landscape Design*. Taylor & Francis.
- Lupton, E., and J.C. Phillips. 2015. *Graphic Design: The New Basics: Second Edition, Revised and Expanded*. Princeton Architectural Press.
- Zimmermann, A. 2015. *Planning Landscape: Dimensions, Elements, Typologies*. Walter de Gruyter GmbH.
- National Association of City Transportation Officials. 2013. *Urban Street Design Guide*. Washington D.C.: Island Press.
- Zimmermann, A. 2011. *Constructing Landscape: Materials, Techniques, Structural Components*. Birkhäuser.
- Vignelli, M. 2010. *The Vignelli Canon*. Lars Müller.
- Hustwit, Gary. 2007. *Helvetica*.

Policies

Communication Intensive This is a certified Communication-Intensive (C-I) course, which meets all of the requirements set forth by LSU's Communication across the Curriculum program, including instruction and assignments emphasizing informal and formal visual and technological communication, teaching of discipline-specific communication techniques, use of feedback loops for learning, 40% of the course grade rooted in communication-based work, and practice of ethical and professional work standards. Students interested in pursuing the LSU Distinguished Communicators certification may use this C-I course for credit. For more information about this student recognition program visit: www.cxc.lsu.edu.

Accreditation Expectations As an accredited Landscape Architecture program LSU's Robert Reich School of Landscape Architecture (RRSLA) must meet the accreditation requirements as stated by the Landscape Architectural Accreditation Board (LAAB) to ensure RRSLA is meeting the expectations of the field. The LAAB requires programs to provide digital copies of student work as part of this process. Students in this course will be expected to comply with the following requirements as 5% of their course grade: (1) Students must provide a course portfolio with work samples specified by the instructor before the end of the grading period. (2) Each student's course portfolio must be saved as a single, high resolution PDF file with multiple pages. (3) Files must follow the naming convention established by the school: department-coursenumber-semester-year-username.pdf. Example: LA4201-F2019-baharmon.pdf.

Time Commitment Expectations LSU's general policy states that for each credit hour, you (the student) should plan to spend at least two hours working on course related activities outside of class. Since this course is for three credit hours, you should expect to spend a minimum of six hours outside of class each week working on assignments for this course. For more information see: <http://catalog.lsu.edu/content.php?catoid=12&navoid=822>.

LSU Student Code of Conduct The LSU student code of conduct explains student rights, excused absences, and what is expected of student behavior. Students are expected to understand this code: <http://students.lsu.edu/saa/students/code>.

Disability Code The University is committed to making reasonable efforts to assist individuals with disabilities in their efforts to avail themselves of services and programs offered by the University. To this end, Louisiana State University will provide reasonable accommodations for persons with documented qualifying disabilities. If you have a disability and feel you need accommodations in this course, you must present a letter to me from Disability Services in 115 Johnston Hall, indicating the existence of a disability and the suggested accommodations.

Academic Integrity According to section 10.1 of the LSU Code of Student Conduct, “A student may be charged with Academic Misconduct” for a variety of offenses, including: unauthorized copying, collusion, or collaboration; “falsifying” data or citations; “assisting someone in the commission or attempted commission of an offense”; and plagiarism, which is defined in section 10.1.H as a “lack of appropriate citation, or the unacknowledged inclusion of someone else’s words, structure, ideas, or data; failure to identify a source, or the submission of essentially the same work for two assignments without permission of the instructor.”

Plagiarism and Citation Method Plagiarism is the “lack of appropriate citation, or the unacknowledged inclusion of someone else’s words, structure, ideas, or data; failure to identify a source, or the submission of essentially the same work for two assignments without permission of the instructor(s)” (Sec. 10.1.H of the LSU Code of Student Conduct). As a student at LSU, it is your responsibility to refrain from plagiarizing the academic property of another and to utilize appropriate citation method for all coursework. In this class, it is recommended that you use Chicago Style author-date citations. Ignorance of the citation method is not an excuse for academic misconduct.