LAA 4356 Environmental Planning & Design Studio: Landscape Planning and Design in the Orlando metropolitan area Department of Landscape Architecture University of Florida Arc 316 Studio M/W 8:30a.m. - 12:30 p.m. Instructors: Dave Hulse & Changjie Chen Fall Semester 2021 6 credits, Prerequisite – 4th year standing in BLA program or permission of instructor

Course Syllabus

- Purpose this class introduces students to the complex relationships among settlement pattern, land and water management decision making processes and the ecological conditions of a 28 square mile (18,000 acre) area in the greater Orlando metropolitan area centered on the town of Apopka. The studio will be organized around teams of 3-5 students, each team exploring, at a range of scales, different possible futures for the study area and the influence of these futures on the physical structure, ecological functions and social dynamics of a community of people making their homes and earning their livelihoods in the central portion of Florida.
- Goals this class emphasizes ecological concerns, regional and cultural land suitability issues, to demonstrate that real choices are made everyday that effect the long term viability of human settlements and the biotic and abiotic systems on which it depends; to clarify the opportunities for definition of desirable future landscape conditions and to set out ways to achieve these conditions; to articulate the effects of different landscape patterns and management practices on key ecological and cultural functions.
- Objectives at the conclusion of the course the student will be familiar with the following:

working to envision possible future metropolitan form and conditions at the scale of a parcel, a neighborhood, and a landscape;

the role of change, disturbance and adaptability in influencing landscape dynamics;

how to sift through and synthesize relevant, expert-based information in the making of well-informed alternative landscape plans.

Techniques the course will employ fieldtrips, digital tools, as well as faculty lectures to support team and individual student design and planning projects.

Facilities the studio will use Arch 316.

- Expectations and Grading Unlike many other courses, much of the work for this studio will be done in teams of 3-5 students. Please be advised that we will expect you to have formed teams of this size, in which you will remain for the duration of the term, by Wednesday August 25. Early in the semester, you will conduct all work requested in teams. Also, as a studio student at this curricular level, you are expected to take increasing responsibility for your own education. This bears on our expectations, which are set forth below.
- All students are expected to <u>attend studio</u> from 8:30 a.m. 12:30 p.m. M/W, and to conduct the substantial portion of their work for this course in the studio environment. In that regular team/studio meetings will be an indispensable part of studio operations, attendance is critical to studio success. Exceptions to this policy will be rare.
- All students are expected to complete work as described in written problem statements on time and in toto. Late work will have an effect on a student's evaluation, as noted* below. Emergencies and other compelling circumstances will, of course, alter this policy.
- All students are expected to attend and present at all mid-term and final reviews, as well as all studio pin-ups and desk crits.
- A final note: There are, particularly in the early phases of the studio, two tracks we will pursue. The first is to help us "tool up" on relevant issues in the study area, with special emphasis on understanding the issues of the place and communities who make their lives here. The second is using the information we glean from this and other sources to develop visions for future land use that meet human needs and maintain ecological functions. This dual track circumstance may lead to an occasionally schizophrenic quality to the studio. We acknowledge the need to coordinate these two tracks, and welcome your suggestions for improving coordination.

Technical Support

All students are required to sign up for a UF Dropbox account, and we strongly recommend a minimum 64 bit computer and require that each student have a 3TB external disk.

Schedule and Basis for Grades

Assignments will be produced through a combination of group and individual work. There are 4 distinct assignments plus a peer evaluation that comprise the studio:

ASSIGNMENTS	ESTIMATED DATES	PERCENT OF GRADE
Assignment One – Characterizing the Study Area	August 23 - Sept 1	5%
Assignment Two – Study Area and Sub-Area Plans	Sept 1 – Oct 11	40%
Assignment Three – Individual Design Development	Oct 13 – Nov 15	40%
Assignment Four – Project Synthesis	Nov 15 – Dec 6	10%
Peer Evaluation	August 23 – Dec 10	5%

Grading Scale

The following scale and associated letter grades will be used in this course:

Letter Grade	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е
Numeric Grade	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59
Quality Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0

For greater detail, see the Registrar's Grade Policy regulations at http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html

- According to Departmental Policy, Landscape Architecture majors must receive a C or better to move forward. Any grade lower than a C will require that the course be taken over again.
- *Every attempt must be made to submit work on the date it is due. A grade reduction of 10% per day will occur unless there is an acceptable excuse for the late submittal presented in advance of the due date.
- Attendance at all class meetings is expected. If for some reason you are not able to attend, please be sure to notify both instructors in advance.
- All presentations will be assembled using MS Powerpoint. The final presentation is tentatively scheduled for Monday, December 6 during what would be our regular class meeting time. Please note this could change.
- All student work may be retained and used by the Department of Landscape Architecture. Digital Copies of student work for this course must be turned in at the completion of each assignment. No grades will be computed into the final course grade until digital submissions have been turned in via email. Files are to be named as follows:

course# name project student name. dwg/pdf/jpg/

Example: 3352PlantDesAssig10Smith Use caps for separation No spaces, hyphens, or underscoring A few useful references:

- Bentrup, G. 2008. Conservation buffers: design guidelines for buffers, corridors, and greenways. Gen. Tech. Rep. SRS-109. Asheville, N.C. Department of Agriculture, Forest Service, Southern Research Station. 110 p. www.bufferguidelines.net
- Burchell, Robert W., N. Shad, D. Listokin, H. Phillips, A. Downs, S. Seskin, J. David, T. Moore, D. Helton and M. Gall. 1998. Costs of Sprawl Revisited: Evidence of Sprawl's Negative and Positive impacts. Transportation C0-Operative Research Program Report No. 39. Transportation Research Board. Sept. 1998. on line at http://www.trb.org/
- Frank, James. 1989. The Costs of Alternative Development patterns: A Review of the Literature. Urban Land Institute.
- Groves, C.G. and E.T. Game. 2016. Conservation Planning: informed decisions for a healthier planet. Roberts & Co. Publishers. ISBN 9781936221516.
- Johnson, B. and K. Hill. (eds). 2002. Ecology and design: frameworks for learning. Island Press. Washington, D.C. ISBN 1-55963-813-3.
- Arendt, R.G. 1996. Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks., Island Press, Wash. D.C. ISBN 1-55963-489-8.
- Fabos, J. and J. Ahern (eds). 1996. Greenways: The Beginnings of An International Movement., Elsevier., New York. ISBN 0-444-82464-2.
- Smith, D. S. and P.C. Hellmund. 1993. Ecology of greenways. Univ. of Minnesota Press. Minneapolis. ISBN 0-8166-2157-8.
- Steinitz, C. et al. 1996. Biodiversity and Landscape Planning: Alternative Futures For The Region of Camp Pendleton, California., Graduate School of Design, Harvard University, Cambridge, Mass. 02138
- Steiner, F. R. 2000. The living landscape: an ecological approach to landscape planning. New York: McGraw Hill. AAA HD108.6 .S74 2000

Links for Urban Natural Resources Management and Ecological Restoration

Links are periodically updated but subject to change. Perform web searches as needed for updated links.

Stream Restoration Websites

http://www.nrcs.usda.gov/technical/stream_restoration/ http://www.epa.gov/owow/restore/

Urban Stormwater/Low Impact Development

Portland Stormwater Manual: <u>http://www.portlandonline.com/bes/index.cfm?c=35117</u> Puget Sound Action Team: <u>http://www.psat.wa.gov/Publications/Pub_Master.htm</u> Follow link to Stormwater Runoff/Low Impact Development and download the publication: Low Impact Development: Technical guidance manual for Puget Sound

Urban Ecology LTERs (Long-Term Ecological Research Stations)

Central Arizona - Phoenix LTER: <u>http://caplter.asu.edu/</u> Baltimore Ecosystem Study: <u>http://www.beslter.org/</u>

Other Websites

The Ecological Cities Project http://www.umass.edu/ecologicalcities/

The Center for Watershed Protection http://www.cwp.org/Resource Library/Restoration and Watershed Stewardship/

Resources by urban topic: DENSITY

Ellis, John G. (2004). Explaining Residential Density [Research & Debate]. *Places*, 16(2), 34. Retrieved from: <u>http://escholarship.org/uc/item/2np5t9ct</u>

Friedman, Avi . (2007). Sustainable Residential Development. Chapter 3. Chapter 4. High Density Neighborhoods. Siting a Community. pp. 45-81

Visualizing Density: https://www.theurbanist.org/2017/05/04/visualizing-compatible-density/

http://apps.ocfl.net/dept/growth/planning/visualizingdensity/default.asp

https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan/The-Adopted-2040-TPP-(1)/Land-Use-Illustrations/Density-of-Development-Examples.aspx

TRANSPORTATION

Litman, Todd. Victoria Transport Policy Institute. (2014). Evaluating Transportation Equity: *Guidance For Incorporating Distributional Impacts in Transportation Planning*. www.vtpi.org

Vernez- Moudon, Anne. (2003). **STRATEGIES AND TOOLS TO IMPLEMENT TRANSPORTATION-EFFICIENT DEVELOPMENT: A REFERENCE MANUAL Phase 2 of Integrating Land Use and Transportation Investment Decision-Making.** Department of Urban Design and Planning, Univ. of Washington.

NEIGHBORHOODS

Farr, Douglas. "Sustainable Urbanism: Urban Design With Nature 1st Edition." Sustainable Urbanism: Urban Design With Nature: Douglas Farr: 9780471777519: Amazon.com: Books. N.p., n.d. Web. 21 July 2016.

Girling, Cynthia L, and Ronald Kellett. *Skinny Streets and Green Neighborhoods: Design for Environment and Community*. Washington, DC: Island Press, 2005. Print. Chapters 1 and 8.

Handy, Susan. (2003). **Planning for street connectivity: getting from here to there.** Published 2003 by <u>American Planning Association, Planning Advisory Service</u> in Chicago, IL (122 S. Michigan Ave, Suite 1600, Chicago 60603).

PARKING

San Mateo Countywide Water Pollution Prevention Program. (2009). "San Mateo County Sustainable Green Streets and Parking lots Design Guidebook." http://www.flowstobay.org/documents/municipalities/sustainable%20streets/Book%20La yout%20Guidebook/Green%20Streets%20revised%20book%20layout%20Guidebook.pdf

STREET DESIGN

"Urban Street Design Guide - National Association of City Transportation Officials." *National Association of City Transportation Officials*. N.p., n.d. Web. 21 July 2016.

"Measuring the Street: New Metrics for 21st Century Streets in NYC." *Greater Places*. N.p., n.d. Web. 21 July 2016.

McCann, Barbara A., and Suzanne Rynne. Complete Streets: Best Policy and Implementation Practices. Chicago: American Planning Association, 2010. Print.

WATER

"Sustainable Drainage Systems (SuDS)." *British Geological Survey (BGS)*. N.p., n.d. Web. 21 July 2016.

Sarté, S. B. (2010). "Chapter 3: Water Conservation and Supply" and "Chapter 4: Integrated Water Management" *in* Sustainable infrastructure: the guide to green engineering and design. Wiley, 59-163.

USEFUL INTERNET LINKS SPECIFIC TO FLORIDA

Critical Lands and Waters Identification Project http://www.fnai.org/clip.cfm Office of Greenways and Trails Florida Ecological Network website http://www.dep.state.fl.us/gwt/about/ecological.htm Conservation Trust for Florida Greenways Program website http://www.conserveflorida.org/index.php/greenways-program.html 1000 Friends of Florida Florida Ecological Network History and Programming Article http://www.1000fof.org/PUBS/EcologicalGreenwaysFinalVersion.pdf 1000 Friends of Florida Tools for Protecting Florida's Working Landscapes Article http://www.1000fof.org/PUBS/F1-working-landscapesFinal2011.pdf Florida Forever Needs Assessment http://www.fnai.org/FlForever.cfm Bureau of Economic and Business Research Information http://www.bebr.ufl.edu/start Florida Rural Land Stewardship Area Program http://www.dca.state.fl.us/fdcp/dcp/rurallandstewardship/ Florida Forever Coalition website http://www.supportfloridaforever.org/ Florida 2060 human population projection http://www.1000friendsofflorida.org/planning/2060.asp 1000 Friends of Florida Working to Sustain Florida's Rural and Natural Lands Report http://www.1000friendsofflorida.org/planning/ruralreport.asp 1000 Friends of Florida Wildlife Habitat Planning Strategies Manual http://www.floridahabitat.org/wildlife-manual

<u>UF Policies</u>

Academic Honesty

"UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates

academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class."

Disabled Students requesting Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodations. Students with disabilities should follow this procedure as early as possible in the semester.

Counseling Resources

Students experiencing crisis or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575. Please call the University Police Department: 392-1111 or 9-1-1 for emergencies.

Religious Holidays

The university calendar does not include observance of any religious holidays. The Florida Board of Governors and state law govern university policy regarding observance of religious holidays. Students shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith with prior notification to the instructor. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances.

Online Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <u>https://gatorevals.aa.ufl.edu/students/</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>https://ufl.bluera.com/ufl/</u>. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Disclaimer

This syllabus represents our current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

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Wed week Mon 8/23 studio meets 8:30 - 12:30 p.m. 8/25 Plan for Study Area Characterization Landscape 1 studio intro, team dynamics; finalize teams. and Field trip on Saturday August 28 Understanding Prob. 1 & Team Covenants assigned 2 Getting to 9/1 Present Prob. 1: charrette on major 8/30 Team Covenant due, team work time changes; Assign Prob. 2 Study Area and know the place 8:30-10:00 a.m., digital tools Intro #1 10 a.m. Sub-Area plans; preview Prob. 3 Indiv. -12 noon in studio Designs and Prob. 4 Final Designs. 3 9/8 Team time 8:30 -9:30 a.m.; dig. tools 9/6 NO STUDIO- Labor Day Intro #2 10-11:15 a.m. in studio; work in studio, desk crits as needed 9/13 Team time 8:30 -9:30 a.m.; dig. tools 9/15 Team time 8:30 -9:30 a.m.; dig. tools Study Area 4 Intro #3 10-11:15 a.m. in studio; work in Intro #4 10-11:15 a.m. in studio; work in and Sub-Area studio, desk crits as needed. studio, desk crits as needed. Plans 9/22 draft Study Area plan due; dig. tools 5 9/20 Team time 8:30 -9:30 a.m.: dig. tools Intro #6 10-11:15 a.m.: desk crits as needed. Intro #5 10-11:15 a.m.; desk crits as needed. 6 9/27 work in studio, desk crits as needed 9/29 work in studio, desk crits as needed 10/6 Pin-Up Review - all work for Mid-7 10/4 draft Sub-Area plan due:work Term due 4 p.m. 10/10, prep for Midin studio, desk crits as needed Term Review. 10/11 MID-TERM REVIEW 10/13 Mid-term debrief; Assign Prob. 3, 8 Design Teams discuss individual projects, desk crits as needed 10/18 work in studio, team members Individual 10/20 work in studio, desk crits re 9 coordinate ind design projects Designs ind design projects, 1 pg description due 10/25 work in studio, desk crits as needed 10/27 work in studio, desk crits as needed 10 11/3 work in studio, desk crits as 11/1 work in studio, desk crits as needed 11 needed, sign up for ind. project pin up reviews Pin Up Review of ind. 11/10 11/8 Pin Up Review of ind. design projects 12 design projects **Final Review** 13 11/15 Assign Prob. 4 Project Synthesis 11/17 work in studio; desk crits as Preparation needed 14 11/22 work in studio; desk crits as needed 11/24 NO STUDIO - Thanksgiving 15 11/29 presentation rehearsals 12/1 presentation rehearsals, all work **Reviews** due 12/5 12/8 submit digital version of final boards. 16 12/6 FINAL REVIEW Peer Eval by 12/10 at 12 noon