**LSA 433/633 Planting Design and Practice**



**Fall 2010**

**Course Syllabus**

**A. Instructors and Office Hours**

Tim Toland, Assistant Professor

324 Marshall Hall phone: 470.6969 email: trtoland@esf.edu

Office Hours: Posted and by appointment

Shirley Knight, Graduate Assistant

email: saknight@syr.edu

Office Hours: By appointment

**B. Class Meeting Arrangements**

Monday + Wednesday 8:25 am – 9:20 am 319 Marshall Hall

Thursday 9:00 am – 12:00 pm 409 Marshall Hall, Studio Space

See Class Schedule for specific activities and/or meeting locations

**C.** **Course Goals and Objectives**

Planting design is one of the core elements of landscape architectural practice and is an essential component in the creation of outdoor spaces. As a skill set, planting design distinguishes landscape architecture from architects, engineers and other land development professionals. As a design element, plants are dynamic and have the ability to affect a site in tangible and intangible ways, contributing to mood, comfort, aesthetics, and function. As living organisms, plants have specific needs and limitations that must be understood in order to ensure their survival. As a part of the living environment, plants can have impacts on local and regional ecosystem functions.

As a landscape architect, you will be asked to include plants in a number of different design contexts, from expansive urban master plans to tight gardens in urban locations. Plants can be the aesthetic focus of the design, or they can be used in concert with hardscaping with the function of spatial definition. No two planting locations or design problems are the same and with this variety comes the need to adapt your approach and your plant palette to the situation at hand. To be successful, you will need a broad knowledge base in order to make appropriate design decisions. It is this complexity of issues that makes planting design so difficult and so important. Plantings can fail because of poor design as much as they can from improper maintenance.

The main goal of this course is to *introduce* you to the use of plants in design. This course is not intended to make you horticulturists. Rather, it is intended to make you aware of the complexities involved in dealing with a dynamic medium in otherwise pseudo-static environments. It will focus on the ecological, functional and aesthetic attributes of plants, as well as their technical and specific design issues. We will integrate concepts of design theory, planning, botany, horticulture, ecology, hydrology, soil science, and landscape construction and maintenance.

Upon completion of this course, students should be able to prepare cohesive and comprehensive site scale planting designs, including conceptual planting design proposals with appropriate graphics and labeling. Students will be familiar with the nature of planting design theory and a range of planting design approaches that culminate in the selection and location of individual plants tailored to the site and design problem, and that consider future maintenance needs.

Specific educational objectives include instruction so that:

1. Students should be able to apply knowledge of the ecological relationships within plant communities, their natural environments, and natural geographic distribution in planting design; and be able to select and arrange appropriate plant species in specific ecological contexts.
2. Students should be able to apply principles of planting design as a visual art, recognizing the fundamental design characteristics of plants and applying them as a primary element of visual and spatial composition in the landscape.
3. Students should be able to apply planting design as a means of addressing functional and environmental issues in the landscape utilizing the structural characteristics of plants.
4. Students should be able to apply professional techniques for the creation and communication of planting design ideas, including the development of appropriate illustrative graphics, plans, details, written notes and specifications.
5. Students should be able to prepare cohesive and comprehensive site scale planting designs typical of the practice of landscape architecture.
6. Students should be able to apply a basic knowledge of horticultural theories and practices associated with the use of commercially distributed plant materials in design, including plant propagation/production, procurement, installation and maintenance.

# D. Course Organization

This course is a combination lecture/studio course. There will be a series of lectures covering various topics throughout the semester (see Class Schedule at the end of this document). Lectures will generally be PowerPoint based, utilizing images and graphics to clearly illustrate the concepts being discussed. All lectures will be posted as PDFs onto Blackboard (http://blackboard.syr.edu) for your access and review.

The studio period will be used to reinforce and apply concepts discussed in the lectures, as well as to focus on specific skills and techniques. We will have periodic guest lectures and seminar activities as well. It will also be an additional working period as we will coordinate projects for this course with your studio.

Finally, this class is meant to be a dialogue. Class participation is valued and expected. During the lectures and studio activities, the faculty will do their best to relate information to actual practice experiences, and any personal observations added by students will only enrich the experience.

**E. Course Work and Grading**

This semester’s course work will include:

**Tasks Weighted Value**

In-Studio Projects 25%

Exam 1 12.5%

Exam 2 12.5%

Final Design Project 25%

Final Exam (Dec. 13, 8:00 am) 25%

All projects and assignments will be assessed on the following criteria:

***Successful solution of the design program requirements***

Each project is intended to draw upon and incorporate ideas discussed in lectures. Where appropriate, supplemental sources of information will also be given to you. For each project you will be given a detailed project statement that will outline exactly what is required. The successful project will be one that fully addresses all of the elements noted in the project statement, to the standards indicated in each statement. Quite simply, unsuccessful projects will lack elements or not meet the standards indicated.

***Timely submission of all project requirements***

Project tasks are generally scheduled to be submitted at a specific time on a specific date. These will vary with each project/task and will be outlined in detail in the project statements. Class policy will be to accept course work only on or before the assigned due date. ***NO late projects will be accepted.*** The only exception to this will be due to acute illness, sudden family emergency or other situations that were negotiated with the instructor ***PRIOR*** to the submission date. We do understand that life happens, however at this stage of your development you are expected to behave as professionals. When properly excused, students are required to complete assignments within one week of returning to classes. Additionally, backups at the printers or copy centers will not be tolerated as an excuse for not handing things in on time. You have multiple resources in the city to get your projects reproduced (CAVLab, Baker Lab, DISC, Syracuse Blueprint, Plan & Print, Kinko’s). Do not wait until the last minute, and always have an alternative. Finally, it is infinitely better to submit an incomplete project than nothing at all.

**Note on Digital submissions**. When allowed by the project requirements, graphics completed using digital production techniques may be submitted electronically. All digital files MUST be submitted in Adobe Acrobat PDF format, *not* in native AutoCAD, Illustrator or other file formats. Failure to adhere to this requirement may result in a letter-grade lowering of your final grade.

***Professional packaging and formatting of submissions***

All course work is to be neatly prepared as outlined in each project statement. They shall include such common conventions as standard page sizes, title blocks, scales, north orientation, labeling, etc. Title blocks, at a minimum, shall include the student’s name, project name, date, and sheet title. Clear linework, appropriate lineweights, and neat lettering will be emphasized.

With each project, guidelines will be given as to required format, particularly sheet sizes. These projects are not meant to determine who can produce the longest color plot; this is not an indicator of creativity, ability or successful resolution of the design problem. Excessive sheet sizes are unnecessary, wasteful and a time drain on your part to produce, and will not be tolerated. Additional penalties will be incurred for work that is submitted with mismatched sizes or plan orientations, trace with torn or ripped edges, or any sheet without a title block that at a minimum includes the student’s name, the project name, date, and sheet title.

***Overall project management and professionalism***

Your faculty will make every effort to be on time and available to you during class hours, and it is expected you will do the same. Attendance is ***required*** for all class activities. Lack of attendance will be noted, penalized and most likely be reflected in the quality of your work.

Working at home or in the computer labs during the studio periods will also not be tolerated. We cannot help you if you are not here. Disruptive behavior will also not be tolerated. This applies to working on other coursework during studio hours. Studio time is to be devoted to design projectsonly, not your off-campus proposals, technical writing assignments, design studio assignments or other course work.

Failure to comply with the above will result in the reduction of a student's project or course grades. The combination of poor attendance and poor quality work will be especially penalized. If you must miss a class for whatever reason, please make arrangements with your instructor ***prior*** to your absence. A simple phone call or e-mail makes a *big* difference.

***Final Grades***

The faculty will assess each project based on the interpretation of your submission(s) compared to the program requirements and the above criteria. Grades will be assessed based on how students work through the problems. Growth from previous assignments, self-direction in response to criticism, commitment to imaginative exploration and problem solving, dedication to refinement and completion, and excellence in communication in terms of graphic, written and verbal resolution will be considered. Your solutions will be evaluated on the strength of your idea(s), degree of challenge, level of complexity and completeness. Your ideas should show evidence of applying a broad range of resources to inform the quality of your solution. Exceptional work is built upon a synthesis of previous knowledge, as well as a broad spectrum of sources, not merely the project statement. Final grades will utilize the following benchmarks:

**Notable to Excellent Work: A**

A student who not only works hard and consistently, but also excels by:

* Addressing and expanding upon the issues presented in the assignments.
* Discovering/ proposing issues which are reciprocal, similar and coincidental to the assignment. [this means your ideas are fully and exhaustively researched and developed, that you have made attempts to bring observations and ideas not touched on directly in class to the projects we undertake.]
* Active and prolific production throughout the project, including in studio and between class days.
* Demonstrating the ability to achieve and excel independently.
* Ability to render-visible key concepts and issues.
* Demonstrating superior craft.
* Actively participating/proposing in a critical dialogue in lecture, group and individual discussions.
* Enthusiastic about the assignments and discussions.
* Making the most of each and every lecture and studio session.

**Acceptable Work: B**

A student who works hard and consistently with some success by:

* Addressing and expanding upon the issues presented in the assignments.
* Demonstrating not only understanding but also achievement in directing the investigations and development of assignments.
* Generally effective production throughout the project, including in studio and between class days.
* Demonstrating strong competence in craft.
* Actively participating in group discussions.
* Demonstrating enthusiasm about the assignments and discussions.
* Attending and working during each studio session.

**Marginal Work C**

A student who does not demonstrate the minimal competence to advance in the program by:

* Exhibiting difficulty in demonstrating recognition and understanding of the issues and concepts presented in the assignments.
* Poor process, showing little effort or advancement during working sessions and/or between classes.
* Missing or leaving lectures and studio sessions early without notice.
* Repeatedly coming to class late.

**Unacceptable Work: D or F**

A student who demonstrates no ability to advance in the program by:

* Failing to recognize and understand the issues and concepts presented in the assignments.
* Lack of effort and/or wasting time during studio work periods
* Missing or leaving lectures and studio sessions early without notice.
* Repeatedly coming to class late.
* Being a distraction rather than an asset to the working environment of the studio.

**F. Textbooks**

**Required Text**

Available at Follett’s Orange Bookstore and on-line ([www.amazon.com](http://www.amazon.com), [www.bestbookbuys.com](http://www.bestbookbuys.com)).

***Professional Planting Design: An Architectural and Horticultural Approach for Creating Mixed Bed Plantings.*** Scott Scarfone. 2007. John Wiley and Sons

***Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses***. ***5th or 6th Edition.*** Michael Dirr.

**Suggested Texts**

These are not required for this course, but were for your respective plant identification courses and will be helpful in this class, particularly when you are required to specify plants in your design problems.

***The American Horticultural Society Encyclopedia of Plants and Flowers (American Horticultural Society Practical Guides).*** Christopher Brickell, Trevor Cole, and H. Marc Cathey. ISBN: 978-0789489937

***Wildflowers in the Field and Forest: A Field Guide to the Northeastern United States*** *(*Jeffrey Glassberg Field Guide Series). Steven Clemants. ISBN: 978-0195150056

***A Field Guide to Trees and Shrubs: Northeastern and north-central United States and southeastern and south-central Canada*** (The Peterson Field Guide Series). George A. Petrides, ISBN: 978-0395353707

***Rodale's Illustrated Encyclopedia of Perennials: 10th Anniversary Revised and Expanded Edition***. Ellen Phillips. ISBN: 978-0875968995

***Pocket Guide to Ornamental Grasses*** (Timber Press Pocket Guides). Rick Darke. ISBN: 978-0881926538

***National Wildlife Federation Field Guide to Trees of North America*** . Bruce Kershner. ISBN: 978-402738757

**Other Texts**

There are literally thousands of books on plants and garden design. Unfortunately, no single book covers all that you need to know. Moon Library has a good selection of these titles. Use them as supplemental references as needed:

1. ***Planting the Landscape*.** Nancy Leszcynski. (SB472.L39. 1999)
2. ***Trees in the Urban Landscape***. Peter Trowbridge and Nina Bassuk (SB436.T86 2004)
3. ***Urban Soil in Landscape Design.*** Phillip Craul. (S592.17.U73 C73 1992-Reserve Desk)
4. ***Urban Soils-Applications and Practices***. Phillip Craul. 1999. (S592.17.U73 C735 1999)
5. ***Soil Design Protocols for Landscape Architects and Contractors***. Craul (SB472.45 .C73 2006)
6. ***Plants in the Landscape.*** Carpenter, Walker, and Lanphear. (SB472.C27)
7. ***Landscape Design with Plants.*** Clouston. (SB472 L37. 1990)
8. ***Tree and Shrub Handbook.*** Morton Arboretum (SB435.T69 2002)
9. ***Trees for Architecture and Landscape.*** Robert Zion (SB435.Z5 1995)
10. ***Native Trees, Shrubs, and Vines for Urban and Rural America : A Planting Design Manual for Environmental Designers.*** Gary Hightshoe (SB435.5 .H54 1988)
11. ***Trees of New York State.*** Donald Leopold. (QK477.L46 2003-Reference Section)
12. ***Native Plants of the Northeast.*** Donald Leopold (SB439.24.N67 L46 2005-Reference Section)
13. ***Taylor’s Master Guide to Gardening.*** Frances Tenenbaum (SB473.T425 1994-Reference Section)
14. ***Trees of the Central Hardwood Forest.*** Leopold, McComb, Muller (QK115.L43 1998-Reference Section)
15. ***The Encyclopedia of Plant Combinations.*** (SB454.3.C64.L67 2002-Reference Section)
16. ***North American Plantfile.*** Gary Hightshoe, Harlen Groe (SB435.H533 1998-Reference Section)
17. ***The American Horticultural Society A-Z Encyclopedia of Garden Plants.*** (SB403.2.A45 1997-Ref. Section)

In addition to the above, these are useful references that you may want to buy if you’re serious about plants..

1. ***Up by Roots.*** James Urban. ISA Press.
2. ***Arboriculture***. Richard Harris. Prentice-Hall.
3. ***Hardy Trees and Shrubs- An Illustrated Encyclopedia.*** Michael Dirr. 2003. Timber Press
4. ***Manual of Herbaceous Ornamental Plants,*** 4th edition***.*** Steven Still. 1993. Stipes Publishing, LLC
5. ***Bold Romantic Gardens***. Oehme, Van Sweden, Rademacher. 1998. Spacemaker Press.
6. ***The Color Encyclopedia of Ornamental Grasses.*** R. Darke. 1999. Timber Press
7. ***Landscaping with Native Trees.*** Guy Sternberg, Jim Wilson. 1995. Chapters Publishing LTD.
8. ***Street Tree Fact Sheets.*** H. Gerhold, N. Lacasse, W. Wandell. 1993. Penn State University.

**G. Supplies**

In addition to standard note taking supplies, you will need drafting and graphics supplies as required by your studios to complete the projects and assignments. Most projects will be completed within the studio period and will consist of hand-graphic based exercises. For later projects that will be coordinated with studio, you may use digital media but you must have a laptop and the required software for use at your studio workstations. Most projects can be completed utilizing the Adobe Suite and/or AutoCAD. Proficiency in the software is suggested if you intend to utilize these tools, as you will need to be in production mode for most of the semester in order to stay on top of things.

**H. Schedule**

This course schedule is tentative, and subject to change

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| **August** | **30-First Day of Classes** | **31** | **1** | **2** | **3** |
| Introduction; Plant Characteristics (Aesth) |  | Plant Characteristics, cont  (Aesthetics) | Landscape Graphics -Plan |  |
| **September** | **6 – Labor Day** | **7** | **8** | **9 – Field Trip** | **10 – Eid Ul-Fitr** |
| No Classes |  | Plant Characteristics, cont. (Aesthetics) | Terry Ettinger: Planting Design Field Walk | No Classes |
| **13** | **14** | **15** | **16 – Field Trip** | **17** |
| Plant Characteristics, cont. (Design Function) |  | Plant Characteristics, cont. Composition | Center of Excellence (Dissection Project) |  |
| **20** | **21** | **22** | **23** | **24** |
| Composition, cont. |  | Ecology in Planting Design | Planting Style Studies |  |
| **27** | **28** | **29** | **30 – Field Trip** | **1** |
| Ecology in Plnt Dgn, cont. Native and Invasive Plants |  | Native and Invasive Plants, cont. | Northern Nurseries |  |
| **October** | **4 – TT Out** | **5 - TT Out** | **6 - TT Out** | **7 - TT Out** | **8 - TT Out** |
| **Exam 1** |  | **Class cancelled** | Don Leopold Guest Lecture: Nat. Plant Comm. |  |
| **11** | **12** | **13** | **14** | **15** |
| Planting for Sustainability |  | Planting for Sustainability, cont. | Clubhouse Conceptual Plan |  |
| **18** | **19** | **20 - TT Out** | **21 - TT Out** | **22 - TT Out** |
| Green Roofs |  | **Class cancelled** | Lee Newman Guest Lecture: Phytoremediation |  |
| **25** | **26** | **27** | **28** | **29** |
| Planting and Planting Details |  | Planting and Planting Details, cont. | Jim Urban Guest Lecture: Soils and Trees | Jim Urban Day-long seminar (optional) |
| **November** | **1** | **2** | **3** | **4** | **5** |
| **Exam 2** |  | More Planting Details | Clubhouse Redesign |  |
| **8** | **9** | **10** | **11** | **12** |
| More Planting Details, cont. |  |  | Plant Specification and Selection |  |
| **15** | **16** | **17** | **18** | **19** |
| Maintenance for Establishment |  | Maintenance for Establishment, cont | Start final design project |  |
| **22** | **23** | **24 – Thanksgiving** | **25 – Thanksgiving** | **26 – Thanksgiving** |
| Maintenance – Ongoing Care |  | No Classes | No Classes | No Classes |
| **29** | **30** | **1** | **2** | **3** |
| Terry Ettinger Bare root planting |  |  | Final Design Project,  Plant Selection |  |
| **Dec** | **6** | **7** | **8** | **9** | **10 – Last Day of Classes** |
|  |  |  | Final Design Project,  Plant Specification |  |
| **13 – Final Exam** | **14 – Exam Week** | **15 – Exam Week** | **16 – Exam Week** | **17 – Exam Week** |
| **8:00 – 10:00 am** |  |  |  |  |