**LARC 5342: LANDSCAPE TECHNOLOGY II**

**SPRING 2016**

Class Time: Monday and Wednesday 3:00-5:50 p.m., Saturdays as needed.

Classroom: ARCH 103

Instructor: David Hopman, ASLA, PLA

 Office: ARCH 428

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 Phone: 817-272-0468

Office hours: See posting on door of room 428.

Course Prerequisites: LARC 5340, LARC 5350 or permission of the professor

**Course Syllabus**

**Course Description:**

The objective of this course is to familiarize students with the basic principles of landscape construction, to provide study material to help pass the LARE, and to develop the skills required to produce a complete construction package to a professional standard.

**Course Objectives:**

1. Develop the necessary working knowledge to accurately and correctly dimension landscape architectural elements.

1. Develop working knowledge concerning the physical properties of landscape construction materials inclusive of concrete, masonry, wood, stone, asphalt and steel.
2. Develop technical expertise for the design of landscape elements such as decks, retaining walls, overhead structures, water features, steps and ramps.
3. Develop and apply common landscape architectural details to typical design situations.
4. Develop the skills necessary to complete a set of contract documents.
5. Develop a professional construction drawing technique using AutoCAD with a hierarchy of line weights.
6. Develop a good organization process in completing and compiling construction documents.

**Measurable Outcomes:**

Upon the completion of the class, the student will:

1. Produce a complete set of construction documents to a professional standard including: layout, grading, planting, hardscape and softscape details, and a cost estimate.
2. Demonstrate knowledge of construction materials and methods through a series of quizzes and exams.

**Attendance Policy:**

Attendance is required, unless excused by the instructor. Keeping deadline commitments is an integral part of being a Landscape Architect. No project will be accepted for credit after the class period that it is due. Additionally, grades will be given for all interim presentations that will comprise 30% of the total project grade.

Tentative Class Schedule:

Week 1&2 Pavement/Layout and Dimensioning

Week 3&4 Steps and Handrails

Week 5&6 Retaining walls

Week 7&8 Wood Decks and Arbors

Week 9&10 Steel Construction

Week 11&12 Pools and Water Features

Week 13-16 Completion of Construction Document Set

**Evaluation Criteria**:

There will be 7 homework assignments, one semester project, weekly quizzes, one midterm exam, and a comprehensive final exam.

The semester project and final exam must be passed to receive a passing grade in the course. Additional reading may be assigned, as the instructor deems necessary.

Assignments and problems will be due at the beginning of class on the date specified.

Late work will not be accepted for full course credit and will receive a 20% deduction. All deadlines will be strictly enforced. Extenuating circumstances for INDIVIDUAL exemptions to the late work policy will follow these guidelines:

1. Illness accompanied by a medical certificate will extend the project deadline the number of days that the illness impaired the individual from completing the work. The medical certificate must be accompanied by written explanation from a physician as to the physical or other reasons why you were unable to complete the work.

1. Compassionate reasons (such as illness or death of an immediate family member or family problems requiring you immediate attention, i.e. divorce, court proceedings). Stress and mismanagement of time are not acceptable reasons for compassionate extensions.

Semester grades will be based entirely on the homework assignments, tests, details, models & examinations as follows:

# No. Description Points Each Total Points

 Semester Project \* 30%

 Homework Assignments 25%

 Quizzes 15%

 Midterm Exam 10%

 Comprehensive Final Exam \* 20%

\* Must be passed to pass course

Letter grades will be assigned for each assignment. A letter grade will be issued for each student at the end of the semester. Grades for the class will be based on a percentage of the total possible. Not on a curve.

A= 90 to 100%: Outstanding academic performance, only minor mistakes that

would not affect the overall solutions. Technical data is

complete and accurate. Work was graphically neat and

handed in on time.

B = 80 to 89%: Very good academic performance, minor mistakes not critical

but overall solution effected. Technical data is complete,

graphic quality is good but improvements needed. Work

submitted on time.

C= 70 to 79%: Average academic performance, mistakes are apparent which

seriously affect solution. Technical data is incomplete and not

accurate. Graphic quality generally poor.

D= 60 to 69%: Poor academic performance; solution unworkable with major

mistakes. Lack of understanding of technical data. Work

Incomplete and graphic quality generally poor.

F= 0 to 59%: Failing work not submitted on time or incomplete. Solution is totally unworkable. Little comprehension of technical data.

Note: All projects will be completed on an individual basis; however this is not intended to discourage individuals from helping one another. Discussion or joint participation will not be allowed during the tests or final exam.

**Required Text:**

1. Hopper, Leonard J. 2007. *Landscape Architecture Graphic Standards.* Hoboken New Jersey: John Wiley and Sons, Inc.

**Secondary Sources:**

It is required that you purchase *Landscape Architecture Graphic Standards* as the text for this course and as an excellent reference for your professional library. We will be reading *Sustainable Landscape Construction* as well. This book is highly recommended but not required. Other recommended references are listed below.

**Newer References**

1. Dines, Nicholas T. and Kyle D. Brown. Landscape Architect’s Portable Handbook. McGraw-Hill, New York, New York, 1999.
2. Dines, Nicholas T. and Kyle D. Brown. Time Saver Standards: Concise Site Construction Details Manual. McGraw-Hill, New York, New York, 2001.
3. Hopper, Leonard J.. Graphics Standards Field Guide to Hardscape. John Wiley and Sons, Hoboken, 2010.
4. Kirkwood, Niall. The Art of Landscape Detail: Fundamentals, Practices, and Case Studies. John Wiley & sons, Inc., New York, 1999.
5. Landphair, Harlow C. and Fred Klatt Jr.. Landscape Architecture Construction (3rd Edt.). Elsevier North Holland, New York, New York, 1999.
6. Mcleod, Virginia. Detail in Contemporary Landscape Architecture. Laurence King Publishing, Ltd., London, 2008
7. Ryan, Tom R., Edward Allen, and Patrick Rand. Detailing for Landscape Architects: Aesthetics, Function, Constructability. John Wiley and Sons, Hoboken, 2011.
8. Strom, Steven and Kurt Nathan. Site Engineering for Landscape Architects, 2nd Edt. Van Nostrand Reinhold, New York, New York, 2004.
9. Thallon, Rob and Stan Jones. Graphic Guide to Site Construction. The Taunton Press, Newton, Ct. 2003
10. Thompson, William and Kim Sorvig. Second Edition. Sustainable Landscape Construction. Island Press, Washington D.C. 2008.
11. Zimmerman, Astrid (Ed.). Constructing Landscape: Materials, Techniques, Structural Components. Birkhauser Verlag, AG, Boston, 2009

**Older References**

1. Allen, Edward. Fundamentals of Building Construction: Materials and Methods. John Wiley and Sons, Inc., New York, New York, 1985.
2. Barry, B. Austin. Construction Measurements. 2nd Edt. John Wiley and Sons, Inc., New York, New York, 1988.
3. De Chiara, Joseph and Koppelman, Lee E. Site Planning Standards. McGraw Hill Book Company, New York, New York, 1978.
4. Ellison, D. C., Huntington, W. C. and Mickadeit, A. E. Building Construction: Materials and Types of Construction. 6th Edt. John Wiley and Sons, Inc., New York, New York, 1987.
5. Harris, Charles W. and Dines, Nicholas T. Time Saver Standards for Landscape Architecture. McGraw- Hill Book Company, New York, New York, 1988.
6. Hammer, Mark J. and MacKichan, Kenneth A. Hydrology and Quality of Water Resources. John Wiley and Sons, Inc., 1981.
7. Landphair, Harlow C. and Motlock, John L. Site Reconnaissance and Engineering: An Introduction for Architects. Landscape Architects and Planners. Elsevier Science Publishing Co., Inc., New York, New York, 1985.
8. Lynch, Kevin. Site Planning (2nd Edt.). The M.I.T. Press, Cambridge, Massachusetts, 1971.
9. Munson, Albe E. Construction Design for Landscape Architects. McGraw Hill Book Company, New York, New York, 1974. V
10. Schroeder, W. L. Soils in Construction, 3rd Edt. John Wiley and Sons, Inc. New York, New York, 1984.
11. Unterman. Richard K. Grade Easy. Landscape Architecture Foundation, McLean, Virginia, 1973.
12. Unterman, Richard K. Principles and Practices of Grading. Drainage, and Road Alignment = An Ecological Approach. Reston Publishing Company, Inc., Reston, Virginia, 1978.
13. Walker, Theodore D. Site Design and Construction Detailing. PDA Publishers, Mesa, Arizona, 1978.
14. Weinberg, Scott and Coyle, Gregg A. Handbook of Landscape Architectural Construction: Materials (Vol.4). Landscape Architecture Foundation, McLean Virginia, 1002. SCA 1211511999)

**Other Information:**

1. Students will need access to a digital camera of at least 8 mega pixels.
2. Use of aerosol materials, paints, and other hazardous chemicals: Due to health and safety regulations and University policy, no spray paints, adhesives and other hazardous aerosol products are allowed in the building. Furthermore, no painting or use of flammable or other hazardous chemicals is allowed anywhere in the building, including and especially the fire stairs. Use of such chemicals is a hazard to your health and safety and that of other building occupants. It is also against the law. Spray painting and similar activities are only permissible in the approved ventilated spray booths in the School Shop. Violations of this policy will be subject to both academic and civil penalties.

**Mission Statement:**

The mission of the program in Landscape Architecture is to educate for ultimate leadership in the landscape architecture profession. This mission requires fostering rigorous scholarly inquiry of the discipline, and the preparation of knowledgeable practitioners.

**Ownership of Student Work:**

All student work submitted for evaluation is under the proprietorship of the Program (Excluded are such works that may be protected by copyright or patent rules). A representative collection of student work is essential for accreditation and is to be archived on campus for a period of six years. Therefore, it is suggested that students maintain photographs or reproductions of all work submitted, displayed in a cumulative portfolio reflecting student progress while completing the MLA at UT-Arlington.

**Equal Opportunity Statement:**

It has been, and will continue to be, the policy of The University of Texas at Arlington to be an equal opportunity employer. The University does not discriminate on any basis prohibited by applicable law including race, color, religion, sex, national origin, disability, age, or veteran status in recruitment, employment, promotion, compensation, benefits or training. It is also the University’s policy to maintain a work environment free from discrimination on the basis of sexual orientation. The University of Texas at Arlington is committed to seeking the best qualified person to fill each available position and will reward employees based on their job performance.

**Final Review Week**

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Americans With Disabilities Act:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

**Title IX:**

The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

**Academic Integrity:**

At UT Arlington, academic dishonesty is completely unacceptable and will not be tolerated in any form, including (but not limited to) “cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts” (UT System Regents’ Rule 50101, §2.2). Suspected violations of academic integrity standards will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Drop Policy:**

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/ses/fao>).

**Student Support Services Available:**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting [www.uta.edu/resources](http://www.uta.edu/resources).

**Electronic Communication:**

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Student Feedback Survey:**

At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory will be asked to complete an online Student Feedback Survey (SFS) about the course and how it was taught. Instructions on how to access the SFS system will be sent directly to students through MavMail approximately 10 days before the end of the term. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback data is required by state law; student participation in the SFS program is voluntary.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located on the second floor near the bottom of the main central staircase of The School of Architecture. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.