Date: February 5, 2010
Course Number: LSA 304
Course Title: Integrated Digital Graphic Methods

New Course OR Changes in existing course (check all that apply):

- Prefix
- Description
- Shared Resources
- Number
- Pre-requisite(s)
- Course Format
- Credits
- Co-requisite(s)
- Content
- Title
- Semester Offered

This course meets the General Education standards in the following knowledge and skills area (check all that apply):

- American History
- Humanities
- Other World Civilizations
- The Arts
- Mathematics
- Social Sciences
- Basic Communication
- Natural Sciences
- Western Civilization

Prequisites or co-requisite requirements:

Prerequisites: Undergraduate standing in the DLA Bachelor of Landscape Architecture program or permission of the instructor. Completion of LSA 301, 302 and 303 recommended. Co-requisites:

Institutional Impact:

Anticipated Enrollment: 60-76 (for 304 and 504 combined) per semester

Technology and Classroom Resource Demands:

The course requires: (1) lecture facilities which seat up to 76 students (all students enrolled in LSA 304/504), and (2) a computing classroom (lab). Lab enrollment per section will be limited to the number of computing stations (an institutional computer or designated station for use of a personal computer) available in the computing classroom. Instructional facilities in both venues are to include a whiteboard, suitable electronic projection for instruction, an adequate instructor’s PC and/or suitable connections for an instructor’s personal PC, wired and/or wireless network connections, access to the Internet and to campus network resources such as an online course management site and online data storage.
DETAILED COURSE DESCRIPTION

COURSE: LSA 304 – Integrated Digital Graphic Methods
1 Credit Hour – Fall Semester
2 hours of lecture and 3 hours of lab per week for the last 5 weeks of the semester
Prerequisite(s): Undergraduate standing in the DLA Bachelor of Landscape Architecture degree program or permission of the instructor. Completion of LSA 301, 302 and 303 recommended.

Instructor: TBD

Course format: The course is offered during the fall semester. Mastery of course content will require students to have access to the campus computing network and either personal or institutional computers for use both within and outside of designated class time in order to complete class exercises and assignments.

SCOPE:

1. Level of Instruction:
   a. LSA 304 is a required course intended to fulfill upper division program requirements.
   b. Credits will not be granted for LSA 304 and LSA 504 (undergraduate and graduate versions of the same course).
2. Relation to curriculum or to other ESF or Syracuse University courses:
   a. LSA 304 is required for all students enrolled in the Bachelor of Landscape Architecture degree program. It’s taught as a shared resource course with LSA 504.
   b. Students enrolled in LSA 504 have additional components to perform on some class assignments and have higher standards applied to the grading of their performance on class assignments over those expected of the LSA 304 students.

STUDENT LEARNING OUTCOMES:

After completing this course, students will have basic competency in:

1. Producing composite graphics derived from collaborative digital processing between CAD, vector drawing, bitmap image processing, 3D modeling and GIS software applications. Software training emphasizes AutoCAD, Adobe Creative Suite, SketchUp and ArcGIS applications;
2. Preparation of digital documents for both print and electronic distribution;
3. Workflow management and production issues common to digital work environments.

Student competency is evaluated through:

1. Weekly assignments which emphasize: (1) the application of various processing techniques, software features, and production methods associated with the use of designated course software; and (2) the assembly of various assignment components into composite pages of content for print and electronic distribution.

MAJOR CONCEPTS OR METHODOLOGIES:

Designers and planners gather data on a wide range of environmental, political, and cultural factors relevant to a particular problem, analyze the content, generate ideas, propose solutions, and often oversee the implementation of those solutions. Central to this activity is mediation of a participatory process that includes various private, public and professional interests. The process relies heavily on visualization of ideas, as both a tool to help designers and planners understand the content they’re analyzing and the solutions they’re formulating, and as a means of communicating content to the other participants in the process. Visualization of ideas for analysis and communication is not new, but the digital tools being used for these tasks are in a constant state of development. The situation requires practitioners to learn
contemporary and evolving digital techniques and develop skills at using the digital medium to perform the bulk of their professional work. This course focuses on the development of basic skills in digital methods relative to graphic techniques for the exploration and communication of design ideas.

Landscape architects, architects, planners and other design professionals need to communicate ideas visually to a wide variety of participants in the design and planning process. Ultimately this includes translating conceptual content into technical content suitable for construction implementation. To that end, CAD applications are the primary tool used in design and planning disciplines for the preparation of graphic technical content. This course focuses on the use of CAD to produce technical graphic content for both print and electronic document distribution.

**CATALOG DESCRIPTION:**

LSA 304 — Integrated Digital Graphic Methods (1)

Two hours of lecture and three hours of lab per week for the last five weeks of the semester. Students learn skills for producing graphics derived from collaborative digital processing (CAD, vector drawing, bitmap image processing, 3D modeling and GIS software). Content emphasizes graphics for print, report documents, and electronic display and distribution. Software training emphasizes AutoCAD, Adobe Creative Suite and SketchUp. Fall.

Prerequisite(s): Undergraduate standing in the DLA Bachelor of Landscape Architecture degree program or permission of the instructor. Completion of LSA 301, 302 and 303 recommended.

**COURSE HISTORY:**

First offered as LSA 496/696 in the fall of 2009. New course proposed in February 2010.

Current revision: February, 2010
Computing Resources:

Students must have access to the Internet; to campus network storage resources and course management sites; and to computers running recent releases of a Windows operating system, CD/DVD writing software, Adobe Creative Suite, AutoCAD, SketchUp and ArcGIS software. Although landscape architecture students are required to provide their own microcomputers and software for use in LSA classes, it is assumed that most students in this course will use institutional computers within the context of course laboratory sessions. Students using personal computing equipment for this course are responsible for maintaining their equipment in a useable condition. Students are required to provide their own file storage and backup functions of all personal data files, and are responsible for providing required electronic course submissions as functional files in the formats and versions specified by the instructor.

Library Resources:

None

Transportation Requirements:

None

Forest Properties or Field Practicum Facilities Required:

None
Health and Safety Considerations:

Conditions or situations present in association with the course?

1. **Will substances with any of the following properties be used during instruction?** flammability, toxicity, corrosivity, reactivity, registered pesticide, legally controlled, or other characteristics with the potential to cause harm or injury?  
   - Yes / No: No

2. **Will any physical hazards be present during instruction?** (e.g., machines that need safety guards; razor blades or syringes; compressed gases, etc.)  
   - Yes / No: No

3. **Will any biological hazards be present during instruction?** (e.g., handling animals (rabies or hantavirus); cultures or stocks of infectious agents (fungal spores, viruses, bacteria, etc.).  
   - Yes / No: No

4. **Will any radiation hazards be present during instruction?** (e.g., radioisotopes, X-rays, ultraviolet rays, lasers, etc.)  
   - Yes / No: No

5. **Will any electrical equipment that, due to its design, location, or method of use, pose any threat to safety during instruction?** (Give considerable thought to electrical use outdoors, or any potentially wet location.)  
   - Yes / No: No

6. **Will there be any personal safety issues related to the class?** (e.g., due to time of day or location, at the end of any organized class exercise, will students be in danger of physical assault, etc.)  
   - Yes / No: No

7. **Will any students be driving official state or research sponsored land or water vehicles during any class or instructional exercise?**  
   - Yes / No: No

8. **Will any type of personal protective equipment be necessary during class exercises?** (e.g., hard-hats, eye/face protection, hearing protection, hand/foot protection, lab coat, visibility clothing, etc.)  
   - Yes / No: No

If the answer was “Yes” to any of the HEALTH AND SAFETY questions, please explain:

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