LA 4101 Realtime Landscapes

LSU Robert Reich School of Landscape Architecture Spring 2008
bradley cantrell . assistant professor of landscape architecture

cantrell@lsu.edu

office hours: M 9:30-11:30 or by appt.

reactscape.visual-logic.com

Class Meeting Time: W 9:30-12:30

Overview

Interaction with virtual worlds creates compelling methods for design visualization and landscape analysis. Students will study methods to create realtime virtual environments using mini-blogging, vrml, flash, alice, and the unreal and/or half-life game engine. Methods specific to realtime environments such as data streaming, low polygon modeling, texturing, and lighting will be analyzed to highlight best methods for architectural and landscape visualization. The course will examine methods to use realtime representations for analytical and representational purposes. Students must have experience using 3d modeling software such as 3ds max or Maya and image editing software such as photoshop.

Learning Objectives

- *Define multiple methods for representing landscapes in realtime.*
- *Explore techniques for creating realtime landscapes/data.*
- *Identify appropriate methods to create realtime landscapes.*
- *Create prototypes of realtime landscapes*
- *Execute methods for modeling and texturing realtime environments.*

Course Policies

ATTENDANCE POLICY:

Attendance is mandatory for the scheduled duration of the seminar meetings. More than three unexcused absences may constitute grounds for placement on attendance probation (see Attendance Regulations in the LSU General Catalog). Since most class meetings or general

discussions will take place at the beginning of the class period it is important that all students should be in the seminar room promptly at 9:30. Arriving late or leaving early, unless authorized by the instructor, will be considered an unexcused absence.

RESEARCH:

Projects will explore pragmatic representation and analysis issues as well as ask students to research information outside of seminar meetings. In this upper level seminar students are expected to define their research in order to appropriately meet the assignment requirements. Topics will be introduced and discussed in class and students will be expected to perform a substantial amount of research and project work between class meetings.

SUBSTANCE ABUSE:

University regulations prohibit the consumption of alcoholic beverages and the use of any illegal substance in University buildings at any time. Violations are likely to result in serious penalties. Smoking is prohibited in University buildings and within 25 feet of University buildings at any time (this includes the balconies and porches of the Design Building and the courtyard). Repeated violations of any of these regulations may also result in the Design Building being closed at night and on weekends. For the benefit of all, please be aware of the serious consequences that could result from violations of these regulations.

Grades

Each student's final grade will be determined by the student's progress and final product of the project. This includes the quality of interaction, production, craft, content, and presentation of the student's work. Students must engage in active discussions regarding the progress of their work. Late and incomplete work will not be accepted unless the student has a valid excused absence. Students will be expected to participate in all class/online discussions and reviews. Participation is critical for your progress in the seminar and is therefore required.

Participation - Readings	15%
Mini-blog (twitter)	15%
Project (mid review)	30%
Project (final review)	40%

Schedule - tentative

Week 1   Wednesday, January 16

Design Week

Week 2   Wednesday, January 23

Course Introduction, Project Introduction

Tools - Steam and Half Life 2, HL2 SDK

LA 4101 Realtime Landscapes

LSU Robert Reich School of Landscape Architecture Spring 2008
bradley cantrell . assistant professor of landscape architecture

Week 3   Wednesday, January 30

Introducing Realtime Environments

Introduce Hammer Level Editor

Present Project Precedents

Week 4   Wednesday, February 6

Mardi Gras Holiday

Week 5   Wednesday, February 13

Scripted vs. Realtime

Limitations

Week 6 -   **Wednesday, February 20**

Worlds/Environments

Test Run of level mock-up

Week 7   Wednesday, February 27

Objects/Prefab/Component

Week 8   Wednesday, March 5

Level Mock-up Due (mid review)

Week 9   Wednesday, March 12

Balance/Flow

Week 10   Wednesday, March 19

Spring Break

Week 11   Wednesday, March 26

Storyboard/Sketches/Mapping of FInal Project

Week 12   Wednesday, April 2

Social

Week 13   Wednesday, April 9

Experiential

Week 14   Wednesday, April 16

LA 4101 Realtime Landscapes

LSU Robert Reich School of Landscape Architecture Spring 2008
bradley cantrell . assistant professor of landscape architecture

Level Mock-up Critique

Week 15   Wednesday, April 23

Landscape Architecture Studio Reviews

Week 16   Wednesday, April 30

Bug Testing/Play Testing

Week 17   Wednesday, May 7

Project Due Deathmatch Challenge

Please note that the syllabus is subject to change at the discretion of the professor

Suggested Resources

Co, P. 2006 Level Design for Games, New Riders, Berkeley, California.

http://developer.valvesoftware.com

http://www.pixel2life.com/tutorials/valve_hammer_editor/

http://www.moddb.com/tutorials/23950/beginners-guide-to-valve-hammer-editor