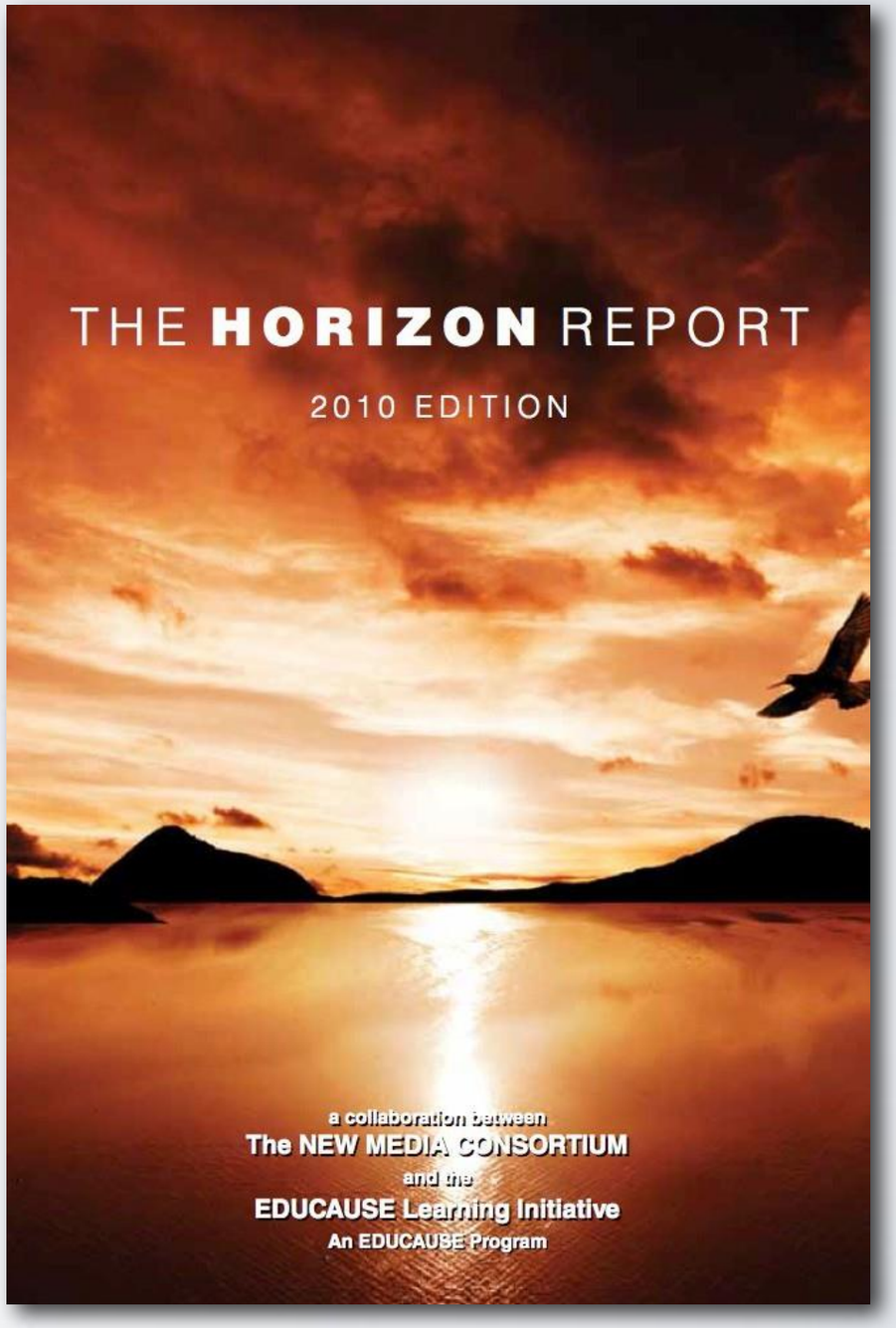
ECAR HORIZON REPORT

How do we stack up?

ECAR HORIZON REPORT

- Produced annually by:
  - New Media Consortium (NMC)
  - EDUCAUSE Learning Initiative (ELI)
- Highlights 6 emerging technologies
  - Implementation in 5 years



MOBILE COMPUTING

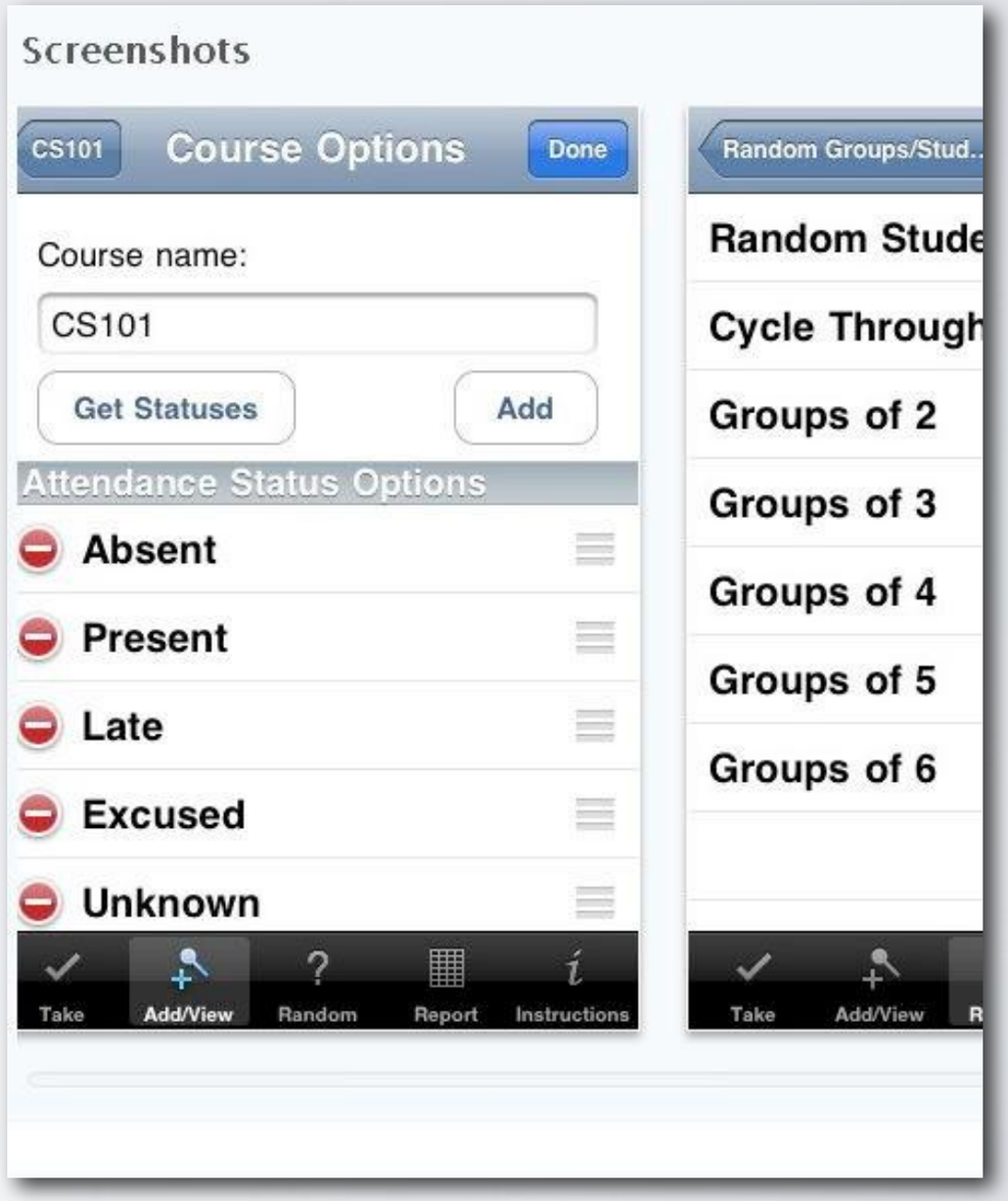
Time-to-Adoption Horizon: One Year or Less

EDUCATION

- Initial design stage of mobile interface for Purlieu system
- Soon to launch mobile data collection iPhone app

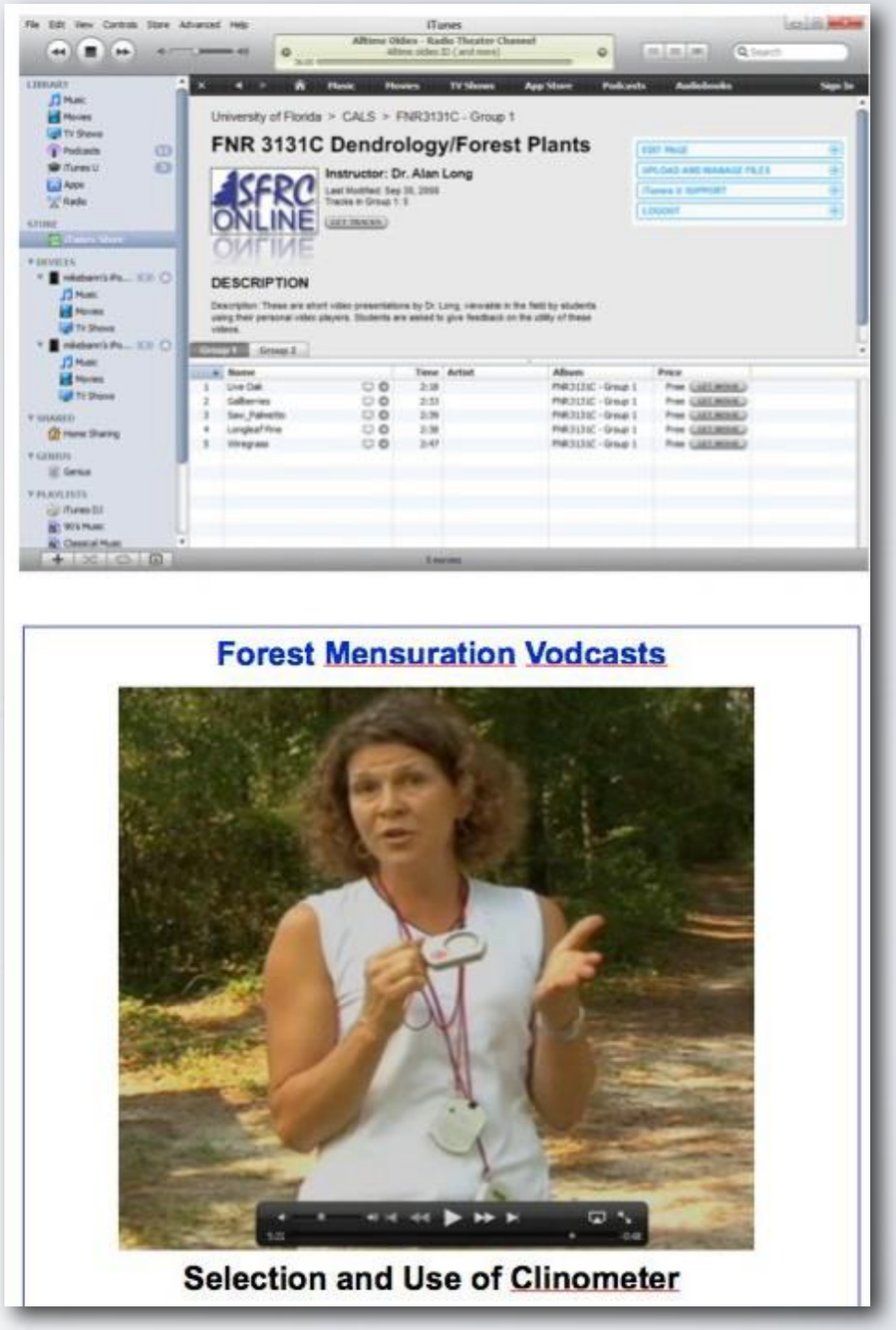
THEATER & DANCE

- Beginning to replace large consoles in production process
- Designers use smartphones to adjust lighting on the fly
- iPhone color app used in design course



FOREST RESOURCES & CONSERVATION

- Implemented video podcast tutorials
  - Used in 3 courses
  - Can be downloaded from UF iTunesU
- More tutorials proposed



CISE

- Dr. Sumi Helal world leader in mobile computing
  - General Chair ACM conference on ubiquitous computing
  - Teaches Mobile Computing course

BUSINESS

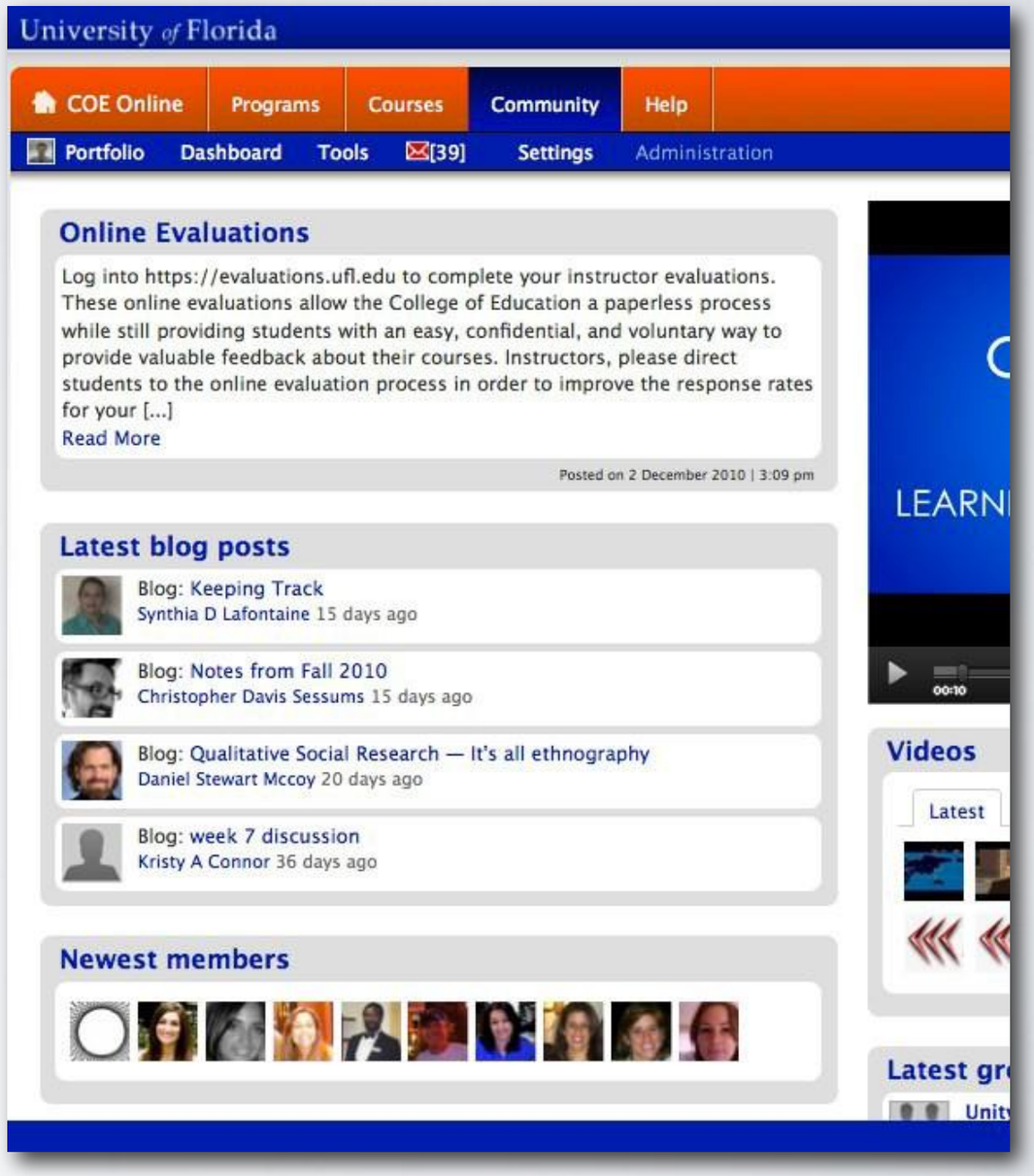
- Has used iPod video lectures for years
- Spring 2011 IMBA students will receive iPads
  - Investigating iPad participation in course activities

OPEN CONTENT

Time-to-Adoption Horizon: One Year or Less

EDUCATION

- Developed Purlieu, an open source social learning system
  - Allows learners to access publicly accessible content
  - Research collaboration
  - Marketing potential
  - Continuing Education



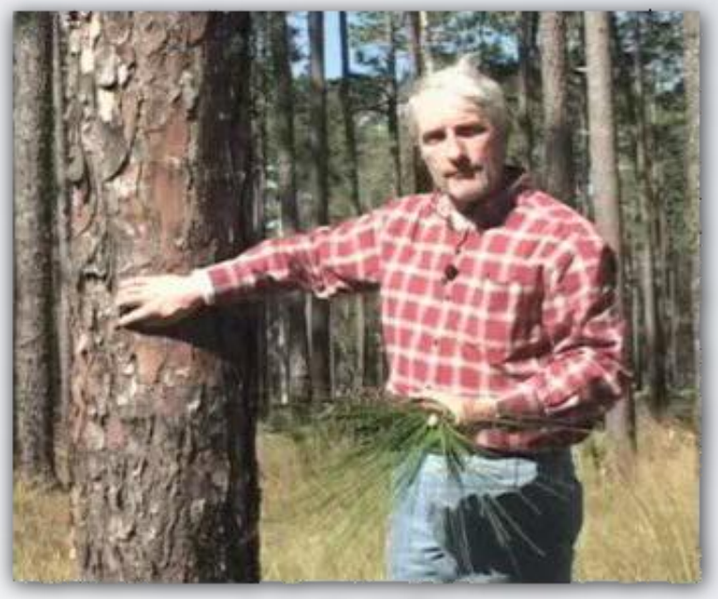
THEATER & DANCE

- Pending funding, proposed developing open source text book

  - Peer-reviewed
  - Licensed under Creative Commons
  - Easily editable

FOREST RESOURCES & CONSERVATION

- Developed RLO for longleaf pine identification
  - Peer-reviewed on UF EcoLearnIt Repository
  - Submitted proposals seeking funding for new RLOs on soil carbon sequestration



Longleaf Pine

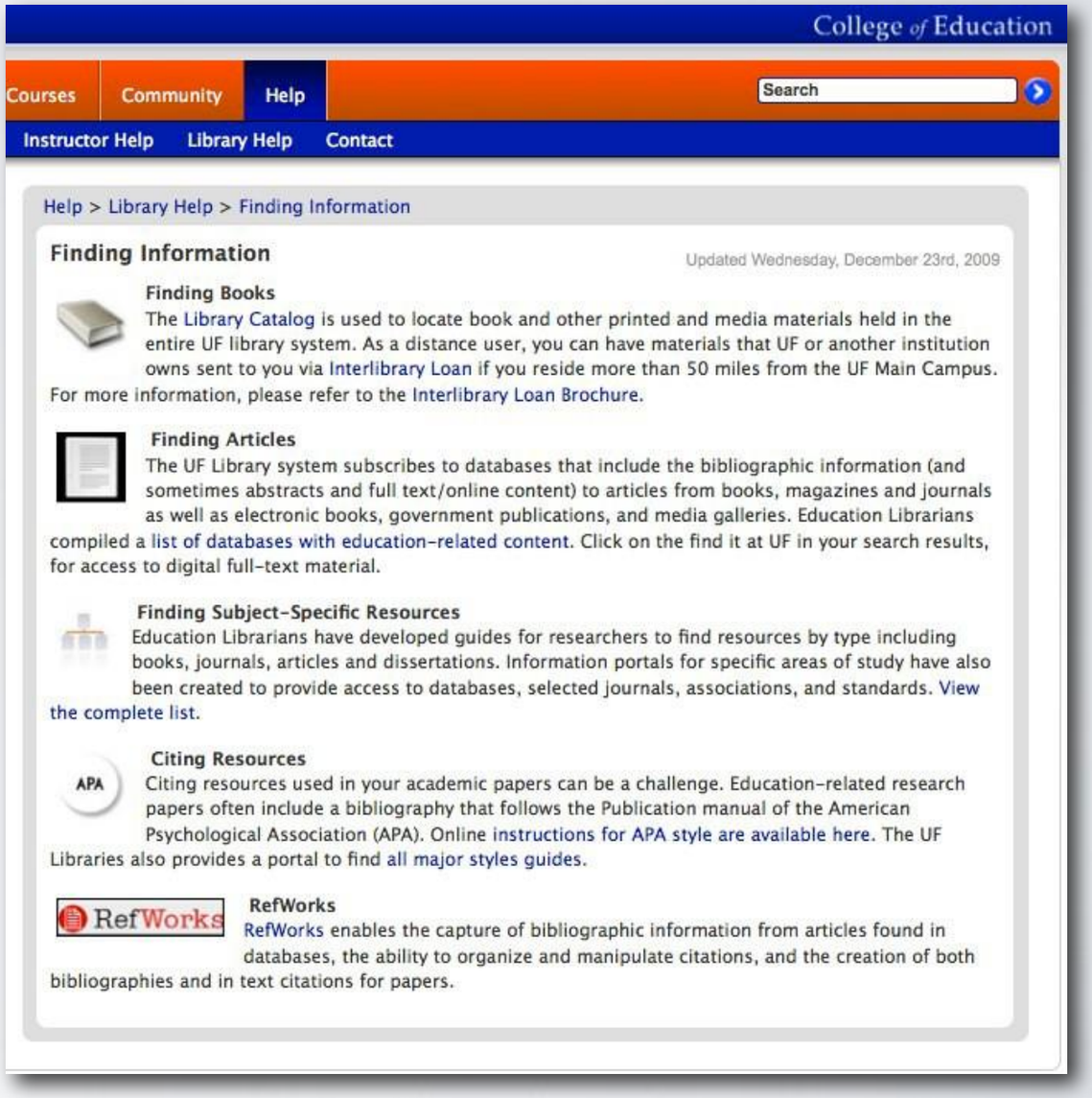
Saw Palmetto

ELECTRONIC BOOKS

Time-to-Adoption Horizon: Two to Three Years

EDUCATION

- Online courses use very few paper texts
  - Most use digital content through UF Libraries
  - Some use open source texts



BUSINESS

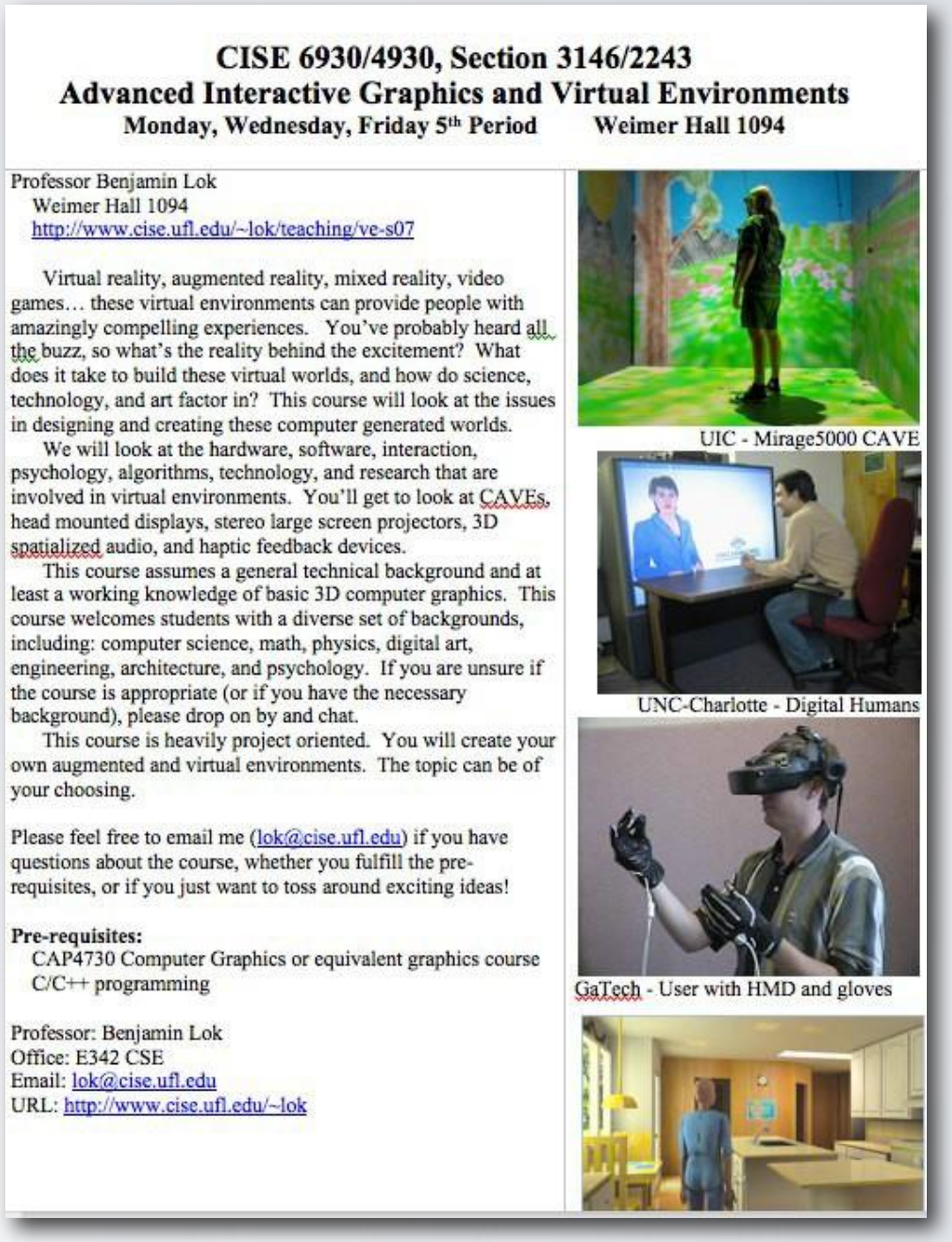
- IMBA investigating use of e-Books
- Exploring use of iPads as e-readers

SIMPLE AUGMENTED REALITY

Time-to-Adoption Horizon: Two to Three Years

CISE

- Virtual Environments course
  - Taught by Dr. Lok
  - Introduces theories and technologies of AR
  - Students implement AR apps using webcams and laptops



CISE 6930/4930, Section 3146/2243
Advanced Interactive Graphics and Virtual Environments
Monday, Wednesday, Friday 5th Period Weimer Hall 1094

Professor Benjamin Lok
Weimer Hall 1094
http://www.cise.ufl.edu/~lok/teaching/ve-s07

Virtual reality, augmented reality, mixed reality, video games… these virtual environments can provide people with amazingly compelling experiences. You've probably heard all the buzz, so what's the reality behind the excitement? What does it take to build these virtual worlds, and how do science, technology, and art factor in? This course will look at the issues in designing and creating these computer generated worlds.

We will look at the hardware, software, interaction, psychology, algorithms, technology, and research that are involved in virtual environments. You'll get to look at CAVEs, head mounted displays, stereo large screen projectors, 3D spatialized audio, and haptic feedback devices.

This course assumes a general technical background and at least a working knowledge of basic 3D computer graphics. This course welcomes students with a diverse set of backgrounds, including: computer science, math, physics, digital art, engineering, architecture, and psychology. If you are unsure if the course is appropriate (or if you have the necessary background), please drop on by and chat.

This course is heavily project oriented. You will create your own augmented and virtual environments. The topic can be of your choosing.

Please feel free to email me (lok@cise.ufl.edu) if you have questions about the course, whether you fulfill the pre-requisites, or if you just want to toss around exciting ideas!

Pre-requisites:
CAP4730 Computer Graphics or equivalent graphics course
C/C++ programming

Professor: Benjamin Lok
Office: E342 CSE
Email: lok@cise.ufl.edu
URL: http://www.cise.ufl.edu/~lok

UIC - Mirage5000 CAVE

UNC-Charlotte - Digital Humans

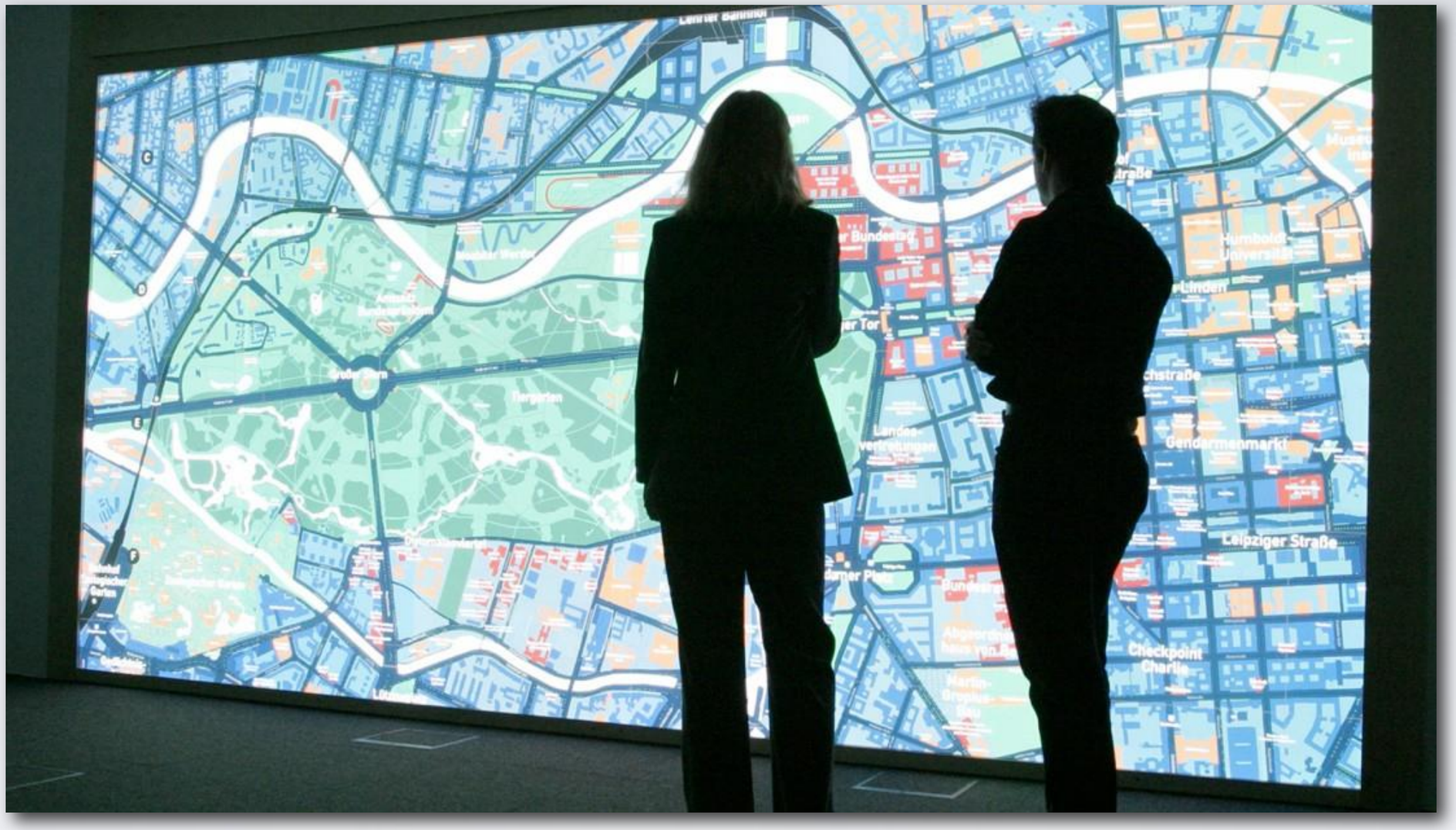
GaTech - User with HMD and gloves

GESTURE-BASED COMPUTING

Time-to-Adoption Horizon: Four to Five Years

CISE

- Virtual Environments course
  - Introduces theories and technologies, like Wii and Kinect
  - Some students use Wii to create virtual environments and interfaces



VISUAL DATAANALYSIS

Time-to-Adoption Horizon: Four to Five Years

QUESTIONS?