

ECE-481 (Fall) and ECE-482 (Spring)
SPECIAL TOPICS

Type (check one): Required: _____ Elective: X

2005-2006 Catalog Data: ECE 481-ECE 482. Special Topics. Elective courses of special or current interest. Usually taught by visiting faculty with special or unique qualifications. Normally taken by Seniors. Prerequisites are announced with course offerings. *One semester; three credits.*

Prerequisites: Junior standing and approval of instructor.

Co-Requisites: None

Textbook: None

Other Required Materials: None

Other References: None

Instructor: Dr. Juan Carlos Olabe-Basogain, Professor of Electrical Engineering.

Course Objectives: These courses include a series of seminars on: 1) current research in the design, implementation, analysis, and use of computer systems ranging from integrated circuits to operating systems and programming languages; 2) the activities of graduates in industry (large, medium, and small), start-up companies, government laboratories, and community colleges; 3) Dialogue with leading entrepreneurs, corporate executives, venture capitalists, and technology leaders from around the world. The seminars are available online. 3 credits.

Prerequisites by Topics:

Recent Presenters and Topics:

Presenters

Rob Barrett (IBM Almaden Research Center)
Roy Pea (Stanford Center for Innovations in Learning)
Alan Kay (HP Labs)
Krishna Bharat (Google)
Fred Turner (Stanford Dept. of Communication)
Wally Smith (Edith Cowan University, Western Australia)
Kate Collie (University of British Columbia)
Douglas Oard (University of Maryland)
BJ Fogg (Sun Microsystems)
Victoria Bellotti (PARC)
Terry Winograd (Stanford University)
Marti Hearst (UC Berkeley SIMS)
David Hilbert (FX Palo Alto Laboratory)
Judith Donath (MIT Media Lab)
Raul Rojas (Freie Universitaet Berlin)
Brad Myers (Carnegie Mellon University)
Paul Whitmore (E*Trade)
Richard Marks (Manager R&D Special Projects, Sony)

Topics:

The DIVER Project: Point-of-View Authoring of Virtual Tours of Video Recordings
Croquet: A Collaboration Architecture
Web Search Engines: Algorithms and User Interfaces
From Counterculture To Cyberculture: How The Whole Earth Catalog Brought Us
Technology Demonstrations: What are they for?
Challenging the Videoconferencing Gold Standard: Art Therapy and Tele-Mediated Communication in Behavioral Telehealth
Searching Spoken Word Collections
Using Computers to Change What People Think and Do: Insights into Captology
TaskMaster: Resource management in an email client
Where Do HCI Theory and Practice Meet?
Using Words to Search a Thousand Images: Hierarchical Faceted Metadata in Search Interfaces
Issues in Personalizing Shared Ubiquitous Devices
Intuitive media: Depicting people and situations in mediated environments
Electronic Chalk: A tool for live and remote teaching
Mobile Devices for Control
Advanced User-Interface Design for Vehicles
Design of a Video Auditorium and Leveraging the Asymmetric Sensitivity of Eye Contact for Videoconferencing
Beginning with the End in Mind: How to design for people's real goals
The AMD Opteron Microcomputer A Compatible Bridge Between 32- and 64-bit Computing
BiReality: Mutually-Immersive Mobile Telepresence
EyeToy: A New Interface for Interactive Entertainment
3D Face Recognition The Ultimate Biometric Lock
The Architecture of Colossus, The First PC
Wireless in Really Remote Areas
Things CPU Architects Need To Think About
Multi-Microphone Speech Processing, or Why Two Ears Are Better Than One
Open for Change
200 miles across the desert. 10 hours. No driver.
dns typosquatting: method, effects, counteraction
The Voting Machine War
The Battle for Accountability in Election Systems
A New Look at Cyber Defense
Blending Insight from Computer Science, Health Science, and Operations Research
Wireless Communication in a Post-Spectral World
What's New in Python - Not your usual list of new features
Computer Forensics
Corporate Fraud and The Discovery of Electronic Evidence
The Skynet Virus - Why it is Unstoppable, Hot to Stop It
Improving the Security Structure through Code Identity
Building a Virus-Safe Computing Platform
Don't Add Security, Remove Insecurity

Prepared by: Dr. Juan Carlos Olabe **Date:** August 2005