University Studies Cluster Proposal Cover Sheet
For Academic Year 2009-2010

Cluster Proposed for: Popular Culture

Title of course: Digital Media & Society

Course Number: CS 348

Proposing Faculty: Wu-chi Feng

Cluster Coordinator: Grace Dillon

Proposal Type:

___ Cluster Course to New Cluster

X ___ New Course to Cluster

___ Removal

Other clusters this course is assigned to:

Proposals are due to the University Studies office (CH 117) with 12 duplicate copies by Friday, November 9, 2007 so that they may be reviewed and forwarded to the UCC Committee for final approval.

ORIGINAL
University Studies New Cluster Course Addition

Adding a previously unapproved course to a cluster

(When addressing questions, please attach a separate sheet)

PROPOSING FACULTY (Name, signature, and department)

Wu-Chi Feng, Wen-Chi Fang, Computer Science

PROPOSED CLUSTER(S) Tentative

Freedom, Privacy, and Technology

Media Studies

Popular Culture

1. THE COURSE

A. COURSE TITLE, NUMBER, AND CATALOG DESCRIPTION

Course title: Digital Media and Society

Course number: CS348

Catalog description: This course covers the transition of society from a primarily paper-based society to one that is digital, with particular focus on the use of digital media such as audio, images, and video. The course will provide an understanding of (i) what is digital media and how did it come about, (ii) what are some of the technical limitations of digital media, (iii) the impact of copyright and digital rights management, (iv) digital media and the Internet, and (v) the impact this will have on future society. The course may not be used as one of the upper-division CS Electives for the BS degree in Computer Science.

B. DEVELOPMENT Is the course based upon an existing course, or is it a new course under development?

This is a new course. Some of the materials are derived from the CS 410/510 Introduction to Multimedia Networking and CS 305 Computer Ethics. It is intended for non-CS majors.

C. AVAILABILITY

With what regularity has the course been—or will the course be—offered?

Initially, it is expected to be offered once a year. If demand is high, more sections may be added
D. PREREQUISITES
List any course prerequisites beyond the cluster Sophomore Inquiry course.

2. COURSE OUTLINE. Provide a detailed outline of the proposed course, also including its preliminary reading list, and the name(s) of instructor(s) committed to teaching the course.

No prereqs. Outline below:
Name of instructor: Wu-chi Feng (tentatively)
Book: TBD

Week 1: Digital History
  Understanding the transition between analog and digital society
  Terminology and background for digital media society
What is digital media
  Audio – analog and digital representations
  Images – analog and digital representations
  Video – analog and digital representations

Week 2: Compression and limitations of Audio Media
  CD-audio
  MP3 compression
  Limitations of audio compression

Week 3: Compression and limitations of Image Media
  Popular image compression formats (GIF, JPEG, TIF, etc)
  Limitations and uses of image compression
  Explore the history of the development of image formats
  Explore why some formats are better at some things vs. others

Week 4: Compression and limitations of Video Media
  Popular video compression formats (MPEG-1, MPEG-2, AVI, MOV)
  Limitations and uses of video compression
  Explore the history and development of video formats
  Explore the limitations of such formats

Week 5: From 8-track, LPs, and tape to CDs and MP3
  Explore the impact on society and commerce with the change
  Explore the impact of new Internet sharing mechanisms

Week 6: Mid term
  The impact of networked video on society
  Youtube and iTunes phenomena

Week 7: The impact of networked video on society
  Video distribution
  Video conferencing
Week 8:  Protecting Digital Media
         Techniques to prevent illegal copy and theft of digital media
         Watermarking technologies
         Encryption technologies

Week 9:  Managing Digital Media Distribution
         Digital rights management
         Region encryption
         Convergence of cable, telephony, and the Internet

Week 10: The Future of Digital Society
          Explore issues relating to a society based solely on digital media
3. GENERAL EDUCATION GOALS.

A. COURSE CONTENT & SUITABILITY FOR CLUSTER
   Discuss the course content in relationship to the thematic focus of the cluster.

TBD: It could fall under:

   Freedom, Privacy, and Technology

   Media Studies

   Popular Culture

B. UNST GOALS Indicate what materials and assignments will address those University Studies goals appropriate to the course content and cluster theme (the goals are Inquiry and Critical Thinking, Communication, Diversity of Human Experience, and Ethical Issues & Social Responsibility).

This course will explore the limitations of digital media in graphics communications and computer literacy. The course will also stimulate critical thinking, focusing on the understanding and analysis of the analog to digital conversion society is currently going through. Students will also learn about the ethical and social aspects of digital media on society. In particular, it will focus on digital copyright and digital rights management for media.

C. CLASSROOM ENVIRONMENT Discuss the teaching strategies employed in the course and how they articulate with the student-centered, active-learning strategies characteristic of University Studies courses.

There will be many in class activities. The students will be expected to participate in discussion-oriented sessions.
**OBTAIN CHAIR AND CLUSTER COORDINATOR SIGNATURES BEFORE SUBMITTING TO UNIVERSITY STUDIES OFFICE**

DEPARTMENT CHAIR(S) ____________________________

DATE: __________ 12/1/08 _______  DATE: ________

CLUSTER COORDINATOR ____________________________

DATE: __________ 12/1/08 _______

*All changes to Clusters must be approved by PSU's Senate Curriculum Committee.*

**THE ORIGINAL + 3 COPIES OF THE PROPOSAL MUST BE RECEIVED AT UNIVERSITY STUDIES (CH 117) BY NOVEMBER 7 2008.**

Proposals submitted by this due date will be reviewed for inclusions in clusters beginning in AY 2009 - 2010.
COURSE APPROVED FOR CLUSTER INCLUSION

CHAIR, CLUSTER COORDINATORS: ____________________________

DATE: 12/1/99

CHAIR, UNST COMMITTEE: ________________________________

DATE: ___________________