Course description

Because research is the currency of both the academic world and the industry world, the conduct of research is essential to your professional career and your contributions to knowledge in Information Technology (IT). This course is intended to introduce you to established and emerging areas of scholarly research in IT and to help you identify a research agenda that will guide your research efforts. This course is also intended to introduce the potential pathways from research to practice and to help you better prepared in your future workplaces. The knowledge and insights you develop in this seminar will serve you throughout your academic and professional lives.

Over the semester we will explore research traditions in IT, discuss key issues in the conduct of research in this field, examine the range of approaches taken by IT researchers, and discuss challenges and opportunities when move from research to practice. In support of this agenda, SoIT faculty members and IT professionals will be invited to give guest lectures, and students will be able to discuss research topics that interest them and various issues that they may face in their professional careers with the guest speakers.

Course objectives

By the end of this course, students will:

- recognize established and emerging areas of scholarly research in IT;
- explain, compare, and reflect on the main theoretical and methodological approaches used by IT scholars;
- appreciate the ongoing research and scholarly pursuits of SoIT faculty;
- identify research problems in IT and the relevant sources of evidence;
- describe and analyze challenges and opportunities in the process of applying research to practice.
Course Requirements

Completing the required readings, viewing the course materials (e.g., PPTs and lecture videos), posting on the discussion board, writing reflective essays, and making a final video essay on time are essential to doing well in this course. Your grade will be based on the following criteria:

1. Contribution to online discussion (300 points)
You are expected to actively engage in online discussion. In every session week you should post at least one post on the discussion board to share your thoughts of the required readings (if any), and comment on at least two classmates’ posts. Your posts and comments do not need to be very long but have to show your independent and creative thoughts.

If a guest speaker is invited to give a lecture in a given week, you should also post at least one question for the speaker on the discussion board. I will collect questions and share them with the speaker.

**Posts and questions are due by the end of the Wednesday (11:59 pm EST) of the session week. Comments on others’ posts are due by the end of the following Monday.**

2. Reflective essays and quiz (300 points)
If a guest speaker is invited to give a lecture in a given week (e.g., Session 4-11), you will prepare a short reflective essay (500 words ~) that addresses the major theories, methods and/or problems of the speaker’s research area and professional experience that you find most important or interesting. Sometimes you will finish a short quiz instead of writing an essay after the guest talk (e.g., Session 3). Essays and quiz will be turned in via Blackboard and returned to students via Blackboard.

**Essays and quiz are due by the end of the following Monday (11:59 pm EST) after the session week.**

3. Video essay and critiques (400 points)
To explore current trends in IT, you will script and record a short (5 - 10 minutes) video essay on a current issue, phenomenon, or debate related to IT research or IT profession. The video essay will address why the research/practical problem is important to the field of IT and will cover theoretical frameworks, methodologies and empirical evidence that have been applied in investigating the problem area. Instructions to the content and format of the video essay will be discussed in detail.

**Your video must be uploaded to a video sharing site (e.g., YouTube or Vimeo) and viewable without any major technical glitches. Post the link to your video on the discussion board by the end of 12/5 (11:59 pm EST), comment on at least two classmates’ videos by the end of 12/6 (11:59 pm EST)**
Grading policy

In this class, good work and satisfying all of the requirements of the assignments will earn a student a B. To receive an A, a student must show creative, exceptional work which goes beyond the basic requirements of each assignment and brings something creative or otherwise impressive to the work.

Any missing or plagiarized assignments will receive no credit. Late submission of online posting/commenting will be accepted once during the semester, no questions asked, provided it is posted within two days after the due. You will be penalized for any more late submissions. I reserve the right to subtract 50 points of your grade each day beyond the due day.

950 - 1000     A
900 - 949       A-
850 - 899       B+
800 - 849       B
750 - 799       B-
700 - 749       C+
650 - 699       C
600 - 649       C-
550 - 599       D
500 - 549       D-
Under 500       F

Emergency Statement

In the event of a major campus emergency, course requirements, deadlines and grading points are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Here are ways to get information about changes in this course: my email address: guo.freeman@uc.edu

Academic misconduct Statement
See http://www.uc.edu/conduct/Academic_Integrity.html for IV. UC’s student guide to academic integrity.
Schedule of Topics, Readings and Assignments
(All readings are available on the Internet or on Blackboard. Subject to change with advance notice)

Session 1 (8/24-8/30)
Topic: Introduction and overview of the course
Required readings:
1. Syllabus

Post self-introduction to the discussion board by the end of Sunday (8/30)

Session 2 (8/31-9/6)
Topic: More than computerization: Information technology (IT), Information and communication technology (ICT), and sociotechnical systems (STS)

Required readings:

Assignments:
1. Post your thoughts of the readings to the discussion board; comment on at least two classmates’ posts

Due by the end of Wednesday (9/2)

Note: 9/7 – Labor Day

Session 3 (9/8-9/13)
Topic: Library resources for IT research
Guest speaker: Bob Freeman
Required readings:

1. Go to the Virtual Library module, found in the Student Resources area of this course, and browse the various resources.
2. Watch the Welcome Video from Robert Freeman.
3. Watch the Tour of the UC Libraries Homepage.
4. Read the Starting Your Search post in the "Ask a Librarian" section of the Discussion Board.
5. Browse the Citing Your Sources Research Guide.
Assignments:
   1. Quiz

Due by the end of the following Monday (9/14)

Session 4 (9/14-9/20)
Topic: Understanding and improving the mobile ecosystem: Measurements, security and tools
Guest speaker: Assistant Professor Xuetao Wei
Required readings:

Assignments:
   1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 9/16)
   2. Reflective essay (due by the end of the following Monday: 9/21)

Session 5 (9/21-9/27)
Topic: Information Technologies for Social Change
Guest Speaker: Dr. David Nemer, Assistant Professor of Information Communication Technology (ICT), School of Information Science, University of Kentucky

Required readings:

Assignments:
   1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 9/23)
2. Reflective essay (due by the end of the following Monday: 9/28)

Session 6 (9/28-10/4)
**Topic: Intimacy-mediated collaboration: How online games shape interpersonal relationships**

**Required readings:**
1. TED talk: Jane McGonigal: Gaming can make a better world. [http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world?language=en](http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world?language=en)

**Assignments:**
1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 9/30)
2. Reflective essay (due by the end of the following Monday: 10/5)

Session 7 (10/5 – 10/11)
**Topic: Modeling and Analyzing User Behavior of Privacy Management on Online Social Network**
**Guest Speaker: Dr. Kijung Lee**

**Required readings:**

**Assignments:**
1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 10/7)
2. Reflective essay (due by the end of the following Monday: 10/19)

Session 8 (10/12-10/18) Fall Reading Days
Topic: Guideline for video essay

Session 9 (10/19-10/25)
Topic: From research to practice – User experience in IT
Guest speaker: Jingya Yu, MS., Business Analyst, Cummins Inc.

Required readings:

Recommended but not required (if you have time, have a look at):
iOS Human Interface Guidelines:

Assignments:
1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 10/21)
2. Reflective essay (due by the end of the following Monday: 10/26)

Session 10 (10/26-11/1)
Topic: Implement research ideas in IT industry
Guest speaker: Peng Chen, Ph.D., software engineer, Facebook

Required readings:
1. Research (crazy idea) vs product (profit): https://www.youtube.com/watch? v=jroQCyWwEgE
2. Comparing academia with industry: http://www.pgbovine.net/academia-industry-junior-employee.htm
3. Some interesting blogs (recommended but not required):
https://code.facebook.com/ posts/
https://news.ycombinator.com/

Assignments:
1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 10/28)
2. Reflective essay (due by the end of the following Monday: 11/2)

Session 11 (11/2 -11/8)

Topic: From research to practice: IT in online marketing and e-Commerce
Guest speaker: Han Jia, MS, software engineer, eBay

Required readings:

Assignments:
1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 11/4)
2. Reflective essay (due by the end of the following Monday: 11/9)

Session 12 (11/9-11/15)

Topic: From research to practice: Big data, social media, and human life
Guest speaker: Xin Shuai, data scientist, Thomson Reuters

Required readings:
Assignments:
1. Post your thoughts of the readings and at least one question for the speaker to the discussion board; comment on at least two classmates’ posts (due by the end of Wednesday: 11/11)
2. Reflective essay (due by the end of the following Monday: 11/16)

Session 13 (11/16 – 11/22)
Topic: The future of IT
Required readings:

Assignments:
1. Post the topic of your video essay to the discussion board; comment on at least two classmates’ topic (due by the end of Sunday: 11/22)

Note: 11/23-11/29 Thanksgiving

Session 14 (11/30-12/6)
Topic: Watch video essays and provide feedback

Assignments:
1. Upload your video to a video sharing site (e.g., YouTube or Vimeo) and make it viewable without any major technical glitches. Post the link to your video on the discussion board by the end of 12/6 (11:59 pm EST).
2. Comment on at least two classmates’ videos by the end of Wednesday, 12/9 (11:59 pm EST).