# **COMS 647: Communication Technology**

Spring Semester 2019

Location: DuSable Hall 218
Time: 6:00-8:40 Monday
Instructor: Dr. David J. Gunkel
Department: Communication

Office: Reavis 112

Office Hours: MW 1:00-2:00 & by appointment

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### **Course Description**

This graduate seminar addresses recent innovations in information and communication technology (ICT), providing students with the following:

- Critical overview of the significant technological developments in computers, data networks, and information systems
- Facility with the important questions, issues, and problems that shape contemporary debates and conversations about ICT
- Knowledge of the influential individuals, organizations, and research programs that define the field.

In the process, students not only examine recent developments in technology and gain familiarity with the literature of ICT scholarship but actively participate in the field by producing original research projects suitable for the MA thesis, presentation at an academic conference, and/or publication in a scholarly journal. The objective of the course, therefore, is to cultivate informed, critical citizens and decision makers, who are confident dealing with current and future technological innovation.

### **Texts & Resources**

- David J. Gunkel. Of Remixology: Ethics and Aesthetics After Remix. The MIT Press, 2016. ISBN: 9780262033930
- David J. Gunkel. *Gaming the System: Deconstructing Video Games, Game Studies and Virtual Worlds.* Indiana University Press, 2018. ISBN: 9780253035721.
- David J. Gunkel. *Introduction to Communication & Artificial Intelligence*. Polity Press, 2019. (Pre-Print copy available via Blackboard).

These three texts are required and must be procured by all students enrolled in the course. In addition to these traditional print materials, we will employ a number of on-line texts. These materials are indicated on the course calendar and are required reading.

#### **Objectives**

Seminar members will learn and become proficient with the following:

• **Theory and Concepts** - Students will know the terminology, fundamental texts, and basic concepts of information and communication technology. They will be able to talk

the talk, to analyze the major issues and debates, and to trace complex relationships between ICT and contemporary culture.

- Critical Thinking and Information Literacy Students will practice critical evaluations
  of texts, media, and technology. They will learn how to question information, assess its
  importance, and communicate their findings to others. In doing so, they will cultivate
  the knowledge and confidence to deal effectively with current and future technological
  innovation.
- Research & Publication Students will actively participate in the current debates and
  controversies concerning ICT. They will develop, research, and write an original paper
  suitable either for the MA thesis, publication in a scholarly journal, or presentation at an
  academic conference. In this way, students will not only learn about ICT but will
  actively engage with and contribute to the field.

### Responsibilities

*Preparation* - Seminar participants are responsible for reading and preparing all assigned class materials in accordance with the <u>course calendar</u>. Reading involves not only looking at the text but engaging the material in a thoughtful and organized fashion. Note taking, outlining, and other reading strategies are highly recommended.

Course Structure - This class is not a lecture-course. It is a seminar. Therefore, the responsibility for working through the material and structuring an effective learning environment falls to each member of the seminar community.

Attendance - Because the environment of the course is interactive and collaborative, it is necessary that seminar members attend and participate in every class meeting. Attendance is, therefore, mandatory. You will be permitted one (1) unexcused absence. After that, the final grade will be reduced by 20 points per additional absence. This guideline is not inflexible and is subject to change due to individual circumstances. This alteration, however, must be confirmed with the instructor. When possible, this should be accomplished before the additional absence(s). Missing the first class meeting does constitute an absence. In the case of any absence, it is the student's responsibility to make-up the missed work by obtaining notes from classmates or reading the assigned material. The instructor will not provide individual instruction for students who have missed a regularly scheduled class meeting.

Student Assessment - Student learning and achievement is assessed by three activities: a formal presentation, a research project, and a comprehensive final examination.

1) Presentation - One of the skills necessary to live and work successfully in an age of information is the ability to process, organize, and present data. For this reason, the course offers you the opportunity to exercise, develop, and demonstrate this ability that has been and will continue to be an integral part of your educational experience. Each class meeting one or more seminar members will provide a formal presentation (approximately 20-30 minutes) of the texts/topics that are to be considered that class period. These presentations are not book reports. They must be critical engagements with the material that are designed to initiate and to structure seminar discussion. For this reason, interesting questions and methods of inquiry are more valuable than hasty conclusions, superfluous summaries, and rigid assessments.

The manner of presentation is wide open, and you are encouraged to be creative and innovative. In presenting the material, each presenter is required to incorporate some mode of presentation technology. This may include video, web materials, PowerPoint, Prezi, etc. The presentations will be formally evaluated using the following evaluation form:



A sign-up sheet will be circulated during the second class meeting. You are encouraged to browse the <u>course calendar</u> to decide on a presentation topic and date. It is your responsibility to remember the date of your presentation and plan accordingly. Missing your presentation will constitute failure of the assignment.

After your presentation, please upload your presentation slides in order to make these materials available to the seminar. Slides may be uploaded (preferably in pdf format) to the Discuss/Share" space on the course <u>Blackboard page</u>.

- <u>2. Maker Exercises</u> Students will complete four "learn-by-doing" exercises designed to provide hands-on practical knowledge of communication technology and to assist in the development of basic computer/digital media skills. These exercises will be developed, executed, and evaluated during class meetings. Students who are absent for these sessions, will need to complete the work on their own outside class and present the results to the instructor no later than 1 week after the scheduled lab session.
  - <u>Code</u> Learn how computers are programmed and function by writing basic web applications.
  - Remix Use audio processing and editing tools to create an original digital remix.
  - Chatbot Create an interactive chatbot that can talk with you.
  - Social Robot Experiment and communicate with a socially interactive robot.
- <u>2) Research Project</u> This activity offers you the opportunity to research, examine, and critique a particular problem or issue in the new field of communication and information technology. Early in the semester, seminar members will choose one of the topics addressed in the course to study and research. (The research topic may be the same as your presentation topic. Although this integration is not a requirement, it will help you consolidate and minimize your work.) These projects are designed to demonstrate your critical thinking and research skills, to provide original work for a growing data-base of information in communication technology, and to assist development of your MA thesis or project. At the end of the course, seminar members will present their research to the class for comment and discussion. Projects will be assessed and evaluated using the following evaluation form:



The project must be delivered in both hardcopy form and as a pdf document for web distribution. The text should be prepared following the current guidelines of the <a href="American\_Psychological Association (APA)">American\_Psychological Association (APA)</a> The projects are due on **30 April 2019** and will be formally presented to the seminar. A <a href="project proposal">project proposal</a> will be due on **20 February 2019**. The proposal is an important and necessary step in the development of the project. It will provide you an opportunity to test your thesis and approach prior to committing any significant time to research and writing. The instructor will read the proposals and provide feedback and comments to assist your work. For this reason, the proposal (although not evaluated for a letter grade) is absolutely necessary.

# **Sample Projects**



Procedural Ecology



An Ethical Approach to Drones



Influencing the Influencer

- <u>3) Final Examination</u> The course will conclude with a comprehensive final examination. The examination does not require pointless memorization and/or regurgitation. Rather, it is designed to assess your knowledge of and facility with communication technology. The examination will consist of four sections.
  - Talk the Talk Define technical terms and acronyms (i.e. URL, Hypertext, ARPANET).
  - It's Who You Know Identify major figures in the field of CMC (i.e. J. C. R. Licklider, Jaron Lanier, Donna Haraway).
  - Short Answers Provide brief responses to short answer questions (i.e. The Internet has been described as a "decentralized web of heterogeneous processors." What does this phrase mean?).

• Essay - Write an essay in response to a question. This part of the exam will be written on the computer and students may use both word processing tools (spell check) and Internet resources in constructing their responses.

Questions in the first three parts will be based on course materials and our investigation of these materials in seminar discussions. They will examine your understanding of terminology, people, and basic concepts that are necessary for a working knowledge of advanced communication technologies and computer-based systems. The essay question will provoke critical reflection on or assessment of a particular issue previously discussed in seminar meetings. It will assess your ability to reflect critically on a contended issue and your skill in communicating this assessment in writing. The essay part of the exam will be written on the computer and students may use both word processing tools (spell check) and Internet resources in constructing their responses.

Several days before the examination, an on-line study guide will be published. The study guide will list all elements that need to be reviewed prior to the exam. The best way to prepare for the examination is to complete the study guide. And the only way to complete the study guide is to read the course material, to attend class, and to take notes during discussion. If you read the material and participate in class discussions, you should have no problem with the examination. If you do not read the material and are consistently absent, you should expect to have considerable trouble with the examination.

# Grading

# **Evaluation Distribution (400 Total Points)**

Presentation = 100 points

Exercises = 100 points (4 x 25 points per project)

Research Paper = 100 points

Examination = 100 points

### **Grade Scale**

A = 369-400

A = 360-368

B + = 348 - 359

B = 334-347

B - = 320 - 333

C + = 307 - 319

C = 280-306

D = 240-279

#### **Policies**

Academic Integrity - Good academic work must be based on honesty. The attempt of any student to present as his or her own work that which he or she has not produced is regarded by the faculty and administration as a serious offense. Students are considered to have cheated if they copy the work of another during an examination or turn in a paper or an assignment written, in whole or in part, by someone else. Students are responsible for plagiarism, intentional or not, if they copy material from books, magazines, or other sources

without identifying and acknowledging those sources or if they paraphrase ideas from such sources without acknowledging them. Students responsible for, or assisting others in, either cheating or plagiarism on an assignment, quiz, or examination may receive a grade of F for the course involved and may be suspended or dismissed from the university.

Classroom Conduct - This course encourages students to form, express, and defend their own ideas. In order to ensure a fair and equitable environment for the open discussion of these ideas, students agree to be respectful and civil in their interactions with each other and with the instructor. Debate and criticism will be directed to ideas and the mode of their expression and not to the individual person who articulates it.

Accessibility - Northern Illinois University is committed to providing an accessible educational environment in collaboration with the Disability Resource Center (DRC). Any student requiring an academic accommodation due to a disability should let his or her faculty member know as soon as possible. Students who need academic accommodations based on the impact of a disability will be encouraged to contact the DRC if they have not done so already. The DRC is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 or drc@niu.edu.

Terms & Conditions - The policies, procedures, and responsibilities articulated on this website are considered binding and in full force and effect for the entire academic semester during which a student is enrolled in the course. By registering for the course, students consent to these stipulations and affirm that they have read, understood, and agree to abide by everything contained herein. Only students who officially drop the course or withdraw from the university will be considered to be released of these responsibilities prior to the recording of final grades. Additionally, exceptions to and/or alterations in the policies, procedures, and responsibilities listed on this website will only be considered in situations of extreme hardship, documented learning disability, or medical emergency. In all cases, the instructor will be considered to be the final arbiter of any request for exception.

#### Calendar

Introduction

14 January - Introduction

Course Website

21 January - MLK Holiday

No Class Meeting

CMC & Internet Studies

28 January - Computers & the Internet

- History of Computing
- Brief History of the Internet
- Computer History Museum The Web
- Exercise #1 Code

# 4 February - Computer Mediated Communication

- Computer as Communication Device
- A Cultural Approach to Communication
- Critical Debates in Internet Studies
- Current Trends in CMC

### 6 February (5:30pm) - Robot Rights

Book Lecture - NIU Library

# 11 February - Robot/Al Conference (Utrecht)

- No Class Meeting
- Research Paper Proposal
- Sample Proposals

# Digital Lives & Virtual Worlds

### 18 February - Beyond Fun & Games

- Gaming the System Intro & ch. 1
- Castronova Virtual Worlds
- Due Date Research Paper Proposal

### 25 February - Identity & Community

- Gaming the System ch. 2 & 3
- <u>Dibbell A Rape in Cyberspace</u>

#### 4 March - Social Issues & Other Problems

- Epstein From Russia with Love
- Turkle Connected, but Alone? (video)
- Gaming the System ch. 4 & 5
- Exercise #2 Chatbot

### Spring Break

### 6 March - Spring Break

No Class Meeting

#### Digital Media & Remix

### 18 March - title

- Galor Rip: A Remix Manifesto (video)
- Of Remixology Intro & Premix
- Remix Exercise Resources

### 25 March - AAAI Conference (Stanford)

- No Class Meeting
- Exercise #3 Remix

### 1 April - title

- Ferguson Everything is a Remix (video)
- Of Remixology Remix & Postmix

#### The Next New Media

# 8 April - Artificial Intelligence

- Intro to Communication & AI ch.1-3
- PBS The Chinese Room (video)
- Steiner Algorithms Are Taking Over (video)

# 15 April - title

- Intro to Communication & AI ch.5-6
- Amper & Taryn Southern Break Free (videos)
- Sunspring (video)

### 22 April - Social Robots

- Intro to Communication & AI ch.7
- Jibo Promotional Video
- Breazeal Personal Robots (video)
- Exercise #4 Social Robot

# Conclusions & Projections

### 29 April - Course Conclusions

- Student Research Projects
- Course Evaluation
- Final Exam Study Guide

### 6 May (6pm)

Final Examination