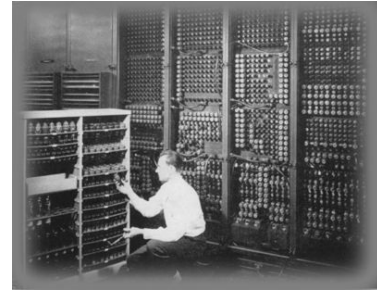


University Honors Seminar: All Things E

Seminar Leader: Dr. Richard S. Wolff
Gilhousen Telecommunications Chair
Department of Electrical and Computer Engineering

Description: Ranging from history to sociology, from the present to the future, the seminar will explore the revolutionary and disruptive advances occasioned by information technology. From cellphones to WiFi; Facebook to computer games; Artificial Intelligence to Second Life, telecommunications have affected our lives in



profound ways. Social networks, instant messaging, online video and music downloads are but a few of the markers of change in daily life. Academic inquiry and creative activities have also been affected dramatically and questions abound. What does the future hold? What are the social and economic implications? Has technology gotten ahead of policy, ethics, etiquette, and the legal system? Students will engage in a range of activities including online learning systems, blogging, social networking, electronic research methodologies and new media creation techniques. Numerous guests will visit the seminar, providing expertise tailored to student interest.

** The seminar assumes average tech literacy and is intended for students from a wide variety of majors. It does not assume prior technical expertise in engineering or computer science.

Preliminary Schedule

Week/date	Topic	Reading	Activities
1 8/31 and 9/3	Communications and information technology: then and now	Albion, "The Communication Revolution"	Become acquainted with Desire2Learn
2 9/7 and 9/10	Innovation, on-line discussion	Richard John, "The Politics of Innovation" V. Bush, "As We May Think"	Start student blogs; Class will meet on-line using Desire2Learn
3 9/14 and 9/17	Information technology and computing	John Battelle, "The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture"	9/14: Tour of American Computer Museum 9/17: Search engines and information
4 9/21 and 9/24	Web 2.0 and social networks, e-business, on-line games and virtual worlds	Tim O'Reilly, "What Is Web 2.0? Design Patterns and Business Models for the Next Generation of Software"; Carr, "Is Google Making us Stupid?"	9/21: Guest leader Ritchie Boyd, Extended University. Web 2.0 9/24: Discussion on Web 2.0 and impacts
5 9/28 and 10/1	Social Networks Human-Computer-Interfaces	Hirschorn, "Web 2.0 Bubble" Video: "What is Social Networking" Cranston, "Who Invented the Mouse?"	In class examination of social networking sites GUI and web design
6 10/5 and 10/8	Inside the computer: chips, processors, microcomputers, minicomputers, PCs and beyond	Steve Wozniak, "How I invented the Personal Computer."	10/5: Film: "Modern Marvels – The Computer", 10/8: Visit to Computer Engineering Lab, Dr. Brock LaMeres
7 10/12 and 10/15	Wired and Wireless Communications: how cell phones work, current and future	"Interview with Joel Engel", Farley, "The Cell Phone Revolution",	10/12: Visit to Electrical Engineering Wireless Communications Lab

	prospects, WiFi, community networks, ad hoc networks	Farley, "Cellular Telephone Basics"	10/15: Dr. Klein Gilhousen
8 10/19 and 10/22	Information security and personal privacy - Discussion on the changing landscape of our electronic lives Software: operating systems, applications, browsers, games, media	John Markoff, "Takedown"	10/19: Film: Wargames 2: The Dead Code(2008) PG-13 10/22: Adam Edelman, Chief Security Officer, ITC, conduct personal Internet search, devise a security audit
9 10/26 and 10/29	Artificial Intelligence: what is it, what are the applications and limitations	Asimov, "I Robot"; "Introduction to AI" "AI Overview"	10/26: John Paxton, Computer Science 10/29: John Paxton, Computer Science
10 11/2 and 11/5	Machine learning and evolutionary systems	A. M. Turing, "Computing Machinery and Intelligence"	11/5: John Sheppard, Computer Science
11 11/9 and 11/12	The Internet: what is it, its history and its future	Jonathan Zittrain, "The Future of the Internet and How to Stop It" Vint Cerf, "The Internet in 2035"	11/9 DVD: L. Kleinrock, "The History of the Internet and its Flexible Future" 11/2: Vint Cerf video
12 11/16 and 11/19	Information technology and grid computing and uses in science and engineering Electronic media	Internet2 projects The Kindle, E-books, Gutenberg project, Music, Video, Free Press Changing Media Study	11/16: Tour of ITC and CCB 11/19: Ivan Judson, Grid computing
13 11/23	The future of broadcasting and electronic media	Future of Media Report	11/23: Eric Hyyppa, station manager, Tour of KUSM
14 11/30 and 12/3	Communications, information and democracy	Lawrence Lessig, blogs, Electronic Frontier Foundation , Pew Internet and Public Life Project	Examine and critique the uses of the Internet and other media for citizen engagement

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15 127 and 12/10	Student projects		
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