

<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Friday</i>
January 19 Introduction Due by 11:00 pm: Class questions on Chap. 1	January 20 Computer Organization basic terminology hardware components Read: Chapter 1	January 21 CPU organization Connecting components virtual machines	January 23 Hardware Demonstration Taking off the cover ITS Technician Dan Keller Due by 11:00 pm Sunday: Class questions on Chap. 2
January 26 Data Representation binary numbers integers, floating Point consequences, limitations Read: Chapter 2	January 27 Numeric Processing LABORATORY EXERCISE 1	January 28 Characters alphabets Images representation file formats	January 30 Image Processing LABORATORY EXERCISE 2 Due: Lab Ex. 1 Due by 11:00 pm Sunday: Class questions on Chap. 3
February 2 Program and Data Storage main memory, files, virtual memory fragmentation security, privacy Viruses Read Chapter 3	February 3 Data Storage LABORATORY EXERCISE 3 Due: Lab Ex. 2 Due by 11:00 pm: Class questions on Chap. 4	February 4 Operating Systems functions, multi-tasking booting, re-booting compatibility, standards Read: Chapter 4	February 6 Operating Systems LABORATORY EXERCISE 4 Research Exercise 1 distributed Due: Lab Ex. 3 Due by 11:00 pm Sunday: Class questions on Chap. 5
February 9 Software Development software life cycle Read: Chapter 5	February 10 Software Development LABORATORY EXERCISE 5 PROTOTYPES TESTING Due: Research Exercise 1 Due by 11:00 pm: Class questions on Chap. 6	February 11 Size, Speed, Capability Moore's Law combinatorial explosion Complexity definitions, tradeoffs, scaling Read: Chapter 6 Due: Lab Ex. 4	February 13 Research Strategies Using the Web & other sources effectively Science Librarian Kevin Engel Due: Lab Ex. 5 Research Exercise 2 distributed

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February 16 Run-time Experiments LABORATORY EXERCISE 6 TIMING ALGORITHMS Due by 11:00 pm: Class questions on Chap. 7	February 17 Computer Applications computer capabilities likely areas for help nature of algorithms Read: Chapter 7 Due: Research Exercise 2	February 18 Applications LABORATORY EXERCISE 7 SPREADSHEETS Due: Lab Ex. 6	February 20 Applications LABORATORY EXERCISE 8 DATABASES Research Exercise 3 distributed
February 23 Turing Machines Universality Due: Lab Ex. 7	February 24 Universality LABORATORY EXERCISE 9 TURING MACHINES MOVING FROM MACHINE TO MACHINE Due: Research Exercise 3 Due by 11:00 pm: Class questions on Chap. 8	February 25 Connecting Computers cables local network configurations the Internet Read: Chapter 8 Due: Lab Ex. 8	February 27 Connecting Computers point-to-point Ethernet token-ring networks Due: Lab Ex. 9
March 1 Networks LABORATORY EXERCISE 10 Due by 11:00 pm: Class questions on Chap. 9	March 2 Sharing Files file servers network access FTP remote file access Read: Chapter 9	March 3 Hour Test 1	March 5 <i>Film:</i>
March 8 Network Protocols ports TCP/IP layers of communication Due: Lab Ex. 10	March 9 File Sharing LABORATORY EXERCISE 11 Due by 11:00 pm: Class questions on Chap. 10	March 10 Data Protection: reliability,security,passwords internal and external threats encryption Read: Chapter 10	March 12 Reliability and Security LABORATORY EXERCISE 12 Due: Lab Ex. 11
March 15 <i>Break</i>	March 16 <i>Break</i>	March 17 <i>Break</i>	March 19 <i>Break</i>

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March 22 <i>Break</i>	March 23 <i>Break</i>	March 24 <i>Break</i>	March 26 <i>Break</i> Due by 11:00 pm Sunday: Class questions on Chap. 11
March 29 The Internet organization ownership, cost addresses Read: Chapter 11	March 30 Web Browsers display of text, images html standards Due: Lab Ex. 12 Due by 11:00 pm: Class questions for Mr. Francis	March 31 html LABORATORY EXERCISE 13	April 2 The Grinnell College Network ITS Director Bill Francis
April 5 User data in html LABORATORY EXERCISE 14 FORMS Due: Lab Ex. 13	April 6 Client-side Processing JavaScript	April 7 JavaScript LABORATORY EXERCISE 15 Due: Lab Ex. 14	April 9 JavaScript, Continued LABORATORY EXERCISE 16 Due by 11:00 pm: Class questions on Chap. 12
April 12 Privacy and the Web browser-server communication cookies privcay and security Read: Chapter 12 Due: Lab Ex. 15	April 13 Browser Information LABORATORY EXERCISE 17 AVAILABLE MATERIALS TRANSMISSION MECHANISMS PRIVACY ISSUES Due: Lab Ex. 16 Due by 11:00 pm: Class questions on Chap. 13	April 14 Web Applications search engines pop-up windows ads e-mail Read: Chapter 13	April 16 More JavaScript LABORATORY EXERCISE 18 ERROR CHECKING POP-UP WINDOWS Due: Lab Ex. 17

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April 19 Web Applications spam regulation of the Web Research Exercise 4 distributed	April 20 Web Applications LABORATORY EXERCISE 19 EXAMINING MIME MESSAGES CREATING POP-UP WINDOWS Due: Lab Ex. 18 Due by 11:00 pm: Class questions on Chap. 14	April 21 Computer and Web Access levels of access policies and consequences Access Controls approaches, effectiveness The Children's Internet Protection Act (CIPA) Read: Chapter 14 Due: Research Exercise 4	April 23 Costs of Web-based resources Librarian Kevin Engel Due: Lab Ex. 19
April 26 Hour Test 2	April 27 Access LABORATORY EXERCISE 20 Due by 11:00 pm: Class questions on Chap. 15	April 28 Comparison of Web-based and Other Materials reliability, bias, comprehensiveness Read: Chapter 15	April 30 Copyrights intellectual property academic freedom fair use application to the Web Due: Lab Ex. 20
May 3 Use of Web-based Materials LABORATORY EXERCISE 21 Due by 11:00 pm: Class questions on Chap. 16	May 4 Can Computers Think? nature of intelligence determining intelligence successes of AI approaches of AI looking ahead Read: Chapter 16	May 5 Computer Thought LABORATORY EXERCISE 22 Due: Lab Ex. 21	May 7 Semester Wrap-up End-of-course Evaluations Due: Lab Ex. 22