

MIDTERM will include True/False, Matching, and Multiple Choice, drawing from ALL of the Material Covered in Units A, B, and C.

Topics	Lecture / Lab / Chapter
<p>What is a Computer? Components of a computer, High-level Languages, Low-level Languages, How are programs translated? Bugs. How are programs written?</p>	A1, Chapter 1
<p>What is a Network? Brief history of the Internet. WAN vs. LAN Network topologies. 7-layer model. Packet-switching. TCP vs. UDP. What is a protocol? HTTP, FTP, SMTP. Format of an IP address. Format of a domain name. DNS. URL. Client vs. Server. Types of Servers</p>	A1, A4, Chapter 3
<p>What is an Algorithm? Features of a algorithm that are important. 3 Types of Algorithms. Big-Oh Notation. $O(n)$ vs. $O(\log n)$. Sequential Search vs. Binary Search. Machine Language, Assembly Language, High-Level Language. Translation vs. Compilation. Run(-)time vs. Compile(-)Time</p>	B3, Chapter 8
<p>Data Representation Bit, byte, base-2, base-16, Convert from Binary to Decimal, from Decimal to Binary. ASCII vs. UNICODE. Text files vs. Binary Files. File Sizes (Kilobyte, Megabyte, Gigabyte). Bandwidth and kilobit. Types of Internet connectivity at home.</p>	C1, Chapter 12, (Chapter 14 saved for the FINAL)
<p>History of Computers Identify Names of Computers and People (Matching)</p>	Chapter 6, Lab A3
<p>Basic Network Tools DNS Lookup, Traceroute, Ping</p>	Lab A1
<p>Basics of HTML Tags, Parts of a Web-page. Basic HTML Tags (Look at the Examples online for a listing)</p>	B1, Chapter 2, Lab B2
<p>Basics of CSS (Style Sheets) 2 ways of adding a style sheet to a web-page. Anatomy of a style-rule (Examples online).</p>	B3, Lab B4
<p>Dynamic HTML (Forms and Javascript) Adding a button on a form. alert("")</p>	C1, Lab C2