

COMPSCI 105 – Lecture #1

Introduction to the Class

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Who Am I?

- I am “Senior Teaching Faculty”,
 - Equivalent to a “Teaching Full Professor”
- I got my Ph.D. at UMass, in COMPSCI,
- I have been COMPSCI faculty since 1990,
- I have been teaching COMPSCI 105 since then.
- What to call me:
 - “Dr. Bill” or
 - “Professor Verts”

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Really, who is Dr. Bill?

- I am in my mid 60s.
- I grew up in Oregon.  
- I am the fac. advisor for the UMass Outing Club.
- I am one of the 2018 winners of the UMass Distinguished Teaching Award.
- I am a fair carpenter, but one hell of a good cook.
- I listen to seriously weird-ass music. 
- I watch a lot of anime.

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Adventures in Wyoming



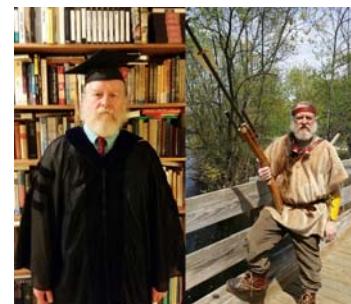
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Adventures in Maine



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Adventures in Massachusetts



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How to Find Dr. Bill



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My Office in LGRC A357: Go in Main Door, then up 2 Floors



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COMPSCI Building: I'm not there, but my mail goes there.



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Contact Information

- Phone: ☎
- Email: verts@cs.umass.edu
- Web: <http://people.cs.umass.edu/~verts>
- Office Hours: M/W/F 2:45-3:45 & by appt.
- Talk to me on the street or in the Blue Wall!

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What Do I Need for the Class?

- Computer (Mac or Windows)
- Printer access (B&W fine, color not required)
- Working Web Connection
- Web Browser ([Firefox](#) or [Chrome](#), not Safari)
- Microsoft Office (recent version)
- Free Software (I'll show you how to install it)
 - Mac: Fugu
 - Windows: PuTTY, WinSCP

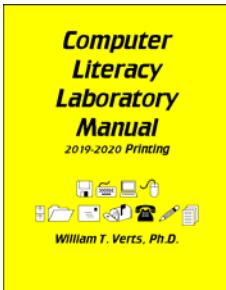
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What Do I Need for the Class?

- Books
 - *Computer Literacy Laboratory Manual* (2019)
 - *Computer Science Companion* (4TH Edition)
- Flash Drive (any size, SanDisk recommended)
- Stapler

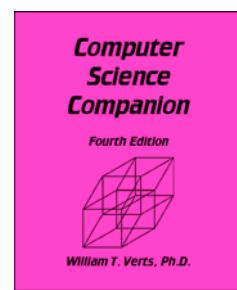
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Books: *Lab Manual*



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Books: *Companion*



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The *Companion* and IT Minor

- I teach four different classes per year:
 - COMPSCI 105 (Computer Literacy, Fall & Spring)
 - COMPSCI 119 (Python Programming, Fall & Spring)
 - COMPSCI 120 (Problem Solving w/Internet, Fall)
 - COMPSCI 145 (Representing Information, Spring)
- All satisfy requirements for IT Minor (ask!),
- All require the *Companion*.

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Course Scoring

- 20% Midterm (likely March 5, 7pm, Room ?)
- 20% Final Exam (May 6, 1pm, HASA 20)
- 40% Lab Assignments (in Lab Manual)
- 15% Homework (on-line, also in Lab Manual)
- 5% In-Class Quizzes (NO MAKE UPS EVER)
- Extra Credit Homeworks (Lab Manual)
- Extra Credit Term Paper (Lab Manual)

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Course Scoring

- I generate a score for you based on those percentages, then $\lceil \text{ceiling} \rceil$ to integer:

90% → A	64% → C
88% → A-	62% → C-
86% → B+	60% → D+
78% → B	50% → D
76% → C+	<50% (or miss either exam) → F

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TAs

- We have a bunch of TAs for the class,
- They will hold office hours in LGRT 222,
- I haven't met all of them yet.
- We will also have undergrad graders (UCAs).
- You will pick up graded work in LGRT 222 during office hours (for any TA from any of my classes).

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Get the Right Door! LGRT 222



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On-Line Grades Reporter

- I don't use Moodle or Blackboard,
- But instead my own custom grade software:



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Dr. Bill's Get My Grades Page!

This page is for students in the current semester only. Since I do not use Moodle or any similar course management system, I have created this page so that you can copy and paste your student ID and the names of my classes and I can encrypt them. Requested grades will create an encrypted message to be sent to the address I have on file for you. The keys to be used for decryption of that message will be displayed in class, but will never be written down, nor even made public.

Requester

Enter your ID in the box below, and your scores for all of the classes that you take with me will be mailed to your UVM email account as a partially encrypted message. If you do not get an email immediately, check your UVM spam folder. If you do not see the message, please report it to your UVM filters to hopefully guarantee the message. When you do receive the message, go to the Decoder (below) to decrypt it.

Decoder

When you get the encrypted message, copy and paste the encrypted part into the large text area below, type in your password, and then click the "Convert and Decrypt" button. The decrypted message will be replaced by the readable message. If the message is still unreadable after the conversion process, then it is likely you entered the wrong password.

Paste encrypted text into the box below:

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Please Do Not...

- ...call me or TAs at home,
- ...email me with trivial questions,
- ...email attachments (they'll be deleted),
- ...“Friend” me on Facebook, Twitter, etc.,
- ...let your cell phone disrupt the class.

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Please Do...

- ...email me when you have serious questions:
 - Put COMPSCI 105 in subject line ↪ ↪ ↪ ↪ ↪
 - Put your name in message body
 - Write clearly (no emojis or text abbreviations)
- ...email me immediately if you must leave school for an extended time (illness, etc.)
- ...seek help from me or the TAs during office hours

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Please Do...

- ...your own work (academic dishonesty is taken very seriously)
- ...take advantage of the Disability Services office now if you need accommodations.

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Take a Breather

Any Questions?

Ready for some Computer Science?

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A Note about Technology



Sir Arthur C. Clarke
1917-2008

*"Any sufficiently advanced
technology is indistinguishable
from magic."*

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Which brings us to...

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How Many Computers Am I
Wearing Right Now?

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What Does this Tell You?

- Computers are everywhere.
- Not all computers look like a computer.
- Many non-computer devices use the same technology.
- Don't laugh at nerds; they're having more fun than you are!

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How long have Computers been around?

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Depends on what you call a "Computer"

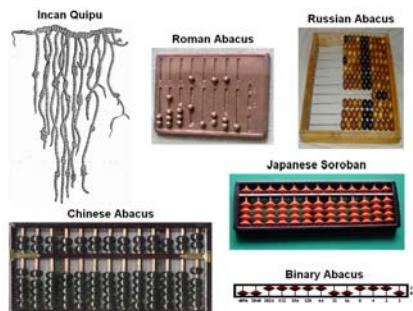
- Does it require energy to operate?
- Does it transform information?
- Is it analog or digital?
- Does it require human input?
- Does it do anything automatically?
- Does it do *everything* automatically?
- Is it self-aware? (Wow, that's a jump!)

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So, how long have they been around?

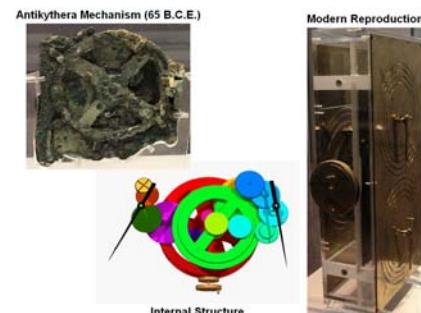
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Abacus (digital, many cultures)



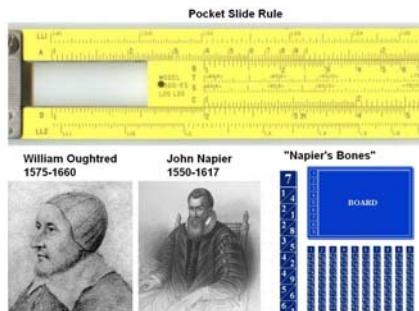
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Antikythera Machine (analog)



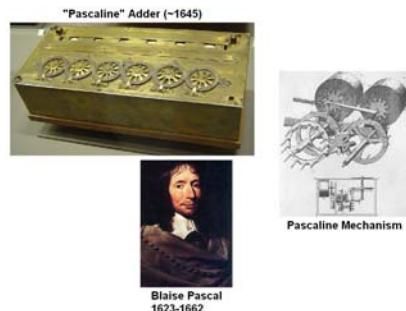
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Slide Rules (analog)



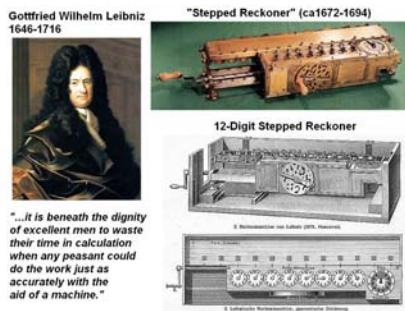
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Pascaline Adder (digital)



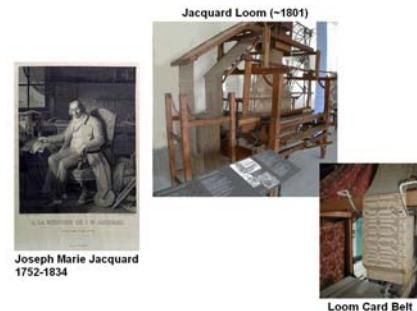
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Leibniz Multiplier (digital)



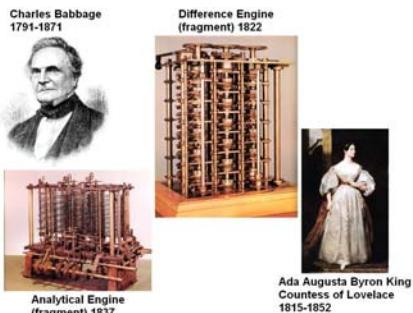
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Jacquard Loom (digital)



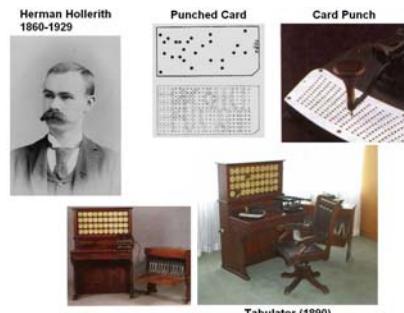
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Babbage Difference Engine (digital)



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Hollerith Tabulator (digital)



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Margaret Hamilton
Apollo Guidance Computer (1960s)



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IBM 5 Megabyte Hard Drive (1956)



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