

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 early 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

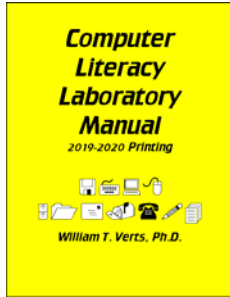
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What Do I Need for the Class?

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

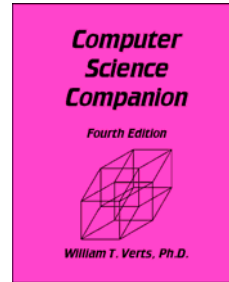
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Books: *Lab Manual*



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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 (October 17, 7pm, Room TBA)
- 20% Final Exam (December 13, 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 round to nearest 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.
- You will pick up graded work in LGRT 222 during office hours (for any TA from any of my classes).

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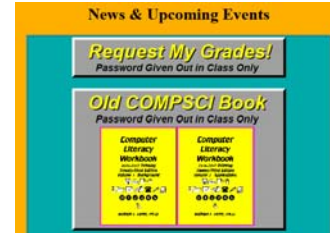
Get the Right Door! LGRT 222



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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 software, I have created this page so that students may request a copy of their current grades in my classes and do so securely. Requesting grades will cause 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 discussed in class, but will never be written down, nor ever made public.

Requester

Enter your ID in the box below, and your access for all of the classes that you take with me will be sent to your CSlice mail account as a privately encrypted message. If you do not get the message immediately, check your SPAM filter; the presence of the recipient user name causes SPAM filters to temporarily suppress the message. When you do receive the message, go to the Decoder (below) to decrypt it.

Decoder

When you get the secret message, copy and paste the encrypted part into the large text area below; type in your password into the password box, and then click the "Convert and Decrypt" button. The decrypted text 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.

Enter 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.)
- ...your own work (academic dishonesty is taken very seriously)

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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"

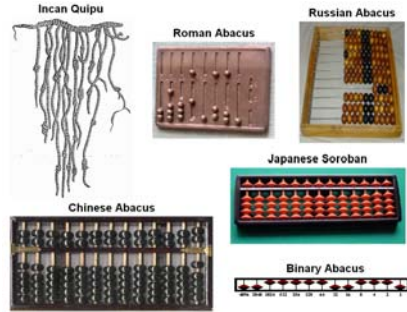
- Does it require energy to operate?
- Does it transform information?
- Is it analog or digital?
- Does it require human input?
- Does it do anything automatically?
- Does it do *everything* automatically?
- Is it self-aware? (Wow, that's a jump!)

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So, how long have they been around?

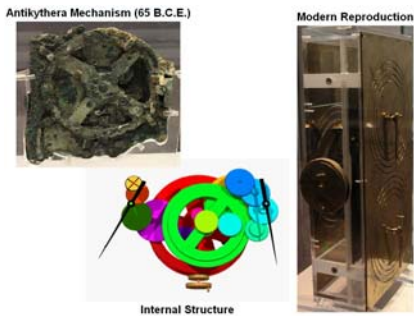
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Abacus (digital, many cultures)



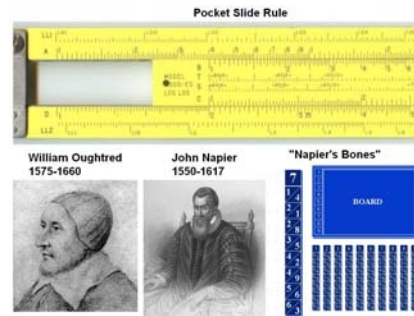
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Antikythera Machine (analog)



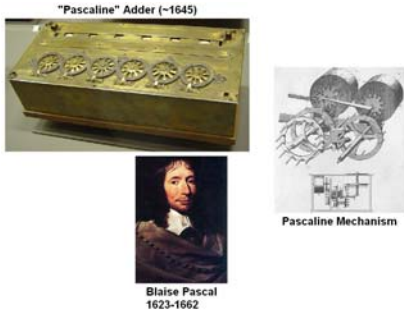
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Slide Rules (analog)



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Pascaline Adder (digital)

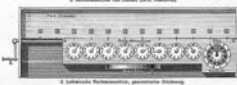


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Leibniz Multiplier (digital)

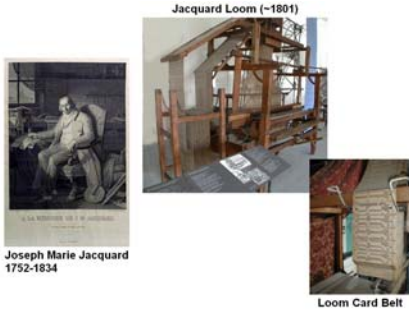


"...it is beneath the dignity of excellent men to waste their time in calculation when any peasant could do the work just as accurately with the aid of a machine."



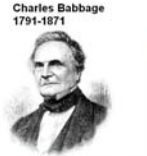
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Jacquard Loom (digital)



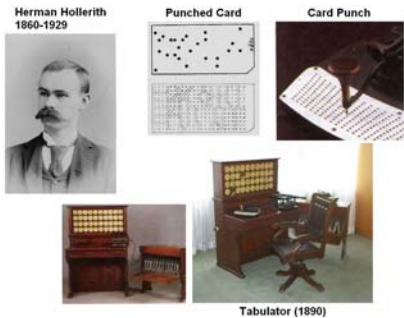
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Babbage Difference Engine (digital)



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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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