

# CSE/INFO 100: Fluency in Information Technology

Winter 2009

## Course Registration

- Cross-listed as CSE 100 and INFO 100
  - Does not matter which you registered for
- The course is full. I will overload the course later in the week based on lab room capacity and staff availability.
  - For now, check both CSE 100 and INFO 100 for openings.
- If you want to switch lab sections, do **NOT** drop the course and try to re-add it—someone might take your spot! Talk to me after class.
- Other registration questions?

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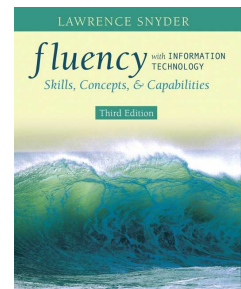
## Syllabus

- See web page: <http://www.cs.washington.edu/100>

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## On Textbooks...

- **Fluency With Information Technology: Skills, Concepts, and Capabilities**  
Lawrence Snyder  
Second Edition (or later)



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## Labs

- **No lab today (1/5) or tomorrow (1/6)**
  - Labs start on Wednesday (1/7)

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## Grading

- Labs: 30%
- Projects: 45%
- Final exam: 25%
- No curve: Your grade depends on *you*
- Not an "easy A"
- Ask lots of questions—seek help early!

Percent	Grade
98+	4.0
96-97	3.9
94-95	3.8
92-93	3.7
91	3.6
90	3.5
89	3.4
88	3.3
87	3.2
86	3.1
85	3.0
...	...
64	0.9
63	0.8
62	0.7
< 62	0.0

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## Course Overview

- The course title is "Fluency in Information Technology"
  - What is "information technology"?
  - What does it mean to be "fluent"?

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## Some Of The "Basics"

*Nobody, but nobody, is going to give you half of \$80 million to help them liberate the funds of a deceased millionaire...from Nigeria or anywhere else.*

David Pogue, "Tech Tips for the Basic Computer User", 10/2/2008

<http://pogue.blogs.nytimes.com/2008/10/02/tech-tips-for-the-basic-computer-user/>

- Tip #1: If it's too good to be true...

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## General Topics

- Terminology
- Design
- Networks
- File structure
- HTML / CSS
- Search
- Digital representation
- Algorithmic thinking
- JavaScript (4 weeks)
- Security
- Privacy
- Spreadsheets
- Databases

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## Questions

- Where is the computer?
- What makes software easy to use?
- How does the Internet work?
- How do you search for information effectively?
- How does a computer store information?
- Where does one go "phishing"?
- What do you want to learn?
  - Send me an e-mail or an anonymous message at:  
<https://catalysttools.washington.edu/umail/form/bensonl/2321>

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## Moore's Law

- Gordon Moore, co-founder of Intel, made the following observation in 1965: The number of transistors that can be placed *inexpensively* on an integrated circuit doubles approximately every two years.
- Exactly how fast is a doubling every two years?
  - Suppose only one transistor could be placed on a circuit in 1965, how many transistors could be placed today?

4,194,304

Source: [http://en.wikipedia.org/wiki/Moore's\\_law](http://en.wikipedia.org/wiki/Moore's_law)

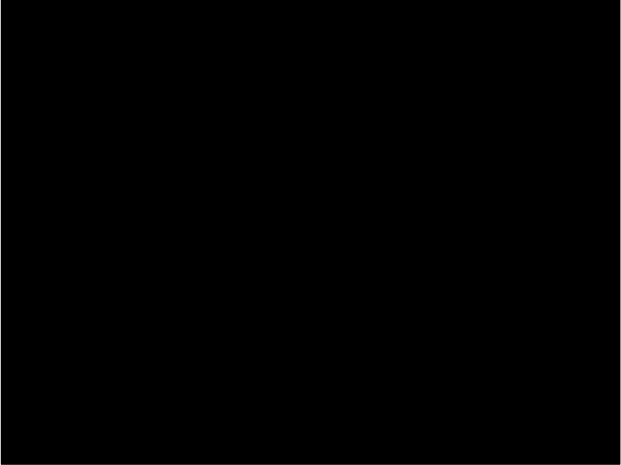
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## Moore's Law

- Now applies to almost every measure of capabilities of digital electronic devices:
  - Processing speed
  - Memory capacity
  - Number and size of pixels in digital cameras:  
<http://www.nytimes.com/2006/06/07/technology/circuits/07essay.html>

Source: [http://en.wikipedia.org/wiki/Moore's\\_law](http://en.wikipedia.org/wiki/Moore's_law)

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## What Does This All Mean?

*We are currently preparing students for jobs that don't yet exist... using technologies that haven't been invented... in order to solve problems we don't even know are problems yet.*

- The world, particularly technology, changes at a rapid pace
- No set of topics is "everything" you need to know
- Prepare for a lifetime of learning