

IN THE CASE OF A FIRE ALARM:

- REMAIN CALM
- IF IT IS SAFE, EVACUATE THE CLASSROOM OR LAB
- GO TO THE CLOSEST FIRE EXIT
- DO NOT USE THE ELEVATORS

IF YOU NEED ASSISTANCE TO EVACUATE THE BUILDING, INFORM YOUR PROFESSOR OR INSTRUCTOR **NOW!!!**

- IF YOU NEED TO REPORT AN INCIDENT OR A PERSON LEFT BEHIND DURING A BUILDING EVACUATION, REPORT IT TO A FIRE WARDEN OR CALL SECURITY SERVICES 204-474-9341
- **DO NOT REENTER THE BUILDING**
UNTIL THE “**ALL CLEAR**” IS DECLARED BY A FIRE WARDEN, SECURITY SERVICES OR THE FIRE DEPARTMENT

COMP 1010- Summer 2015 (A01)

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Hello!

James (Jim) Young

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office hours T / Th: TBA

EITC-E2-582

(or by appointment, arrange by email)

computer science, to me....

toys and fun!



XBOX Kinect

my info...

office: EITC E2-582

office hours: M/T 10:30 or by
appt.

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EITC-E2-582

today...

course description:

“Do I belong in this course?”

“What is computer programming?”

course logistics

overview, marking, website, etc.

introduction to computer programming

course description

who can take this course?

no computer programming background required!

basic computer usage skills: typing, using new software, using the web..

if you have extensive programming background:

- a) you may be surprised at what you still learn
- b) there are ways of challenging the course

what is this course about?

1) problem solving

how do you reach a goal given a set of tools?

learn the tools

practice using them to solve problems

2) computer programming

a specific set of tools that match computers

make computers solve problems for you

what is this course *not* about?

learning how to use software

 microsoft word

 microsoft excel

learning how to make web pages

learning how to make a blog

how to use the internet

course logistics

the course website!!!!!!

(desire2learn)

<https://universityofmanitoba.desire2learn.com/>

COMP 1010

UMLearn

assignments are submitted through D2L:
MUST login to submit assignments
(I will demo again at that time)

UMLearn uses UMnetID

you need to make your accounts!

this is kind of crazy – all kinds of accounts!

UMLearn, aurora, jump,????

claimid ← you do this to create all your accounts

umanitoba.ca/claimid

→ Create UMnetID

things to see on UMLearn

ROASS (course outline)

grade breakdown

Course Schedule

Course notes

Labs

Forum

important announcements

LABS!!

hands-on practice

TA there to help you

attendance mandatory (EASY MARKS)

ATTEND the section for which you are registered. you may not get credit otherwise!!

hint: exam questions are often taken from labs

hint: a little slow at them? they're posted ahead of time, work on them ahead of time

LABS START NEXT WEEK

help center!

<http://www.cs.umanitoba.ca/~helpctr/>



email policy

feel free to email me at any time

always include [comp1010] in the subject

however, **not** the first line of defense

help center!

office hours!

forum on D2L

Be polite:

“yo prof. was up im stuck on AS1 dude, dat
hard ***”

deadlines!

are hard!

(almost) no exceptions!

hard drive crashed?

laptop stolen?

accidental deletion?



forum

USE BACKUP SOFTWARE

Dropbox, one drive, Wuala, Spideroak

automatically backs up as you work

you can access online if your laptop dies

synchronize between machines

CHEATERS!!!!!!

permanent transcript
specialized software

can be kicked from program

EVEN for signing your friends into the lab

EVEN if you PROVIDE assignment

ZERO tolerance, no excuses



honesty declaration

there is a “check list” in D2L that you have to read and digitally sign off on. If you do not, you cannot submit assignments.

Midterm****

Nov 2nd, 6:45pm (location TBA)

introduction to programming

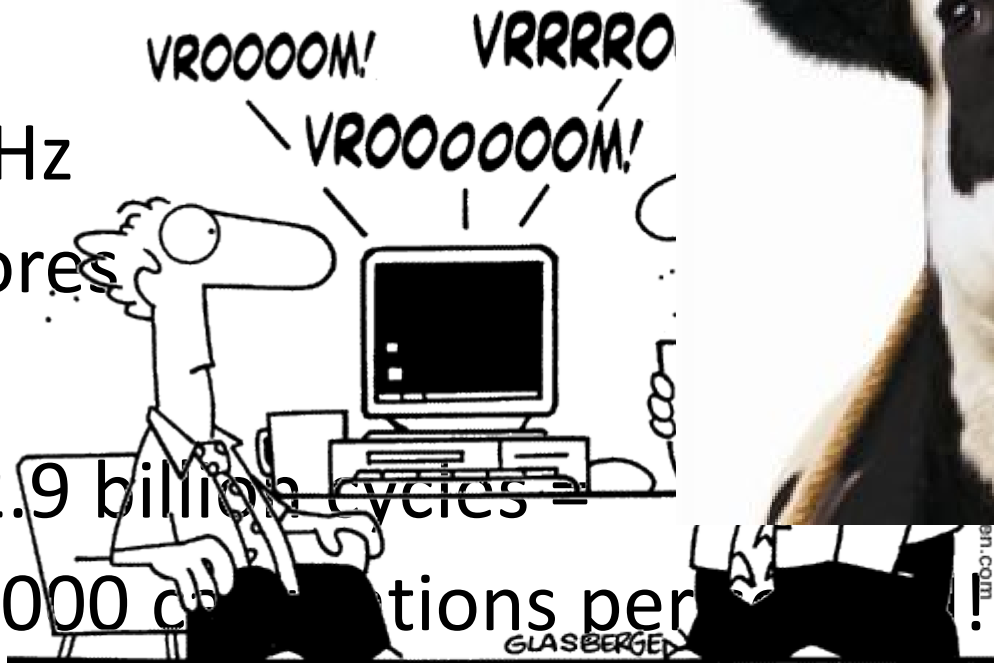
computers are fast!!

Cheap website:

\$500

2.9GHz

six cores



2.9GHz = 2.9 billion cycles =

2,900,000,000 calculations per

six cores – do **six in parallel!**
“we couldn’t afford faster computers,
so we just made them *sound* faster.”

17,400,000,000 calculations per second

holy cow

computers are stupid!

<http://www.youtube.com/watch?v=2H7NZ0GNIIE>

no common sense

no cultural sense!

doesn't speak english!

no ability of reason

can't "fill in the blanks" or "figure things out"

e.g., pick up the phone

pass the salt

copy my vacation photos

computers are stupid!

computers only understand concrete, simple,
unambiguous, logical instructions

has a specific, VERY limited, logical language

but, it can do billions of them per second!

“computers do exactly what yo
Not what you want them to do



computer programming:

Computer programming is the task translating something that you want to do into the computer's limited language.

Given a task or a job, you provide a “recipe” or exact set of instructions for the computer to complete that job.

example – cooking recipe

CORNBREAD

Colvin Run Mill Corn Bread

1 cup cornmeal

1 cup flour

½ teaspoon salt

4 teaspoons baking powder

3 tablespoons sugar

1 egg

1 cup milk

¼ cup shortening (soft) or vegetable oil



a cooking recipe is a standard way to represent how to cook something so that (ideally, hah!) anyone can make a given dish. This is a **program** for cooking.

example – music!

The image shows a musical score for a piece in 4/4 time, consisting of four staves. The first staff begins with a treble clef and a 4/4 time signature. The melody starts with a quarter note G4, followed by a half note A4-B4, and then a quarter note C5. A double bar line with repeat dots follows. The second staff continues with a quarter note D5, a quarter note E5, and a quarter note F5. A double bar line with repeat dots follows. The third staff has a quarter note G5, a quarter note A5, and a quarter note B5. A double bar line with repeat dots follows. The fourth staff has a quarter note C6, a quarter note B5, and a quarter note A5. The score includes several measures with chords labeled above: Am, C, C, C, Am, Am, Am, Am, F, F, C, F, F, C, C. The second staff also features first and second endings marked with '1' and '2'.

this music score is a program for reproducing a piece of music. Gives /most/ of the details, the notes, the rhythm