CPSC 203

Administrative information and introduction to the course

These notes can be found on the course website: https://pages.cpsc.ucalgary.ca/~tamj/2023/203W/index.html
(There is a link to this website in D2L).

This Course Focuses On The Windows Operating System (**Not Apple/MAC**)

- Although assignments are mostly on MS-Office, this course will be using a version of MS-Windows.
  - (The MAC-specific lecture is no longer timetabled by our department).
- You might be able to implement your work on a MAC (some 203 students successfully done this) but keep in mind available resources and help are for Windows.
  - That means if you have an odd technical glitch you might be on your own.
- You can work on assignments in tutorial labs (MS118)
  - Other campus labs may have some features disabled (this is beyond your instructor's control).
  - **Only assignments that work on lab computers will be awarded any credit** (test your work periodically).

Contact Information (James Tam)

- Days/times of availability:
  - Monday: 4:50 - 5:15 PM (ST 143). Please identify yourself as a CPSC 203 student.
  - Tuesday: 5:15 - 5:30 PM (ENA 101).
- And of course you can send email:
  - Since I teach more than one course and to make it easier to flag your emails include the course name and number in the subject line of the email 'CPSC 203'
- Other times may be possible via a remote session.

Course Resources

- Main course webpage (link can be found in D2L under: `Content->Course information`)
  https://pages.cpsc.ucalgary.ca/~tamj/2023/203W/#Main_grid
- You can also find specific sub-links of the course website under D2L, examples:
  - Lecture notes: `Content->Lecture information`
  - Assignment and work book exercise descriptions: `Content -> Assignments and work book exercises`
- Course textbooks (both are available as an eText and a print edition).
  - #1 (Hardware, VBA programming sections) "**Computer Science Chop Suey! (Lite Edition) Computer & software fundamentals, practical problem solving**" by James Tam (Published by Wiley)
    - You may find the full edition which is mostly similar but the lite edition is newer and may cost less because it's shorter.
  - #2 (Hardware, Word, Excel, VBA problems) "**Computer Science Chop Suey! Chop-Chop problems**" by James Tam (Published by Wiley)

Teaching Tutorials

- As the name implies teaching will occur during this time.
  - It may overlap with lecture but unique material will also be taught in tutorial.
  - Teaching Assistants are not required to record their teaching sessions.
  - Make sure you attend a tutorial session so you don't miss anything.
- Similar to enrolling in the lecture you needed to enroll in a specific tutorial when you registered in this course.
  - (2 times per week): Tutorials are scheduled either for MW or TR (depending upon the section) via another Zoom link
  - Day/time/instructor information about each section:
    - https://pages.cpsc.ucalgary.ca/~tamj/2023/203W/#Tutorial_information
    - Teaching will occur remotely via Zoom, in D2l: `Content-> Teaching tutorials`
  - You can find your registration information in PeopleSoft's Student Center.

Help Tutorials

- Also known as Continuous tutorials (or CT for short)
- A sort of "Help desk" specific to this course staffed by Teaching Assistants
- For the distance learning lectures look in D2L under: `Content-> Help tutorials (CT)` and then can see the names of the people who staff the CT.
  - In order to make the most efficient use of finite resources (Teaching Assistant work hours):
    - more hours will be scheduled when there is higher anticipated demand,
    - some weeks will have little or no CT times scheduled.
  - **You can attend the Help Tutorial/CT of any Teaching Assistant.**

Remote Learning? (Last Minute 'No' Given To Me)

- Because lectures and examinations cannot be conducted in person there will differences in the course offered this term.
- Some topics will change.
- **There won't be any examinations (ignore any references to them here).**
- Instead there will be one additional regular assignment and one extra workbook exercise (more on assessment later).

Yes: "This Stuff Will Be On The Exam"

- The administrative notes contains important information e.g. how your grades are calculated, assignment requirements etc.
- To encourage students to pay attention to details (and to reward those who do so):
  - Some of your midterm multiple questions will come from this section.
  - You may see a question or two from this section on the final exam as well.

Evaluation Components: Hands On

- **A0:** submitting files AND properly verifying submissions in D2L.
  - **Due 4 PM Friday Jan. 27 via D2L, not graded but still important.**
- **4 regular assignments**:
  - **All assignments are due at 4 PM submit via D2L**
    - A1 (Using MS-Word): **Due Monday Feb. 6 worth 22.5%**
    - A2 (Using MS-Excel): **Due Friday Mar. 3 worth 22.5%**
    - A3 (Writing a VBA program for MS-Word): **Due Friday Mar. 31 worth 22.5%**
    - A4 (Writing a VBA program for MS-Excel): **Due Wednesday Apr. 12 worth 22.5%**
- **5 workbook type exercises** (similar to those in the Chop-Chop problems text)
  - **All book exercises are due at 4 PM via D2L. Each is worth 2% x 5 = 10% for all.**
  - WB Ex 1, using Word: **Due Monday Jan. 30**
  - WB Ex 2, using Excel : **Friday Feb. 17**
  - WB Ex 3, VBA programming for Word : **Monday Mar. 13**
  - WB Ex 4, VBA programming for Word: **Monday Mar. 20**
  - WB Ex 5, VBA programming for Excel: **Friday Apr. 7**

Assignments: Late Submissions

- In the event of illness you can have up to **one full assignment** (A1 – A4) and **up to two workbook exercises** not counted in your grading.
- Situations where you won't be able to get these special considerations (not have assignments counted in grading) include scenarios that are typical of student life: having multiple due dates, work commitments etc. Forgetting to hand in or submitting an invalid file for part or all of your assignment is not a valid reason for an extension.
  - The usual late penalties specified in the requirements will be applied in these cases.

Assignments: Late Submissions (2)

- Late assignment submissions without an extension will have the following penalties applied.

Submission received:	On time	Hours late : >0 and <=24	Hours late: >24 and <=48	Hours late: >48 and <=72	Hours late: >72 and <=96	Hours late: >96
Penalty:	None	-1 GPA	-2 GPA	-3 GPA	-4 GPA	No credit

- Late workbook exercise submissions without an extension will have the following penalties applied.

Submission received:	On time	Hours late : >0 and <=24	Hours late: >24 and <=48	Hours late: >48
Penalty:	None	-1 GPA	-2 GPA	No credit

No Group Allowed For Assignments

- Assignments and exercises must be individually completed and individually submitted using the D2L Dropbox.
  - There is no group work allowed for this class.
  - Students **should not** see the assignment solutions produced by other students.
  - If you employ a tutor for this class then you should not go over the assignment with your tutor.
  - Violating these rules may result in an academic misconduct investigation being conducted by the office of the dean.

Submitting Assignments: Preparing For The Worst

- Submitting assignments
  - Do it early! (Get familiar with the system)
  - Do it often! (If somehow real disaster strikes and you lose everything at least you will have a partially completed version that the TA can mark).
- **Check your D2L Dropbox submission**.
  - Don't assume that everything was submitted OK.
  - Don't just check file names but at least skim the actual contents (not only to check that the file didn't become corrupt during the upload but also that you submitted the correct version, the latter is a good idea when you make multiple backup copies)….important part of A0.
  - It is each student's responsibility to make sure that the correct file was submitted on time into D2L.
  - Alternate submission mechanisms e.g., email, uploads to cloud-based systems such as Google drive, time-stamps, TA memories **cannot be used** as alternatives if you have not properly submitted into D2L.

Evaluation Components: Examinations

No exams for remote lectures

- Two examinations (*Proportion of term grade:* ***68/100***)
  - They are 'paper' exams written in a lecture room.
    - "Exam type" questions will be provided during the semester in lecture.
  - Two examinations:
    - **Midterm**: (**Friday March 6**), **28/100** marks ENG60 5:30 PM - 6:45 PM
    - **Final exam**: **will be scheduled by the Registrar** (login to the "My Ucalgary" portal for details), **40/100** marks
  - Somewhat similar to assignments, if miss an exam with a good reason and appropriate documentation then you can have the weight for one examination shifted to the other exams.

Grades For Each Component

- The official grading mechanism for this (and most) universities is a letter grade/grade point e.g. A/4.0, A-/3.7 etc.
- Term grades must be stated as a letter grade.
- Component grades (assignment, exam etc.) can either be a letter grade or a raw score (e.g. percentage)
- If want to know the reason why grade points are used for this class: [Information link:
  - https://pages.cpsc.ucalgary.ca/~tamj/2022/203W/notes/pdf/why_are_grade_points_used.pdf]
- For this class each major component will be awarded a grade point (and not a percentage) and this is the value used to determine the term grade.
  - Each assignment component: A1, A2, A3 etc.
  - Each workbook exercise.
  - ~~Paper examination components: midterm, final exam~~

Mapping Raw Scores To Grade Points: Assignments

- Assignment marking keys will specify grade points only
  - Example:
    - Page numbering (Bold numbers 3) in the header of each page in the specified format = **0.2 grade points**,
    - Table of contents (Automatic table 2: 0.2 GPA) at the start of the document on it's own page (0.2 GPA) = **0.4 grade points total**
    - Footnote for the Spruce meadows web address = **0.2 grade points**.
    - Create a new citation for the Cool Runnings film (0.3 GPA) and insert it into the document (0.2 GPA) = **0.5 grade points total**
  - Sum the grade points for each feature in order to yield the grade point awarded for the assignment e.g., 0.2 + 0.4 + 0.2 + 0.5 = 1.3 GPA earned if only the above features were implemented.

Grade Points Are Letter Grades Not Percentages

- Obvious examples why:
  - 4.0/A does not require a "100 % to attain this grade"
  - A passing grade of 1.0/D does equate to passing students who attain at 25% score (if percentages are used).
- In a similar fashion one cannot equate grade point cut offs to percentages:
  - Examples:
    - A cut off of 1.85 GPA or higher for an 'C' letter grade does not equate to a percentage cut off of 46%.
    - A cut off of 3.85 GPA or higher for an 'A' letter grade does not equate to a percentage cut off of 96%.

Mapping Raw Scores To Grade Points: Exams

No exams for remote lectures

- For examinations the mapping between a raw score and a grade point occurs one way (raw score mapped to grade point)
  - Example (purely for illustration purposes) 65 – 69% = C/2.0, 70 – 74% = C+/2.3
  - But grade points don't correlate back to percentages
    - e.g. I was awarded a 66% on midterm and then I see this is a 2.0 GPA (out of 4.0)
    - Does this mean that my percentage 'went' from a 66% to a 50%!!!???
    - No.
      - A C/2.0 does not mean that 50% was awarded as a course grade.
      - To put this in perspective a passing grade point in this university is a 1.0/D in a course. If a grade point mapped back to a percentage this would mean that anyone getting a 25% or higher would pass any course here.
  - The mapping of the midterm to grade point will be posted sometime after the midterm grades have been released.
  - The mapping of the final exam to grade point will be posted sometime after the final exam grades have been released.

Estimating Your Overall Term Grade Point

- To determine your weighted term grade point simply *multiply each grade point* by the weight of each component = weighted component grade
- Sum the weighted grade points to determine the term grade.
  - **Percentages won't be used to determine the term grade/letter grade**
  - So don't ask me: "What percent do I need to pass this class?"
  - The official passing letter/grade point for this university is a 'D' or 1.0.

Calculating Your Overall Term Grade Point

- To determine your weighted term grade point simply *multiply each grade point* by the weight of each component.
  - **Percentages won't be used to determine the term grade point/letter**
- Sum the weighted grade points to determine the term grade.
- Simple and short example (not exactly the same as this term but it should be enough to give you an idea of how to do the specific calculations required this semester):
  - Assignment 1: weight = 60/100, example score = A
  - Assignment 2: weight = 40/100, example score = B+

  Weighted assignment 1: 0.6 * 4.0 = **2.4**

  Weighted assignment 2: 0.4 * 3.3 = **1.32**

  Total term grade point = **2.4** + **1.32** = **3.72**
  - (In this case the term letter is A- if the official university cutoffs were used – more on this shortly)
  - (The number and weight of graded components will needed by adjusted to compute your actual term grade).

Contrast The Cut-Offs

Official UC cutoffs

Official university cut-offs	Letter	Term GPA
4.3 and above	A+	4
4 to less than 4.3	A	4
3.7 to less than 4	A-	3.7
3.3 to less than 3.7	B+	3.3
3 to less than 3.3	B	3.0
2.7 to less than 3	B-	2.7
2.3 to less than 2.7	C+	2.3
2 to less than 2.3	C	2.0
1.7 to less than 2	C-	1.7
1.3 to less than 1.7	D+	1.3
1 to less than 1.3	D	1.0
0 to less than 1	F	0

The Tam cutoffs

Tam cut-offs	Letter
4.15 and above	A+
3.85 to less than 4.15	A
3.5 to less than 3.85	A-
3.15 to less than 3.5	B+
2.85 to less than 3.15	B
2.5 to less than 2.85	B-
2.15 to less than 2.5	C+
1.85 to less than 2.15	C
1.5 to less than 1.85	C-
1.15 to less than 1.5	D+
0.7 to less than 1.15	D
0 to less than 0.7	F

- The cutoffs in the spreadsheet are **significantly more lenient** (almost everyone "gets a big break" e.g. instead of 3.7 for an A- it's 3.5 (midpoint between A-/3.7 and B+/3.3 is the higher letter grade)
- Do not expect a further "rounding up" at the end of the term e.g.
- **Q**: 3.49999999999999999999999999999999999999999999999999 is sooooooooooooooooooooooooooooooooooooooooooooooooooooooooo close to 3.5 can't you get an "A-"
- **A**: 'No' or using an Internet emphasis
  - NOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO!!!

Estimating Your Overall Term Grade Point (2)

- You can use the spreadsheet on the course web page to estimate your term letter grade:
  - http://pages.cpsc.ucalgary.ca/~tamj/2023/203W/203_grade_calculator.xlsx

Your Term Letter Grade

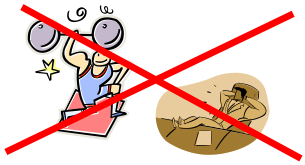
- After being assigned a letter grade for a class regardless of how it was derived then the numeric value for that letter uses the standard university values e.g. for determining your term average and your overall average.
  - The GPA to letter cut off scale is not known the Registrar and won't

Grade	Grade Point Value	Description
A+	4.00	Outstanding performance
A	4.00	Excellent performance
A-	3.70	Approaching excellent performance
B+	3.30	Exceeding good performance
B	3.00	Good performance
B-	2.70	Approaching good performance
C+	2.30	Exceeding satisfactory performance
C	2.00	Satisfactory performance
C-	1.70	Approaching satisfactory performance.
D+	1.30	Marginal pass. Insufficient preparation for subsequent courses in the same subject
D	1.00	Minimal Pass. Insufficient preparation for subsequent courses in the same subject. The Faculty of Law utilizes a "D" grade that does not carry weight in calculating the grade point average. This will be noted in the calendar description as "Not Included in GPA" where applicable.
F	0.00	Failure. Did not meet course requirements. Several Faculties utilize an F grade that does not carry weight in calculating the grade point average. This will be noted in the calendar description as "Not Included in GPA" where applicable.

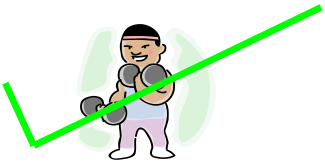
Enhancing Your Learning

- Computer Science is "hands on", someone can teach you: theory, principles as well as how to do something
  - You get better by trying things yourself.

Similar to getting fit: you can't just watch



You have to do it yourself



- Using MS-Office (A1 & A2): Try the features of Excel and Word either in class or as soon as possible after class.
  - Don't just focus on how to run different features but also make sure that you truly understand how they work (this can be challenging for complex features).

Enhancing Your Learning (2)

- "Programming" A3 onward
  - 'Trace programs': read through the lecture examples and try to figure out 'by hand' (not by running them) what happens if the programs were run.
    - Verify your prediction by running the program **after** the hand trace
  - Writing programs ("coding"): try writing the lecture examples yourself from scratch (don't look at the answer in the lecture notes until you've given it attempt)
  - More details provided later.
- The more your practice, the deeper will be your understanding of concepts (all assignments) and more skilled a programmer you will be (A3 & for this term A4).
  - The workbook was written to increase your ability to practice concepts.

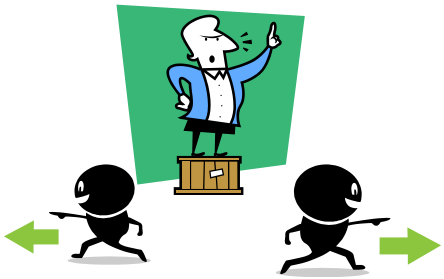
Enhancing Your Learning (3)

- For most students simply sitting and listening isn't enough.
- It has been shown that learning will be enhanced by taking notes (properly – don't capture lectures word for word, paraphrase).
  - Hand written notes are better than electronic versions (and you can probably take down information more quickly by hand especially if you need to draw diagrams).
- Ask questions!
  - If after trying to figure things out yourself make sure you clarify! (Remember I have office hours and there's a CT for this course)
  - If you are attending class, taking down notes and otherwise giving the course a good effort don't "feel dumb" asking a question

Tam's "House Rules"

- I will endeavor to keep the lecture within the prescribed time boundaries

- You won't pack up and end before time is up



Tam's "House Rules"

- No recordings/captures without permission during class please



- (Recall that learning tends to increase with additional levels of engagement).

Tam's "House Rules"

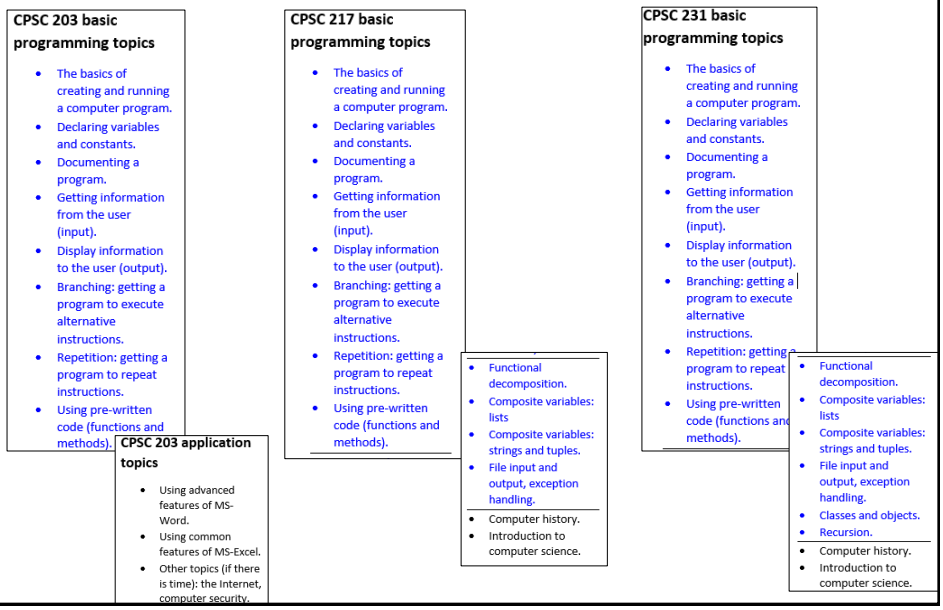
- Quiet whispering is OK…

…but make sure if it is *quiet*. If it's loud enough for me to hear then it's likely that others are being disturbed by the noise as well.

Tam's House Rules (Remote Learning)

- Some of the common sense rules and social norms that apply for face-to-face to learning also apply to the online version e.g. turn taking.
- Please do ask questions!
- But when you have a question use the "raise your hand" feature in Zoom: `Reactions -> Raise hand`
  - Of course you shouldn't just turn on your microphone and start talking.
  - Avoid using the text chat (unless you don't have working mic.)
    - Text chat messages go to me (use it after you raise your hand but your audio input device isn't working).
  - Virtual office time: similar to a physical office, I will help one person at a time (the rest come into a virtual waiting room).
    - https://support.zoom.us/hc/en-us/articles/115000332726-Waiting-Room
    - The TAs will likely employ a waiting room for their help tutorials (CT).

203 Is For Non-Majors: Comparisons To Other Courses



University Account Issues (UC-IT)

- The Department of Computer Science does not manage the university network (e.g. email, PeopleSoft, D2L is managed by UC-IT).
- In short UC-IT deals with technical issues related to university computers (e.g. accounts, login issues etc.)
- **Where to go for issues with your university account: Math Science (not ICT)** MS773.
- UC-IT support page:
  - https://ucalgary.service-now.com/it

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