



GLENDON CAMPUS, YORK UNIVERSITY

Itec/MODR 2915

Computer Usage and Software Applications I

Fall 2021

Instructor: Tuan (Titou) Cao-Huu

Office: YH358

Office Hours: F 13:00-15:00 by ZOOM

E-mail: tuan@gl.yorku.ca

Times, locations & links:

Our Class meets on Fridays 10:00-13:00, virtually by ZOOM & in-person at **YH 030A** (York Hall Basement)

<https://yorku.zoom.us/j/4531386773?pwd=QjM2cTVVY1d6Y2dEMG5iWWxCSC9Wdz09>

Moodle: <https://eclass.yorku.ca>

Rstudio-server: <https://oldtown.glendon.yorku.ca/>

Username: yourlastname (always in small letters)

Password: your_student_number

Your web pages are at: **<http://oldtown.glendon.yorku.ca/~yourlastname>**

Course description:

The course will present the main computer components (hardware and software); advanced topics for the use, edition and layout of documents alone or as part of a team; the creation and use of dynamic Web pages; advanced INTERNET information search techniques; and the design and implementation of a relational database using a database management system (DBMS) with applications to specific environments. Course credit exclusions: GL/MODR 1960 3.00, GL/MODR 1970 3.00, GL/SOSC 1960 3.00, GL/SOSC 1970 3.00.

Course objectives and learning outcomes:

Upon completing this course, a student will be able create responsive web pages and to:

- Work in the Glendon working environment (**Client-server** model) and **rstudio-server pro**
- Write web pages using html, css, Javascript, and Rmarkdown

- Understand what **JavaScript** is and why you should use it. Information search.
- Communicate with classmates using multimedia tools; learn novel features of Office 365 such as transcribe and recording.
- Collaborate with classmates using social networking and collaboration tools including Office 365 and Rmarkdown documents.
- To understand examples of a relational database: Covid19, medical imaging (MRI)
- Implement Web security with httpasswd, htaccess and database.

Course readings: Class Materials are given as PDF and many web links.

Working environment

(remote laboratory, Client-Server, Rstudio-server & ZOOM, GUI Xfce)
RStudio Server enables you to provide a browser-based interface (the RStudio IDE) to a version of R running on a remote Linux server. Deploying R and RStudio on a server has several benefits, including:

- The ability to access your R workspace from any computer in any location
- Easy sharing of code, data, and other files with colleagues
- Allowing multiple users to share access to the more powerful computer resources (memory, processors, etc.) available on a well-equipped server
- Centralized installation and configuration
- Client-server implementations allow seamless working environments for all.

Lectures are given in ZOOM & in-person at **YH 030A** (York Hall Basement)
Attendance is mandatory however I realize there are times when you must be absent. Please give me advance notice of any absences.

Grading:

Homework 40%

1 Test 20%

Final 40%

Letter	Point Value	Percentage	Definition
A+	9	90-100	Exceptional
A	8	80-89	Excellent
B+	7	75-79	Very Good
B	6	70-74	Good
C+	5	65-69	Competent
C	4	60-64	Fairly Competent
D+	3	55-59	Passing
D	2	50-54	Barely Passing
E	1	40-49	Marginally Failing
F	0	0-39	Failing

All Assignments will be submitted through our Moodle web site. If you have multiple files, please zip all your files and label your file, for example:
"yourname_Assignment1.zip"

Collaboration:

- I encourage you all to work together through problems – make sure you comment who you have worked with at the top of the page of your submission

Class Etiquette:

- Be respectful to your fellow classmates.
- Email me anytime if you have a question.

Tentative Schedule:

Week	Topic	Notes
1	Glendon working environment and rstudio-server	
2	Web security with htpasswd and htaccess Making your own site at your home	
3	Overview of HTML, CSS, and JavaScript	Homework 1
4	Data synchronization; Collaborate with classmates using collaboration tools	Homework 1 due
5	Advanced WORD/EXCEL I	
6	Advanced WORD/EXCEL II	Homework 2
7	Design and implementation of a relational database I	Test
8	Design and implementation of a relational database II	Homework 2 due
9	Examples of DBMS; Excel and CSV	
10	Review and practice	
11	Wrapping it all up	