

# **NWEN 241**

# **Systems Programming**

**2022 Trimester 1**

Alvin C. Valera

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# People (1)

Course Coordinator



Jyoti Sahni

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AM414 / <https://vuw.zoom.us/my/jyotisahni>

NWEN 241 Office Hours: Tue, 10:30-12:30

Lecturer



Alvin Valera

[alvin.valera@ecs.vuw.ac.nz](mailto:alvin.valera@ecs.vuw.ac.nz)

AM418 / <https://vuw.zoom.us/my/alvin.valera>

NWEN 241 Office Hours: Wed, 13:00-15:00



# People (2)

## Tutors

- Alessandro Pol
- Crispin Hitchings-Anstice
- Dilitha Wijayapala
- Jayen Gulab
- Luis Slyfield
- Michael Levy
- Pravin Modotholi
- Stephen Thessman
- Vic Roberts
- William Kilty

## Class Representative(s)

*Please e-mail Jyoti if you want to be a class representative*



# APPOINT A CLASS REP

Become a Class Representative at Victoria University of Wellington!

Class Reps are the bridge between the course coordinator, lecturer, and the class to support and improve students' learning experiences in your course and at Victoria.

REGISTER online: <http://www.vuwsa.org.nz/class-representatives/>

Representing your class has many benefits; VicPlus points, Class Rep certificates, professional and personal growth, and links to other representation opportunities.



# Course Assumptions

- This course assumes that you are familiar or have taken courses that have dealt with the following topics:
  - Binary representation of numbers
  - Basic logic or Boolean algebra
  - Computer program design
  - Java programming
- Computer program design and Java programming are essentially covered in COMP 102 and COMP 103
- If you want to brush up on your knowledge of binary representation and basic logic: <https://www.bottomupcs.com/chapter01.xhtml>



# Course Format

- **2 Lectures**
  - Mondays and Wednesdays
  - 15:10-16:00 at HMLT205
- **1 Tutorial-Style Lecture**
  - Thursdays
  - 15:10-16:00 at HMLT205
- **Helpdesk (from Weeks 2-12)**
  - *In-Person* Helpdesk @CO246
  - *Online* Helpdesk @Zoom
  - First-come, first-served

See Course Wiki for more details  
about Lecture Schedule



# COVID-19 Contingency

- Lectures delivered in-person (capacity limits may apply based on the alert settings) will be streamed live over Zoom
- All the lectures will be recorded and made available on Panopto for students who are unable to attend lectures during the scheduled time slots
- Students will be able to access the ECS machines remotely - guide on remote access to ECS machines provided [here](#)
- Both in-person and Zoom based helpdesks will be provided



# In-Person Helpdesk Sessions

- Lab: Systems and Network Lab (CO246)
  - ID access cards (Swipe Cards)
  - Should work if you are registered in NWEN 241
- PC workstations
  - Linux operating system, KDE as graphical user interface
  - Network file system: you can access your files from any of the PCs
  - Compilers & debuggers: gcc, g++, gdb, and more
  - Text editors: kate, gedit, emacs, vi, vim, and more
- Text editor vs IDE: Text editor
- Remote access:  
<https://ecs.victoria.ac.nz/Support/TechNoteWorkingFromHome>





# Books and Other Resources (1/2)

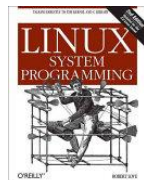
- No textbook required
- Good references:



Perry, Gregory, **C Programming Absolute Beginner's Guide**, Third Edition  
Available Online: [VUW Library Link](#)



Kochan, Stephen, **Programming in C**, Fourth Edition  
Available Online: [VUW Library Link](#)



Love, Robert, **Linux System Programming**, 2nd Edition  
Available Online: [VUW Library Link](#)



Donahoo, Michael, **TCP/IP Sockets in C**, 2nd Edition  
Available Online: [VUW Library Link](#)



Malik D.S., **C++ Programming: Program Design Including Data Structures**  
Available Online: [VUW Library Link](#)



# Books and Other Resources (2/2)

- Classic C programming reference:



Kernighan and Ritchie, **The C Programming Language**, 2<sup>nd</sup> Edition  
Hardcopy Available in VUW Library

- Lecture slides:
  - To be released a day before lecture in [course website](#)



# Assessment

Component	Weight (%)
4 Assignments (10% each)	40
4 Exercises (2.5% each)	10
2 Term Tests (10% each)	20
Final Exam	30

- **No mandatory course requirements**



# Assignments (1)

- **Programming tasks** to test your practical knowledge
- 4 assignments in total, each assignment weighing 10% of the final grade
  - See course wiki for handout dates and deadlines

## Penalties for late submission:

- Each late submission will be penalised by
  - 20% of the achieved marks if it is up to 24 hours late, and
  - 40% if it is between 24 hours and 48 hours late.
- Any work submitted more than 48 hours after the deadline will receive 0 marks



# Assignments (2)

## “Late days” credit

- Each student will have 3 “late days” which you may choose to use for any lab assignment(s) during the course
- There will be no penalty applied for these late days
- You do not need to apply for these - any late days you have left will be automatically applied to lab assignments that you submit late
- The late days are intended to cover minor illnesses or other personal reasons for being late. You should only ask for extensions in the case of more significant or longer lasting problems (and you may need documentation)
- Do not waste “late days” on procrastination!



# Plagiarism (1)

- You are encouraged to discuss the principles of the course and assignments with your tutors and other students, to help and seek help with programming details, problems involving the lab machines
- **However, any work you hand in must be your own work**



# Plagiarism (2)

- Read [School policy on Plagiarism](#) (claiming other people's work as your own)
- We will penalise anyone we find plagiarising, whether from students currently doing the course, or from other sources.
- Students who knowingly allow other students to copy their work may also be penalised



# Exercises

- Simple guided programming tasks
- *Automatically marked* when you submit them to the online submission system
- You may re-submit as many times as you like in order to improve your mark before the deadline
- Exercise submitted after the deadline will not be marked and will get 0 marks.
  - See course wiki for handout dates and deadlines
- No “late days” for exercises





# Getting Help for Assignments & Exercises

1. For quick questions, flick an e-mail to [nwen241-staff@ecs.vuw.ac.nz](mailto:nwen241-staff@ecs.vuw.ac.nz)
2. For issues that are harder to resolve, attend your Helpdesk session
3. Post them in the course forum ([https://ecs.wgtn.ac.nz/cgi-bin/yabb/YaBB.pl?board=NWEN241\\_2022T1](https://ecs.wgtn.ac.nz/cgi-bin/yabb/YaBB.pl?board=NWEN241_2022T1))



# Term Tests and Final Exam

- Term Tests and Final Exam will be in-person except for students taking the course remotely
- See course wiki for the test dates
- Venue to be announced closer to the test dates



# Course Wiki

- Link:  
[https://ecs.victoria.ac.nz/Courses/NWEN241\\_2022T1/WebHome](https://ecs.victoria.ac.nz/Courses/NWEN241_2022T1/WebHome)
- **Check the course wiki regularly!**

