ECEN204 Electronic Devices

(Lec 0 Introduction)

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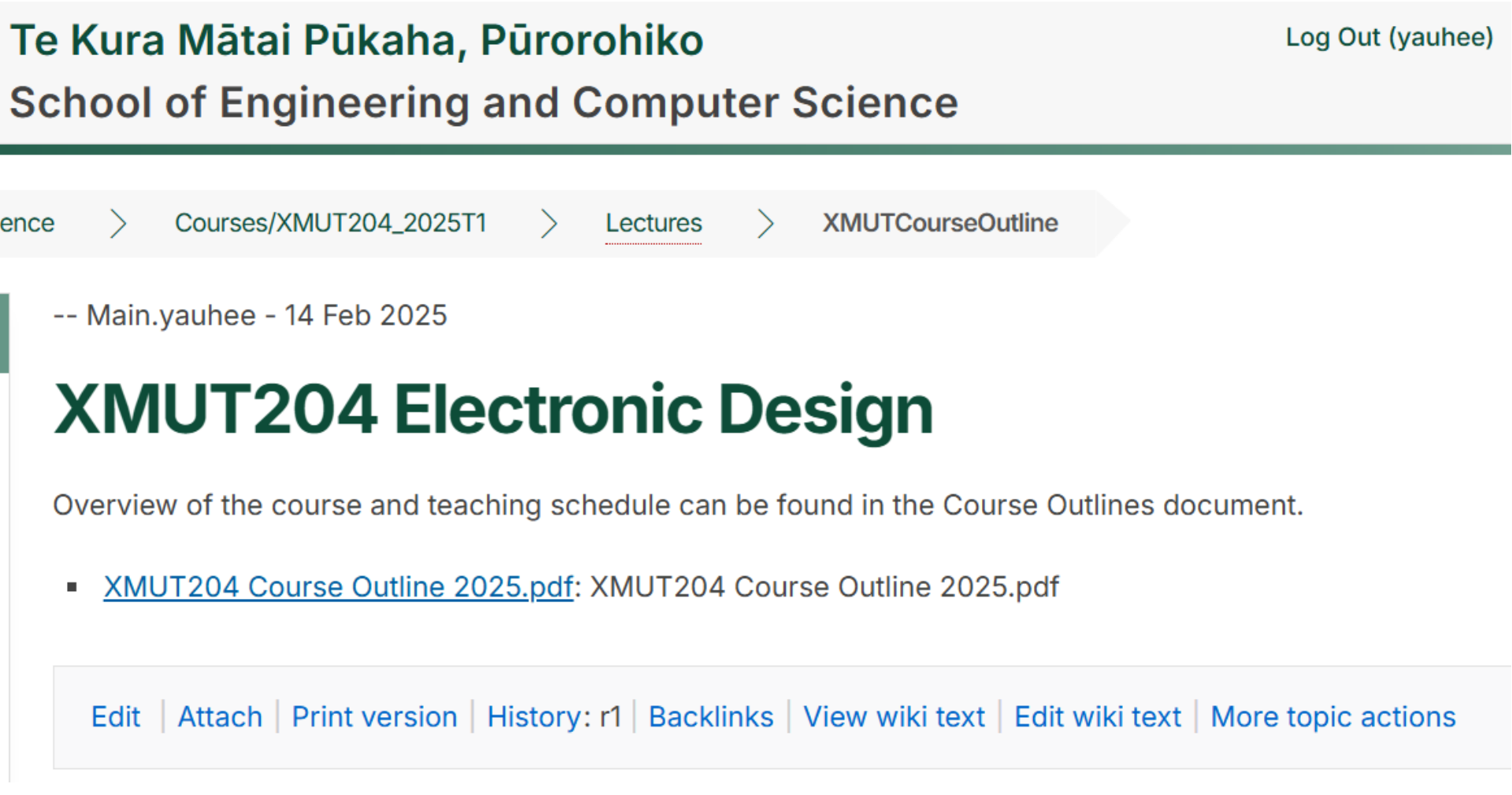
Course website

- https://ecs.wgtn.ac.nz/Courses/XMUT204_2025T1/WebHome



Electronic Devices Course Overview

XMUT204 Electronics Design - Course Schedule 2025

Week	Lecture	Tutorial	Laboratory	Assessment
1	Introduction to Semiconductors		Lab 1	
2	Diode and PN Junctions	Tutorial 1	Demo 1	
3	Diode Models and Circuit Analysis		Demo 2	Assignment 1
4	Diode Applications	Tutorial 2	Lab 2	
5	Diode Applications		Demo 3	Lab Report 2
6	Special Purpose Diodes (Zener Diode)	Tutorial 3	Lab 3	
7	Special Purpose Diodes (LEDs)		Demo 4	Assignment 2
8	Special Purpose Diodes (Solar Cells I)	Mid-term Test	Design Project 1	Mid-term Test
9	Introduction to Transistors		Design Project 1	Design Project Report 1
10	BJT Biasing Circuits	Tutorial 4	Lab 4	
11	BJT Switches		Demo 5	
12	BJT Amplifiers	Tutorial 5	Lab 5	Assignment 3
13	BJT AC Analysis		Demo 6	Lab Report 5
14	BJT Amplifiers Design	Tutorial 6	Demo 7	
15	BJT Further Circuits		Design Project 2	Assignment 4
16	FET Introduction and Characteristics	Preparing for Final Exam	Design Project 2	Design Project Report 2
17-18				Final Exam

Textbook

- Any book on Electronic Devices is equally good.
- But we will refer to this book:

The recommended textbook for the course is: Electronic Devices (Conventional Current version) by Thomas L. Floyd. The 9th edition should be available in the bookshop. Other edition is also good.

It can also be purchased as an eText book from Pearson – see further the publisher website: http://www.pearsoned.co.nz/9781292038070

Assessment Criteria (subject to confirmation)

- One end-of-semester final exam 40%.
- 1 mid-semester Test at 10%.
- 5 Labs to be done. Only 2 labs will be marked (with a total of 10%).
- 4 Homework Assignments. (with a total 10%).
- 2 group projects (with a total of 20%).
- Attendance in Lectures and Labs (total 10%)

On top of the above, you need to manage on your own:

- Tutorials
- Reading

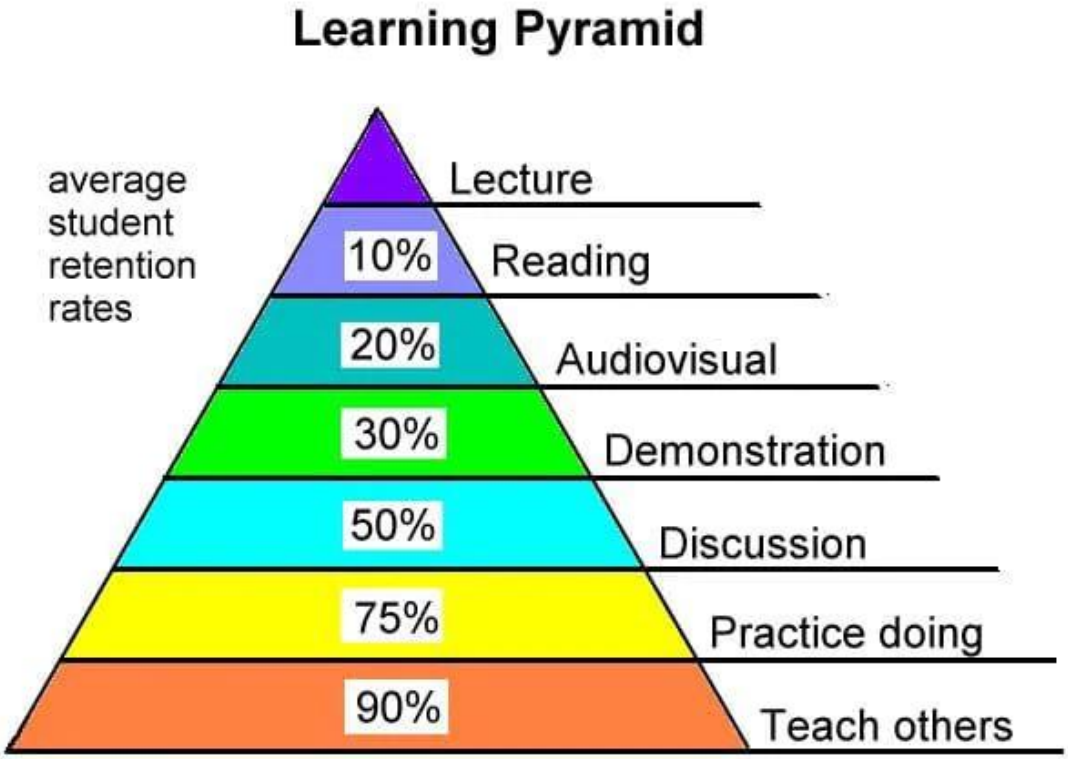
Assessment	Schedule	Learning Outcome	Weight
Assignments (4)	Fortnightly	CLO: 1, 2, & 3	10%
Laboratory Reports (2 of 5)	Fortnightly	CLO: 4 & 5	10%
Design Projects (2)	Week 8 & 15	CLO: 1, 2, 3, 4 and 5	20%
Mid-term Test	Week 8	CLO: 1, 2 & 3	10%
Final Exam	Week 17-18	CLO: 1, 2 & 3	40%
Attendance	All weeks		10%

How to study Engineering Statistics?

Tell me and I forget,

Show me and I remember,

Involve me and I learn.



Source: National Training Laboratories, Bethel, Maine

Expected hours of study

- 4 periods of lectures per week,
- 4 periods of Labs per week,
- You also need self-directed study; how many hours per week will be required?
- At VUW this is a 15-point course; 1 point ~ 10 hours, so this means a total of 150 total hours for whole course.
- We have 16 weeks, so ~ **10 hours per week**!
- These include class/lab times, doing homework, tutorials, assignments, write lab reports, reading etc

General Information

- Difference between the style of teaching and learning at VUW and XMUT
- Plagiarism – do not copy from your classmates
- Attendance – make sure you have enough attendance to sit final exam.
- Mark scaling between VUW and XMUT
- Resit exam – course marks will be calculated.
- Recommendation letters – show me how good you are for me to write good about you

Different systems and teaching styles

- “Easy in Difficult out” vs “Difficult in Easy out”,
- Students treated as mature adults, not higher secondary students,
- Training you to be an independent professional with critical thinking and problem solving skills,
- More hands-off => you explore and teach yourself,
- Open ended questions, reports etc,
- Tests and Exams are usually not the repeat of homeworks.

Plagiarism video @ https://www.bilibili.com/video/BV1nb4y117QN/

- Meaning to copy others' works and submit as your own. This is NOT OK.
- You can discuss and seek help from classmates, BUT
- DO NOT just COPY => you must work on your own.
- This includes NOT just copy and translate words from webpages/textbooks => you must re-write in your own words.
- This includes diagrams and figures!
- In group lab work, indicate all members' names and IDs.

Attendance

- By XMUT's rules, you need to have a minimum level of attendance rate in classes.
- Otherwise, you will not be allowed to take the final exam => you will fail the course
- There is also 10% of marks given to attendance.

Mark scaling

- Different pass marks: 50 marks in VUW and 60 marks in XMUT.
- Does this mean it is easier to pass in VUW?
- NO, due to an inverse relationship => a lower pass mark means assessments are usually more difficult.
- As long as you get 50 marks in VUW's courses, you would have passed!
- When reporting to XMUT, we will apply a piecewise linear scaling so that 50 in VUW becomes 60 in XMUT.

Resit exams

- There is NO resit exams in VUW!
- But we have adapted to XMUT's system, by offering resit exams BUT with a major difference: your normal assessments and tests marks will still be calculated.
- This is different from XMUT where only the resit exam marks will be considered.
- This means, if your normal assessment marks are too low, you will still not pass the resit exam => in some cases even if you get 100% in the resit exam!
- Please take note!

Recommendation letters

- Some of you may choose to go overseas for further studies,
- I have provided many recommendation letters to your seniors,
- And I am happy to write one for you BUT
- It is your responsibility to provide me with good stuff to write about you.
- To me, academic results is one aspect, and your study/personal attitude is another that I will consider.
- My reputation is at stake when recommending you, so
- Do not get offended if I refuse to write one for you ☺

Introduction

- Myself https://people.wgtn.ac.nz/YauHee.Kho
- Jimmi Rosa and Huang Junqi
- Our class…