Ir. Dr. Lau Ee Von
Head of Common Engineering

What to expect?
Outline

- Program Outcomes (POs)
- Moodle
- Units at Monash
- University Study and expected workload
- Notes about First Year units
- Timetable allocations
- Learning Experience
- Principal Dates
- Library Services
Program Outcomes (PO)

Monash University Malaysia adopts the Outcome Based Education (OBE). There are 12 Program Outcomes (POs) in each discipline.

Each outcome is related to one specific aspect of engineering to be achieved at the end of your four year study. For example:

1. Engineering Knowledge: Apply knowledge of science and engineering fundamentals and achieve specialization in Mechanical Engineering discipline

2. Problem Solving and Analysis: Identify, formulate, analyse and solve complex engineering problems, and make appropriate conclusions

3. Design/Development of Solutions: Design solutions for complex engineering problems
Some other POs

4. Research-based Investigation of Systems: Investigate complex engineering problems and systems using research-based knowledge and methods

5. Modern Tool Usage: Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex Mechanical Engineering problems, with an understanding of the limitations

7. Environment and Sustainability: Demonstrate knowledge of and need for sustainable development and understand the environmental impacts of engineering solutions

8. Professional Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

9. Communicate effectively both in oral and written forms, not only with engineers but also with the community at large
Some other POs


5. Modern Tool Usage: Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex Mechanical Engineering problems, with an understanding of the limitations.

7. Environment and Sustainability: Demonstrate knowledge of and need for sustainable development and understand the environmental impacts of engineering solutions.

8. Professional Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

9. Communicate effectively both in oral and written forms, not only with engineers but also with the community at large.
Learning Outcomes (LO) to PO mapping

Example (MEC2405 Thermodynamics)

**Assessment:** Final exam Q1

**Learning Outcome (LO)**

LO1: Determine the properties of a pure substance which include physical state (solid, liquid, gas), entropy, enthalpy, specific volume, pressure and temperature from property tables and charts.

**Program Outcome (PO)**

PO1: Mechanical Engineering Knowledge: Apply knowledge of mathematics, natural science, engineering fundamentals and specialization in Mechanical Engineering to the solution of complex engineering problems

**Assessment:** Online quiz 10

**Learning Outcome (LO)**

LO5: Analyse renewable energy systems which include wind turbines and solar energy.

**Program Outcome (PO)**

PO7: Environment and Sustainability: Understand and evaluate the sustainability and impact of professional engineering work in the solution of complex Mechanical Engineering problems in environmental contexts
Unit Instructions in Moodle

- Every Learning Outcome (LO) in each Unit is mapped to one of the 12 POs.
- At the end of each unit it is expected that you achieved some of the program outcomes.
- Please check in Moodle on the Learning Outcomes prior to the Semester commencement

my.monash → Moodle OR http://moodle.vle.monash.edu/

Moodle page of ENG1011
Units at Monash

- Units offered at Monash have been structured to achieve the POs
  - *Approved Accreditation Syllabus* shows mapping of unit learning outcomes (LOs) to POs

- Each unit is 6 credit points (cp)
  - Typically 6 contact hours
  - 6 hours independent study
University Study and expected workload

- You need to take your own responsibility
  - Attend all classes, review regularly, hand in assignments on time, understand your work

- Failing units could be costly
  - Academic Progress Committee

- Many (design) units, including ENG1011 and ENG1012 adopt the flipped teaching/learning method
  - These units are based on design assignments and online learning so you need to work on specific projects in a group, answering to quiz questions and watch the lecture videos before attending to the lectures, i.e. Work starts now!
“Academic integrity is the moral code of academia. It involves using, generating and communicating information in an ethical, honest and responsible manner.”
Forms of Academic Misconduct

Plagiarism
Taking another person’s ideas and/or manner of expressing them and to pretend they are your own.

Collusion
Unauthorised collaboration on assessable work with other people.

Cheating
Seek to obtain an unfair advantage in an examination.

Contract Cheating
Getting someone else to do your assessment for you.
Penalty for Academic Misconduct

Penalty Guidelines for Part 7 of the Monash University (Council) Regulations
Academic misconduct and research misconduct

Pursuant to regulation 42 of the Monash University (Council) Regulations, the Monash University Council resolved to issue the following penalty guidelines for academic misconduct and research misconduct for the purpose of Part 7 of the Monash University (Council) Regulations:

<table>
<thead>
<tr>
<th>Offence/Circumstance</th>
<th>First offence not of a serious nature and student:</th>
<th>First offence of a serious nature (e.g. deliberate disregard for or a clear attempt to circumvent rules), or second offence not of a serious nature</th>
<th>Second offence of a serious nature.</th>
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<td>• expresses remorse; and/or</td>
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<td>• does not appear to have understood the consequence(s) or impact of his/her actions</td>
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<thead>
<tr>
<th>ACADEMIC MISCONDUCT</th>
<th>Record of guilt and disallowance of work.</th>
<th>Record of guilt and: imposing a zero in the unit; and suspension.</th>
<th>Record of guilt and imposing zero in unit and either: suspension; or exclusion.</th>
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</thead>
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<tr>
<td>Plagiarism</td>
<td>Record of guilt and disallowance of work.</td>
<td>Record of guilt and: imposing a zero in the unit; and suspension.</td>
<td>Record of guilt and imposing zero in unit and either: suspension; or exclusion.</td>
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<tr>
<td>Collusion</td>
<td>Record of guilt and disallowance of work.</td>
<td>Record of guilt and: imposing a zero in the unit; and suspension.</td>
<td>Record of guilt and imposing zero in unit and either: suspension; or exclusion.</td>
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Timetable Allocations

- Lab and tutorials allocations will be done for you
  - Check your timetable in Allocate+
    (my.monash → Timetable)
  - Please contact me via email should you have any questions on unit selection:
    lau.ee.von@monash.edu
Learning Experiences

- Industry training
- Engineering Leadership Program
- UROP
- Buddy- Buddee
- Mentor- Mentee program
- Exchange & transfer
- Design competitions (IEM, Shell ECM, Freescale…)
- Other competitions (SOfE IMechE,…)

Freescale Smart Car Competition

IEM Chemical Engineering Design Competition

Shell Eco Marathon

Training with ServerPark
Learning Experiences

Sir John Monash Medal 2017 – Nicholas Choo

Warman Competition National Finals - [video]

Sir John Monash Medal 2019 – Lim Ee

Shell Eco-Marathon Autonomous Programming Competition - [video]

Speak Out for Engineering (SOFE) Competition

[Image of a presentation slide titled "SPEAK OUT FOR ENGINEERING"]
Online Learning – What to expect and How to cope?
Online Learning support

- To support you in achieving the best possible academic outcome during the disruption caused by Covid-19, changes have been made to grading and results.

- Changes during teaching periods impacted by Covid-19 restrictions
  - option to convert the results of all passed units in a teaching period to a Satisfied Faculty Requirements (SFR) grade that won’t count towards your Grade Point Average (GPA) or Weighted Average Mark (WAM)
  - failed units with a result less than 40 will be automatically withdrawn
  - supplementary assessment for marks between 40–49
  - option to withdraw from your units after results are released without academic penalty.
Hybrid learning – on-campus activities

- You play an important role in contributing to a safe campus community.
- Do not come to campus if you are unwell; write in to your Unit Coordinator.
- You must not come to the University if you are displaying symptoms consistent with Covid-19 or are under quarantine or self-isolation.
- Please abide by social distancing rules and COVID Safe Plan: https://www.monash.edu.my/COVID19-updates
Monash Campus map

Building number
Room number
Floor/Level

5 5 17
Principal dates

- Email notifications and also on my.monash homepage
- https://www.monash.edu/students/dates/principal-dates#full-year
Library Services

Research Skills Support

▪ General Library Workshops
  – Attend research and learning skills development workshops from a range of topics offered.
  – Refer to the [Library Workshop calendar](#) to choose the sessions you want to attend.

▪ Online tutorial and pre-recorded presentations
  – Access the Library’s online tutorials and pre-recorded presentations are available to support you anywhere, anytime.
  – Check the Library’s [e-Learning](#) page for details.

Library Resources

▪ Digital resources
  – Search the Library’s digital collection of e-books, e-journal articles, or online databases to meet your academic needs. Get started with the [Search box](#)

▪ Document Delivery (only for Honours, Postgraduate and Academic staff)
  – Most library networks have limited access to print materials now. However, the Library will do its best to find alternative sources. Let us know about your [document delivery](#) requests.
GOOD LUCK!