# 00BeforeIntroduction

This class is Programming and Algorithms (COMP1038 UNNC)

# **Teachers Info:**

Convenor: Michael Li

Office: PMB-426

Office hours: 14:00-16:00 Wednesday Email: jiawei.li@nottingham.edu.cn

Convenor: Pushpendu Kar

Office: PMB-448

Office hours: 15:30 - 17:30 Thursday
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Convenor: Wooi Ping Cheah

Office: PMB-323

Office hours: 15:00-17:00 Thursday

Email: Wooi-Ping.Cheah@nottingham.edu.cn

# **Textbook**

C: How to Program (8th Edition), Paul Deitel and Harvey M. Deitel, 2016

# **Assessments**

- Assessed coursework- 75%
  - o 2 In-Lab assessments 5%
  - o CW1 assignment 30%
  - o CW2 assignment 40%
- Exam 25% 1h

# **Lecture Schedule**

- Lecture schedule:
  - Wednesday 11:00-13:00, DB-A05Thursday 9:00-10:00, DB-A05

Please bring pens, paper, etc, to lectures as you will need to make notes based on what the conveners are saying and doing. The lecture slides will not show all the information in the course; they are summaries of what I am saying and doing during the lectures.

If you wish to make notes using a laptop or tablet then we are ok with that but:

 you must run your device using the battery. It is too dangerous to have power cables running across the lecture room floor.

| Teaching<br>Week | Week<br>starting | Lecture Topics<br>(exact schedule may vary)                  | Lab   | Coursework           | Tutorial                              | Pre-reading<br>(also see slides) | 2nd Pass Content<br>(may vary)              |
|------------------|------------------|--|---|----------------------|---------------------------------------|----------------------------------|---|
| 1                |                  | Module IntroC Overview<br>Selection statements               | Checking cslinux access   |                      | No tutorial                           | Chp 1, 2                         |   |
| 2                | 26th Sent        | Selection statements<br>Iteration statements                 | Selections, iteration exercises   |                      | Data types and Conversion             | Chn 3 4                          | Build<br>Systems                            |
| 3                | 10th Oct         | Arrays   | Iteration, array exercises  |                      | Control and iteration                 | Chp 6                            | Undefined<br>Behaviour                      |
| 4                | 17th Oct         | Pointers   | Pointer exercises<br>In-lab assessment (selection, iteration and array) |                      | Pointers and arrays                   | Chp 7.                           | Debug                                       |
| 5                | 24th Oct         | Functions  | Function exercises  |                      | Functions                             |                                  | Multiple source files<br>and C preprocessor |
| 6                | 31st Oct         |  | Function, String exercises<br>In-lab assessment (functions)             |                      | Dynamic memory allocation and strings | Chp 8, 9                         | External<br>libraries                       |
| 7                | 07th Nov         | Structures   | Structures exercises  | CW1 start            | Debugging                             | Chp 10                           |   |
| 8                | 14th Nov         | Major data structures  | Data-structure exercises  |                      | Linked lists                          | Chn 12                           | Efficiency considerations in C.             |
| 9                | 21st Nov         | Files  | File IO everciese   | CW1 end<br>CW2 start | Pointers to pointers                  | Chp 9, 11                        | File format parsing                         |
| 10               | 28th Nov         | Extended example   | Comprehensive exercises   |                      | Miscellaneous                         |                                  | Automated testing                           |
| 11               | 05th Dec         | Advanced Pointers<br>Variable argument lists + Module review | Comprehensive exercises   |                      | TBD                                   | Chp 14                           | "OOP" in C                                  |
| 12               | 12 Dec           | (self-study week)  |   | CW2 end              |                                       |                                  |   |
| 13               | 20 Dec           | (self-study week)  |   |                      |                                       |                                  |   |

## Labs

#### Lab schedule:

Group COMP1038/C1/**01**: Friday 9:00 --- 11:00 IAMET-406

Group COMP1038/C1/**02**: Friday 12:00 --- 14:00 IAMET-406

#### **Lab and Tutorial Group Assignments**

See the Faculty Office of Science & Engineering moodle page for the group assignments.

Your group numbers for the Labs (also called "Computing Group") are given in these files.

**Your lab number and your tutorial number may be different!** Please check both sheets carefully to make sure you attend the correct group for each type of session. Please also check your timetable carefully as group 2 may be before group 1, for example.

If you are registered for PGA but not in the group files, please email the module convenor.

YOU MUST ATTEND THE SESSION YOU ARE TIMETABLED FOR. You will be counted as absent if you do not attend your timetabled session. \*You will not be allowed in the room during the other session.\*