# EEE123/3 - Programming for Engineers

#### Lecturers:

#### Dr Junita Mohamad Saleh ( EE3.20, jms@eng.usm.my ) Dr Kamal Zuhairi Zamli ( EE3.22, <u>eekamal@eng.usm.my</u> )

#### **Course Outline**

	TOPICS
1 07/07/09	Introduction to course
	Introduction to Algorithms
2 14/07/09	How to build a C++ program
	How to write a C++ program
	Console input & console output
3 21/07/09	LAB 1
	<b>Arithmetic Operators</b>
	How to Implement Arithmetic Operations
	LAB 2
4 28/07/09	<b>Condition: Relation Operators &amp; Logic</b>
	Operators
	Flowchart for conditions
	How to Implement Decision (if and switch-case)
5 04/08/09	LAB 3
	Flowchart for repetition
	How to Implement Repetition (while & do-while)
6 11/08/09	LAB 4
	How to Implement Repetition
	(nested while)
17/08/09 - 24/08/09	Mid-Semester Break
	LAB 5
25/08/09	How to Implement Repetition
	(for & nested for)
02/09/09	Dr Kamal Zuhairi Zamli
08/09/09	(functions, arrays, file input/output, pointers,
15/09/09	structure, numerical methods)
19/09/09 - 27/09/09	Special Break
28/09/09	Dr Kamal Zuhairi Zamli (labs will be announced by Dr Kamal)
06/10/09	
13/10/09	
20/10/09	
	14/07/09 21/07/09 21/07/09 28/07/09 28/07/09 11/08/09 11/08/09 28/09/09 15/09/09 15/09/09 15/09/09 15/09/09 15/09/09 15/09/09 15/09/09 15/09/09 15/09/09

### Grading (100% coursework)

- Tests (50%)
- Assignments, Labs & Quizzes & Attendance (50%)

#### Text Book & Exercise book

- Tony Gaddis & Barret Krupnow (2007) *Starting out with C++*, 5<sup>th</sup> edition, Addison Wesley, Pearson International Edition.
- Schaum's Outline, John R. Hubbard, *Programming with C++*, McGraw Hill.

#### **Reference Books**

- 1. Diane Zak (2005) An introduction to programming with C++, Thomson/Course Technology.
- 2. Brian Overland (2005), C++ without fear, Prentice Hall.
- 3. Chuck Easttom (2003), C++ programming fundamentals, Charles River Media.
- 4. M. Kumar (2002), Programming with C++ made simple, McGraw-Hill.

However, references must not be restricted to the above list only.

#### Lecture and Laboratory Regulations

- Lecture and Lab attendance is compulsory. 3 absences without notice will be reported.
- An absence from a quiz, lab or test must be accompanied by a Medical Certificate (MC) from any <u>USM Panel Clinic</u> or <u>USM Health Centre</u>. MC from any other clinics is not acceptable.
- Students who are caught browsing the World-Wide Web (WWW) during lecture or lab session will be treated as absent and no lab and/or quiz marks will be considered.
- All given quizzes and/or exercises are unannounced, but are graded.
- Lab start s in week 3 in PPKT. Lab is at 2:00pm.
- Selective lab work will be graded.
- Questions for each lab will be given during the lab session to motivate self-learning and lecture-focus.
- Each lab work has to be submitted to the tutor at the end of the lab session.
- Late lab submission will not be accepted and will incur in zero mark.

## Plagiarism Regulations

- Students are encouraged to discuss the assignment question. However, PLAGIARISM (i.e. copying others' work) is not tolerable.
- Plagiarized assignments, or tests, etc will incur in 'F' grade or zero mark for those involved.