University of Lethbridge
Department of Mathematics and Computer Science

Computer Science 2620 – Fundamentals of programming II
Course Outline – Spring 2015

LECTURES: Tu Thr 12:15 – 13:30   **ROOM:** W561

INSTRUCTORS: Robert Benkoczi (office C556)
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TEXTS: *C++ Primer* 5th Ed, by Lippman, Lajoie, Moo.
Open Data Structures, by Morin, available at `http://opendatastructures.org/` (under a CC License).

GRADING SCHEME:

Midterm	20%
Assignments (approx 6)	30%
Final exam	50%

GRADE DISTRIBUTION: This information is provided as a guideline only and may be revised in this offering.

A+	95	B+	82	C+	70	D+	56
A	90	B	78	C	66	D	50
A-	86	B-	74	C-	62	F	< 50

SCHEDULE:
(as time permits):
1) Classes, abstract data types. Access control and encapsulation, class scope, constructors, static members.
2) Recursive functions.
3) Memory management, pointers. New, delete, STL smart pointers.
4) Templates and generic programming.
5) Searching and sorting.
6) Array based lists, linked lists, skip lists.
7) Heaps, binary trees, random binary search trees.
8) Graph data structures, data structures for storing large integers.

COMMENTS:

– Work must be submitted at the scheduled time; no provision is made for make-up midterm or late assignments, except for medical reasons or emergencies. Missed tests and assignments receive 0 points.
– Requests for remarking tests and assignments are accepted only in writing *no later than one week from the date your graded work was returned.* On the request: identify the assignmemnt or midterm, briefly explain why you believe the mark is incorrect, date and sign. Note that if your work is remarked, your grade may go up, down, or remain unchanged.
– Copying is strictly prohibited. Plagiarism can lead to severe penalties – consult the calendar.
– Please be considerate to your classmates: try not to be late in class, limit your discussion to class discussion during the lecture, and turn off the sound on any electronic device (laptop, cell phone, etc).

LINKS

- Moodle: `http://moodle.uleth.ca/`

- Instructor's page including office hours: `http://www.cs.uleth.ca/~benkoczi/`