

University of Lethbridge
Department of Mathematics and Computer Science

Computer Science 1820 – Discrete Structures
Course Outline – FALL 2019

LECTURES: Tu Thr 9:25 – 10:40 **ROOM:** D634

INSTRUCTOR: lectures: Robert Benkoczi (office C556)
robert.benkoczi@uleth.ca
tutorials: Nawrin Ferdous Chowdhury
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TEXTS: *Discrete Mathematics and Its Applications* - 8th Ed, by Rosen (older editions OK).
Book of Proof - 3rd Ed, by Hammack, available at <http://www.people.vcu.edu/~rhammack/BookOfProof/> (CC Licence).

GRADING SCHEME:

Tutorial quizzes (5)	15%
Tests in class (5)	75%
Small project (1)	10%

GRADE DISTRIBUTION: This information is provided as a guideline only and may be revised in this offering. Minimum percentages for each letter grade are:

A+	95	B+	77	C+	67	D+	55
A	85	B	73	C	63	D	50
A-	80	B-	70	C-	60	F	< 50

SCHEDULE:

(as time permits):

- 1) Introduction to proofs.
- 2) Growth of functions.
- 3) Integers and division.
- 4) Matrix algebra.
- 5) Counting (permutations, combinations, binomial coefficients).
- 6) Discrete probability.
- 7) Graph theory.

COMMENTS:

- Tutorial and lecture attendance is highly recommended. Practice regularly by attempting the exercises from the text. I will be happy to discuss the solutions with you.
- Work must be submitted at the scheduled time; no provision is made for make-up tests 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 assignment 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 – please consult the student discipline policy at <https://www.uleth.ca/policy/resources/student-discipline-policy-academic-offenses-undergraduate-students>

LINKS

- Moodle: <http://moodle.uleth.ca/>
- Instructor's page including office hours: <http://www.cs.uleth.ca/~benkoczi/>