UNIVERSITY OF GUELPH
School of Computer Science
Course Outline

Course Code: CIS*2460	**Course Title:** Modeling of Computer Systems	**Date of Offering:** Fall 2016

Instructor: Yang Xiang **Office hours:** By appointment **Course website:** http://www.cis.uoguelph.ca/~yxiang/2460/2460f16.html	**Office:** Reynolds 318 **Email:** yxiang@uoguelph.ca
TA: Jarrett Phillips **Email:** jphill01@uoguelph.ca	

Calendar Description: This course examines discrete simulation based on event queues and random number generation. Methods for generating input data, measuring and evaluating results using standard statistical tests are studied. Topics covered will include model calibration and validation, and algebraic, probabilistic and simple queuing models of software and hardware operation. Prerequisite(s): CIS*2500	**Topics:** • Spreadsheet simulation • Simulation of queuing systems, inventory systems, and system reliability • Event scheduling algorithm • Ethernet simulation • Statistical models in simulation • Input modeling • Validation of models • Output analysis
Lecture Tue, Thur: 10:00-11:20AM, MCKN 226	**Lab** **Section 1** Mon: 7:00-8:50PM MCKN 238 **Section 2** Wed: 7:00-8:50PM MCKN 238

Required Text: Jerry Banks, John S. Carson, Barry L. Nelson, David M. Nicol.
Discrete-Event System Simulation (5th Edition), Frentice Hall, 2010.

Method of Evaluation:

Course Work	**Date**	**Weight**
Assignment A1:	Due Thur. Oct. 13	10%
Assignment A2:	Due Thur. Nov. 10	15%
Assignment A3:	Due Thur. Nov. 24	10%
Midterm:	Thur. Nov. 3	25%
Final Exam:	Tue. Dec. 6 (2:30 ~ 4:30 PM)	40%
		A student passes the course if the weighted sum of all components ≥ 50%.

Academic Integrity

The University of Guelph is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards, and must abide by the applicable policies (Section VIII of the Undergraduate Calendar on "Academic Misconduct").

For educational purposes, assignments of this course are to be completed individually. Any utilization of external sources must be done with proper references. Work that shows significant unnatural similarity, or that appears to be copied from unacknowledged sources, will be investigated as potential academic misconduct. "Aiding and abetting" is also a punishable offence, and students must be careful not to help others commit offences by giving out their files or allowing others to access their computer accounts.

In this course, Turnitin, integrated with the CourseLink Dropbox tool, will be used to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity. All submitted assignments will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing academic misconduct. You may screen your own assignments through Turnitin before the due date. You will be able to see reports that show you exactly where you have properly and improperly referenced the outside sources in your assignment.

Acceptable Use Policy for Information Technology

Please read the complete policy found on http://www.uoguelph.ca/web/aupg.shtml.

Changes In Dates On Course Outline

See: Undergraduate Calendar: VIII. Undergraduate Degree Regulations and Procedures, Grading Procedures, Resolution 5.

E-Mail Policy

Students should include their name and course number in every email, *e.g.* Joe Smith: CIS*xxxx, since instructors are often involved in teaching more than one course per term. To comply with university privacy policy, all emails should be sent from your *mail.uoguelph.ca* account. All students are responsible for reading their *mail.uoguelph.ca* email regularly.

Assignment Submission

Assignments are expected to be handed in by specified due dates. Late assignments for A1 and A2 are subject to 20% of the total mark per day up to 2 ***calendar*** days. For instance, the latest date to hand in an assignment due on a Thursday is Saturday, with the highest possible mark of 60%. No late assignment is accepted for A3 (to allow marking and feedback before final exam). Please see details on submission procedure in the course website.

Electronic Recording

The electronic recording of class lectures is expressly forbidden without the prior consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.