CSC343H1 F (All Sections) 20219: Introduction to Databases

Jump to Today



[Be sure you've read this important <u>announcement</u> about online and face-to-face components of this course.]

Welcome to CSC343H1! This course provides an Introduction to Databases, and prepares you for later study in the implementation of Database Management Systems.

The material posted on Quercus is required reading. It contains important information, including assignment handouts, the policy on missed work, links to the online discussion forum (Piazza), and announcements. You are responsible for all announcements made in lecture and on Quercus.

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Contact Information

Instructor	Diane Horton	
	L0101: Tuesdays 3-6pm	
	L0201/L2001: Wednesdays 12-2pm and Fridays 12-1pm	
Lectures	Lectures for all sections are online synchronous	
	Zoom link: https://utoronto.zoom.us /j/92699901316 (https://utoronto.zoom.us /j/92699901316) Meeting passcode: 3430101	
Office Hours	Online, on this tentative schedule, beginning Tuesday, September 14th (the day of the first lecture):	
	Tuesdays 10:10 to 11:00 Wednesdays 3:10 pm to 4:30 pm Thursdays 12:10 to 1:30 pm	
	For now, let's use the Lectures link above	
Email (for personal issues)	csc343-2021-09@cs.toronto.edu (mailto:csc343-2021-09@cs.toronto.edu)	
Discussion Board (for issues relevant to other students)	Piazza (https://piazza.com/class/kqqsf0jgn2i5ud)	
MarkUs link	link TBA	
PCRS link	link TBA	

Prerequisites

If you don't have the course prerequisites listed in the <u>calendar entry</u> (https://fas.calendar.utoronto.ca/course/csc343h1), the undergraduate office will contact you with a form to complete in order to request a prerequisite waiver. Waivers are not granted automatically; a decision is made based on whether or not I feel you are well prepared to succeed in the course.

Teaching style

CSC343 is "semi-inverted". It is my favourite way to teach. You will learn some of the basic material on your own, outside of class time; I will teach the more challenging material and demonstrate problem-solving in class. There will also regularly be activities that you participate in during class. Be prepared to get your gears turning! There is strong evidence, and our experience also shows, that active learning works better than passively listening to a lecture. I also think it's a lot more fun!

To prepare for these active classes, you will do weekly "prep" activities outside of class. These will involve learning some material on your own, through readings or videos, and practising things we've learned in class. They will always culminate in some small exercises that you hand in. These weekly activities are not intended to be greatly time consuming.

Technology for online lectures

As noted in the <u>announcement in late August</u>, all sections will meet on Zoom. During my mini lectures, the class will be muted and you will be able to ask and answer questions via the chat feature. For active learning activities, students will go into breakout rooms so that you can work together with other students. I strongly recommend that you turn on audio for this, and that you learn how to use the annotate feature in Zoom to work together on worksheets. A TA and I will move between breakout rooms to work with you.

For security, please ensure that your Zoom client remains up to date.

Lecture recordings

I will record our live lectures and post a link to them on our Lectures page later in the week. However, reading/viewing the recorded materials will provide a poorer experience than participating actively in class. I hope you will choose to attend live and participate, and if you have to miss a lecture, I encourage you to pause the video and do the exercises where noted.

Note that if you use audio during the mini-lectures, you'll be in the recording that I post. I will not post your video, the chat, or anything from the breakouts.

Course videos and materials belong to your instructor, the University, and/or other source, and are protected by copyright. In this course, you are permitted to download videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor.

Marking Scheme

As noted in the Timetable and my August announcement, unless public-health restrictions prevent it, the final exam will be in person. You must be able to attend campus in person for the final; there will *not* be an online option. If you are taking the course from elsewhere, you must get to campus for the final. If you can't, you will need to take the course in another term.

Lecture Preps	10%	10 Weekly lecture preparation activities (for weeks 2 to 11), each worth 1%	Due Mondays before 11pm
Research	1%	Two short surveys, each one folded into a Lecture Prep	Worth 0.5% each
Project, Phase 1	3%	Dataset and relational schema	Thursday, September 30th before 8pm

Assignment 1	10%	Relational Algebra	Thursday, October 14th before 8pm	
Midterm	15%	Online; two hours, during lecture time	Tuesday, October 19th or Wednesday, October 20th (in your section)	
Assignment 2	10%	SQL and JDBC	Thursday, November 4th before 8pm	
Project, Phase 2	3%	SQL schema and data import	Thursday, November 18th before 8pm	
Project, Phase 3	3%	Queries and results	Thursday, December 2nd before 8pm	
Project Presentation	5%	Online presentation, scheduled by sign-ups	November 29th to December 8th	
Final exam	40%	In person; three hours. You must get 40% or above on the final exam to pass the course; otherwise, your final course grade will be no higher than 47%.	TBA, during the final assessment period.	

Discussion Board

Please post your questions about the course material and assignments on our Piazza discussion board so that everyone can benefit from your questions. Feel free to answer other students' questions! Helping someone else learn is one of the most effective ways of truly mastering a subject.

We will monitor the discussion board regularly and answer as many questions as we can. It may take longer near due dates, so try to start assignments early in case you have

questions. If you do not hear back quickly, we are always available during office hours to help.

Creating a Positive Learning Environment

We are committed to creating a respectful learning environment in computer science courses for all students and expect that you will adhere to the University of Toronto Code of Student Conduct (Code (Code (Please be mindful of how your behaviour influences the atmosphere in our learning community, not just in classes, but also in office hours, on our discussion board, and anywhere that you interact with other students and members of the department.

Resources

These two resources are suggested to support your learning in the course:

- The textbook "A First Course in Database Systems" by Jeffrey D. Ullman and Jennifer Widom, 2008 (3rd Edition), available online from the <u>publisher</u> (http://www.mypearsonstore.com/bookstore/product.asp?isbn=013600637X&xid=PSED), Chapters Indigo (http://www.chapters.indigo.ca/home/search/?keywords=A%20First%20Course%20in%20Database%20Systems&pageSize=12), or Amazon (http://www.amazon.ca/s/ref=nb_sb_ss_i_0_34?url=search-alias%3Daps&sprefix=a+first+course+in+database+systems). It is also available on two-hour loan at the Engineering Library in the Sandford Fleming Building. It may or may not be available at the UofT Bookstore at this time.
- Jennifer Widom at Stanford University has in the past offered an excellent free online course on databases. It is now being split into mini-courses and is in transition between platforms. Several of the mini-courses are <u>available on edX</u>
 (https://www.edx.org/school/stanfordonline), but in somewhat synchronous mode that starts September 7th.

Working with a Partner

Preps: All weekly preps must be done individually.

Assignments: For the assignments, you have the option of partnering with one other CSC343 student, and we encourage you to do so. You may choose your own partner, and it need not be the same person for each assignment. Once you begin working on an assignment, you may not dissolve your partnership without my permission. Both partners will receive the same mark for joint assignments.

If you choose to work with a partner for an assignment, you must declare your group on MarkUs. You should declare it as soon as your group is formed, and certainly well before the deadline. Groups cannot be declared once we are into the late period for an assignment. Please note that even if you are working alone on an assignment, you must still declare your "group" on MarkUs. Email the course account (csc343-2021-09@cs.toronto.edu (mailto:csc343-2021-09@cs.toronto.edu) for help if you're having trouble forming a group.

The project: The project gives you a chance to work with real data and to explore a domain of interest to you.

You are required to work with a partner for the project. It takes place throughout the term, in 3 phases that are meant to keep you on track, and a final presentation which you and your partner will make to two TAs. As with assignments, you may not dissolve your partnership without my permission and both partners will receive the same mark. Because the project spans most of the course, it is possible that your partner could drop the course during the project. In that case, you will be permitted to continue your work solo, or to pair up with another student whose partner has dropped. You will need approval and assistance from the course staff to do this. More details will be provided at the time.

Some advice: Working with a partner has the potential to lighten your workload and enhance your learning or to increase your workload and impair your learning, depending on how you work together. Remember that you are responsible for learning the course material underlying all parts of the assignments. You will have the most success if you truly work together.

Policies

Assignment and Project Phase Due Times

Assignments and Project phases are due on Thursdays **before 8:00 pm** sharp. They must be submitted electronically, using the MarkUs online system. Log in with your CS Teaching Labs username and password. Be sure to confirm that you have submitted all the required files and the correct version of each; we cannot accept missing files or a different version of an already-submitted file after the due date. Code that you submit to us for grading must work on the CS Teaching Labs machines as we will be testing your code in this environment.

Late Assignments and Project Phases

MarkUs is known to be slow when many students try to submit right before a deadline. Aim to submit your work at least one hour before the deadline. You can submit your work more than once—only the last version submitted before the deadline will be graded.

The late penalty for assignments and project phases is as follows: 0% deduction for the first hour, then 5% deduction per hour for the next 5 hours, then 15% deduction for the next 5 hours. After 11 hours, no lates are accepted.

Late Preps

For weekly preps, no late submissions will be graded.

Missed Midterm

We are not able to offer a makeup midterm. For students who miss the midterm for a legitimate reason, the midterm weight will be added to the final exam. See the next section for how to request this.

Special Consideration

Students experiencing illness or other emergencies that prevent them from being able to complete homework on time, or write a term test, can request special consideration. You will be required to affirm that you are abiding by the Code of Behaviour on Academic

<u>Matters</u> (<u>http://www.governingcouncil.utoronto.ca/Assets</u>/<u>Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf</u>), in particular that it is an offence

to engage in any form of cheating, academic dishonesty or misconduct, fraud or misrepresentation not herein otherwise described, in order to obtain academic credit or other academic advantage of any kind.

That is, you must confirm that you are truly experiencing an emergency, and acknowledge that to falsely claim so is an academic offence. Applying does not guarantee that you will be granted special consideration.

To apply for special consideration in CSC343, complete the **Special Consideration** (https://q.utoronto.ca/courses/234163/files/15052026 /download?download frd=1) and email it to the course account (csc343-2021-09@cs.toronto.edu (mailto:csc343-2021-09@cs.toronto.edu)) from your UofT email address. If your request is due to illness, fill out the absence declaration form on ACORN and include it with your email. We will do our best to reply within 1-2 business If your special consideration has to do with requesting an extension on an assignment, please be sure to declare your group on MarkUs - even if working alone before sending your email request.

IMPORTANT: Submit your request as soon as possible. It is easier to resolve situations earlier rather than later. If your emergency will affect your ability to complete coursework for more than a few days, or in multiple courses, we recommend you also talk to your Registrar -- they are very helpful in such situations.

Remark Requests

Mistakes sometimes happen when marking. If you feel there is an issue with the marking of your assignment or test, you may request that it be remarked. Remark requests are accepted for two weeks after the item is returned, and are submitted via MarkUs. You must give a specific reason for a remark request, referring to a possible error or omission by the marker. Remark requests without a specific reason will not be accepted.

We will respond to remark requests before the final grades are submitted at the end of the term. We aim to do these sooner, but it is not always possible.

Academic Integrity

The work you submit must be your own. It is an academic offence to copy someone else's work. This includes their code, their words, and even their ideas. Whether you copy or let someone else copy, it is an offence. Academic offences are taken very seriously, and penalties can go well beyond 0 on the piece of work.

At the same time, we want you to benefit from working with other students. Obviously, work done with your partner is a joint effort. You are also welcome to work appropriately with students other than your partner. It is appropriate to discuss course material and technology related to assignments, and we encourage you to do so. For example, you may work through examples that help you understand course material or a new technology, or help each other configure your system to run a supporting piece of software. You may also discuss assignment **requirements**.

However, other than between partners, *collaboration on assignment* **solutions** *is strictly forbidden*. The most certain way to protect yourself is not to discuss assignment solutions or the ideas behind them with students other than your partner. Certainly you must not let others see your assignment solutions, even in draft form, and even your rough work.

Please don't cheat. We want you to succeed and are here to help if you are having difficulty.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations or have any accessibility concerns, please visit Accessibility Services
(http://www.accessibility.utoronto.ca) as soon as possible. The process of accommodation is private: Accessibility Services will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with Accessibility Services.

A note about the "Course Summary" below

The Course Summary below is a summary of due dates generated by Quercus based only on course elements that it knows about. It does not include items I haven't yet defined in Quercus or anything which is done outside of Quercus (such as the early preps).

Course Summary:

Date	Details	Due
Mon Sep 20, 2021	Prep 2 (https://q.utoronto.ca /courses/234163/assignments /667440)	due by 11pm
Mon Sep 27, 2021	Prep 3 (https://q.utoronto.ca/courses/234163/assignments/667441)	due by 11pm
Thu Sep 30, 2021	Phase 1 (https://q.utoronto.ca/courses/234163/assignments/667129)	due by 8pm
Mon Oct 4, 2021	Prep4 (https://q.utoronto.ca/courses/234163/assignments/667442)	due by 11pm
Mon Oct 11, 2021	Prep 5 (https://q.utoronto.ca/courses/234163/assignments/667443)	due by 11pm
Thu Oct 14, 2021	Assignment 1 (https://q.utoronto.ca/courses/234163/assignments/667103)	due by 8pm
Mon Oct 18, 2021	Prep 6 (https://q.utoronto.ca/courses/234163/assignments/667444)	due by 11pm
Mon Oct 25, 2021	Prep 7 (https://q.utoronto.ca /courses/234163/assignments /667445)	due by 11pm

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Date	Details	Due
	Survey 1	
	(<u>https://q.utoronto.ca/courses</u> /234163/assignments/667190)	
	Survey 2	
	(<u>https://q.utoronto.ca/courses</u>	
	/234163/assignments/667191)	