

## CSC 453 – Database Technologies

This is an introductory graduate course in database design and implementation.

Term	2016 – 2017 Winter
Section	801 (21908) CDM Center 216 Monday 5:45PM - 9:00PM
Section	811 (21911): Online Learning
Instructor	Nirajan Khadga
Office Hours	Wednesday 5:30PM – 7:00PM
Office Location	CDM 430
Skype	nkhadga (Include “CSC 453” in the Skype contact request)
Email	<a href="mailto:nkhadga@depaul.edu">nkhadga@depaul.edu</a> <a href="mailto:nkhadga@gmail.com">nkhadga@gmail.com</a>
Course Web Site	<a href="http://d2l.depaul.edu/">http://d2l.depaul.edu/</a>
Required Text	Fundamentals of Database Systems, <b>7th edition</b> Elmasri & Navathe, Addison-Wesley/Pearson, 2016. ISBN: 978-0133970777
Prerequisite	CSC 403 Data Structure II

## Grading

There will be assignments given most weeks. **Late assignments are NOT accepted.**

Assignment	Given most weeks	30%
Mid-Term	February 6 <sup>th</sup>	30%
Final Project	Due on March 13 <sup>th</sup>	35%
Participation Grade		5%

A >= 90%	B >= 80%	C >= 70%	D >= 60%	F < 60%
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## Regarding Academic Integrity

You are expected to be familiar with and to adhere to DePaul’s Academic Integrity Policy, which is available on-line at <http://academicintegrity.depaul.edu/AcademicIntegrityPolicy.pdf>. Violations of the Academic Integrity Policy will be dealt with decisively; penalties may range up to an automatic F in the course and possible expulsion.

Plagiarism includes, but is not limited to: Turning in another person’s work as your own (including hiring someone else to complete an assignment for you); Starting with another person’s work and modifying it to turn in as your own; Cutting and pasting, or otherwise copying, sections of another person’s work into your assignment; Allowing another person (such as a tutor) to write any part of your assignment; and so on. (Obviously, any examples that I post qualify as “another person’s work”.) Supplying such assistance to another student or working closely enough with another student that identical solutions are reached and submitted are also considered violations of the policy. In general, you may feel free to discuss the assignments with other students at a general level. However, when it comes to actually completing your assignment, you must work independently. Your assignments must be entirely your own individual work. If you have any questions or doubts about what plagiarism entails, you should consult me.

## Other Tools

D2L ( <a href="http://d2l.depaul.edu/">http://d2l.depaul.edu/</a> )	This is the course homepage. Students are encouraged to post discussion questions here. All lectures, assignments, and other resources will be available here as well.
CDM Oracle Account	Activate your account at <a href="https://accountactivate.cdm.depaul.edu">https://accountactivate.cdm.depaul.edu</a>
Oracle SQL Developer	Download the Oracle SQL Developer from <a href="#">here</a> .

## CALENDAR

Week 1		January 2 <sup>nd</sup>
-	Relational DBMS	
-	E/R Model	
-	Relational Model	
Week 2		January 9 <sup>th</sup>
-	Converting E/R diagrams to Relations	
-	Normalization	
-	Decomposition	
Week 3		January 16 <sup>th</sup>
-	DDL, DML, and DCL	
-	Single Relation SQL Queries	
-	Aggregation	
Week 4		January 23 <sup>rd</sup>
-	Multi Relation SQL Queries	
-	Subqueries	
-	Aggregation	
-	Modifications	
Week 5		January 30 <sup>th</sup>
-	More Joins, Subqueries and Aggregation	
-	Views	
-	Constraints	
-	Midterm Exam Information	
<b>Week 6</b>	<b>Midterm Exam</b>	<b>February 6<sup>th</sup></b>
Week 7		February 13 <sup>th</sup>
-	Authorization	
-	Database Programming	
-	PL/SQL	
-	Transaction Management	
Week 8		February 20 <sup>th</sup>
-	Triggers	
-	Cursors	
-	Stored Procedures	
-	Java Database Connectivity (JDBC)	
-	JDBC Programming	
Week 9		February 27 <sup>rd</sup>
-	JDBC Programming	
-	Indexing	
Week 10		March 6 <sup>th</sup>
-	NoSQL	
-	Review	
<b>Week 11</b>	<b>Final Project Due</b>	<b>March 13<sup>th</sup></b>