

Welcome To ...

CSC 554

Advanced Database Management



DePaul University

<u>The Bad:</u>		<u>The Good:</u>
◆ Not A Doctor	<i>Don't call me Dr.</i>	◆ Only Have a Master degree
◆ Not A Professor	<i>Don't call me Professor</i>	◆ Never Stop Learning
◆ A Part-time Faculty	<i>Don't see me often</i>	◆ Self-employed consultant <i>(after 30 years full-time employee)</i>
◆ Don't Know Everything	<i>Don't call me Sir</i>	◆ Know Something
◆ Not My Job	<i>I enjoy It!</i>	◆ My Passion

The Lovely:



No \$ Is Too Big for Me!


No Job Is Too Small for Me!

Service Is My Business!

Enjoy Learning, Love Teaching and Helping others

◆ **Marco T. Chou** 

Former Sr. Planning Consultant (Information Architect) of *Allstate Insurance Company*

 www.linkedin.com/in/marcochou

mchou@cdm.depaul.edu


C: 847-226-2263


◆ **ProAct Consulting, Inc.**


- Training, Education, and Consulting
- Database Administration, Information Management, Cloud Computing, Big Data

◆ **DEPAUL UNIVERSITY**
COLLEGE OF COMPUTING AND DIGITAL MEDIA

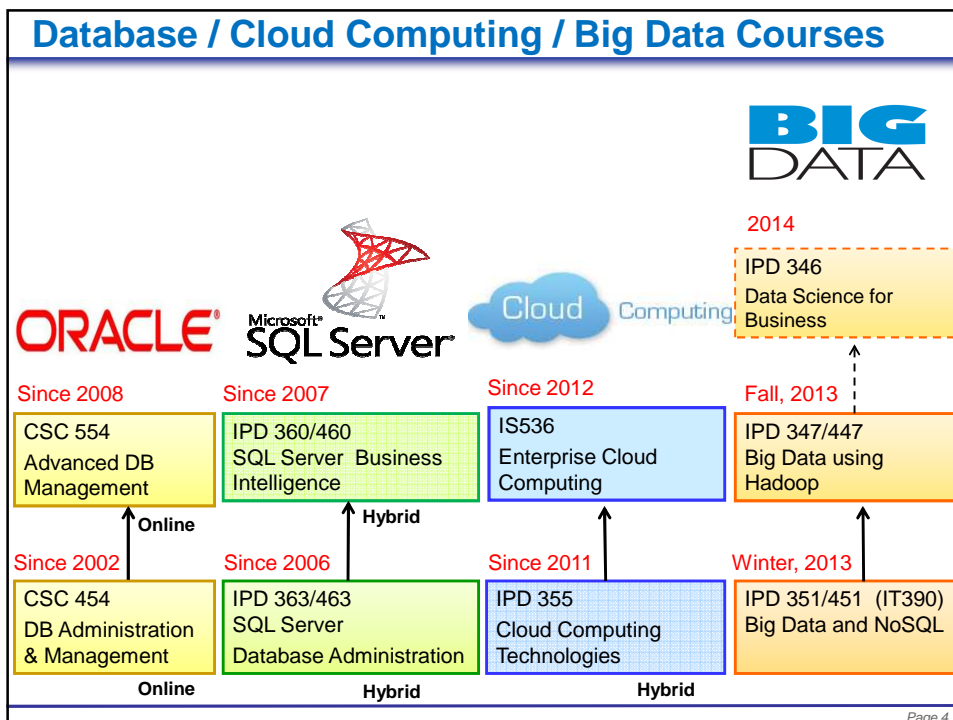
- CSC454 Database Administration & Management
- CSC554 Advanced Database Management
- IPD 460 SQL Server Business Intelligence Program
- IPD 363 SQL Server Database Administration Program
- IS 536 Enterprise Cloud Computing
- IPD 355 Cloud Computing Technologies Program
- IPD 353 Cloud Computing with Amazon Web Services
- IPD 451 Big Data and NoSQL
- IPD 447 Big Data using Hadoop
- IT 390 Topics in Information Technology – Big Data and NoSQL


Microsoft Certified Professional
Database Administrator
Systems Engineer
Trainer


ORACLE CERTIFIED PROFESSIONAL

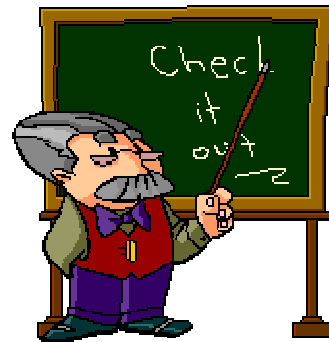

hadoop
Certified Hadoop Administrator


mongoDB
Certified MongoDB Administrator



Week #1 Agenda

- ◆ Introduction
- ◆ Class Information
- ◆ Lecture:
 - Technology Trends
 - Data and Database



Page 5

Introduction

- ◆ Please use **D2L Discussion** to introduce yourself.

Discussions List Subscriptions Group and Section Restrictions Statistics

New ▾ More Actions ▾

Filter by: Unread Unapproved

Week#1 Introduce Yourself ▾

Please briefly introduce yourself by the end of the first week. You can type a few words or share a Youtube link. Thanks.

▾ Hide Topics for Week#1 Introduce Yourself

Topic	Threads
Week#1 Introduce Yourself ▾	0

- ◆ Type a few words or post a Youtube Link

- Your name
- What do you do at work?
- Your device OS, version (Windows, Mac, etc.)
- What do you do for fun?



Page 6

Prerequisites, Goals and Scope

- ◆ **CSC454 or equivalent**
- ◆ **Understanding of Basic Oracle & SQL Server Database**
 - Be able to use Management Studio (SQL Server)
 - Be able to use SQL*PLUS or SQL Developer (Oracle)
- ◆ **Collaborative learning**
 - Learn new technologies
 - Research, discussion and present
 - Expand and share your knowledge
 - Lab & homework – *Learning by Doing*



Page 7

Agenda and Schedule

Week	Topics
1	Introduction, Data & Database Overview
	Top 10 Strategic Technology Trends - Gartner
2	Storage Technologies: RAID, NAS, SAN, VLT, DeDup, Cloud, etc.
3	Data Partitioning
4	Oracle 12c New Features
5	Microsoft Database new features
6	Take-home Midterm
7	Database in the Cloud
8	NoSQL
9	Big Data Overview
10	Summary, Leading in a Digital World - Gartner
11	Take-home Final Exam - NoSQL research/presentation

Page 8

Desire To Learn (D2L) <http://d2l.depaul.edu>

- ◆ Student training sessions and materials
<http://www.itd.depaul.edu/website/students/trainingmaterials.asp>
- ◆ If you are having problems with Desire2Learn or other technologies, you can also call the Technology Support Center at 312-362-8765.

The screenshot shows the D2L interface for a course. At the top, there's a navigation bar with 'My Home' and 'ADVANCED DATABASE...'. Below that, a blue header contains 'COURSE HOME | CONTENT | DISCUSSIONS | DROP'. A search bar is on the left. The main content area is titled 'Week#1 Overview' and includes options to 'Add dates and restrictions...', 'Add a description...', and buttons for 'New', 'Add Existing Activities', and 'Bulk Edit'. A sidebar on the left lists 'Overview', 'Bookmarks', 'Upcoming Events', 'Table of Contents', and 'Week#1 Overview' (which is selected). The main content area lists three activities: 'WK#1-1 Introduction', 'WK#1-2 Data and Database Overview', and 'WK#1-3 Top 10 Strategic Technology Trends - Gartner'.

Page 9

Assignments and Grading Scheme

- ◆ Student grades will be based on individual work.
 - **Lab Exercises: 60 points** (*Don't need to turn in*).
 - **Midterm: 20 points**
 - **Final Exam (Presentation): 20 points**

Points	Grade
93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
60-69	D
0-59	F

Page 10

BYOD & DIY

◆ Windows 7 or 8 (64-bit is preferred)

◆ Software

- SQL Server 2012 Management Studio
- Oracle 12c SQL Plus or SQL Developer
- Amazon Web Services Account



Page 11

<http://www.cdm.depaul.edu/current%20students/pages/msdnaa.aspx>



COLLEGE OF COMPUTING
AND DIGITAL MEDIA

Search

QuickLinks ▼

CDM HOME

ACADEMICS

ONLINE LEARNING

CURRENT STUDENTS

Academic Policies

- Degree Completion/Graduation
- Enrollment/Withdrawal
- Grading
- Transfer Credit at CDM
- Independent Study
- Forms

Resources

- Labs
- Production Resources
- Software

Academic Success Center

- Advising at CDM
- Tutoring
- Graduation

Getting Involved

- Study Abroad Programs
- LA Quarter

CDM Home > Current Students > Microsoft Software

Microsoft Software

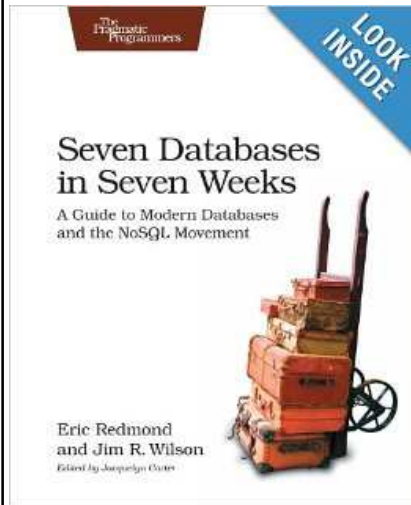
Attention: Due to licensing restrictions, access is granted only to students enrolled in at least one for-credit CDM course. Access begins on the first day of each quarter and ends on the last day of the quarter. There are no extensions or keys given after the last day of the quarter, so plan accordingly.

The MSDN Academic Alliance (MSDNAA) is a special program to provide academic institutions, faculty, and students with leading-edge tools for students. The link to the software is below, please read and understand the rules of this software before downloading.

What software is included?

- **Microsoft Operating Systems, SDKs and DDKs**
Includes all the latest releases, including Windows 8, Windows 7, and Windows 2012
- **Microsoft Server Platforms**
Including Windows Server, Exchange Server, Commerce Server, SQL Server, Systems Management Server, Application Center, BizTalk Server, and Host Integration Server.
- **Microsoft Visual Studio®**
Visual Studio 2013 and 2010
- **Microsoft Visio**
Visio, the premiere Microsoft diagramming application for technical schematics, network, software, and database design.

Reading Materials & Final Exam/Presentation



Final Exam (Presentation)

- Choose a NoSQL database (either from this book or <http://nosql-database.org>)
- Report your research by putting your findings in a presentation style (~10 slides)
 - Introduction/Overview
 - Features, Strengths
 - Usages, Case Studies
 - References, Links (if any)



Page 13

<http://www.library.depaul.edu/Find/resourceList.aspx?s=89>



CAMPUS CONNECT
D2L

Search depaul.edu

Or Search for People/Departments

FIND

- Books & E-Books
- Videos, Music & Images
- Journal & Newspaper Articles
- A-Z Database List
- Library Catalog
- Reference Tools
 - Biographies
 - Reviews
 - Citation Guides
 - Current & Controversial Topics
 - Dictionaries
 - Encyclopedias
 - Statistics & Data Sets
- Reserve Readings

SERVICES

BROWSE SUBJECTS

University Libraries

E-BOOKS: RESOURCES

FEATURED RESOURCES

Books 24x7

Description: An extensive e-book collection in the areas of business, finance and IT. Business Pro collection features publishers such as: AMACOM, ASTD Press, Berrett-Koehler, Harvard Business School Publishing, MIT Press, Oxford University Press & others. Finance Pro coverage includes accounting, auditing, certification prep, investing, taxation & valuation, real estate, risk management. IT Pro features handbooks on programming languages, software, networking, operating systems and more.

Restrictions: DePaul users only

NetLibrary

Description: Business, nursing, computer science and psychology books, along with classic titles from literature.

Restrictions: DePaul users only

Safari Tech Books Online

-1

Class Notes, Homework, Lab, Questions

◆ Class Notes

- Will be posted in D2L

◆ Homework

- Submit to D2L Dropbox

◆ Lab Assignment

- Don't submit (it's for your own practice)

◆ Questions

- E-mail: Put **CSC554 –topic** (example: CSC554 - HW#2 Q#7) in the Subject Line
- By appointment only - CDM#706
- Phone: Unless the above two options not working for you
- **Please don't wait until the last minute**