

Syllabus

Course Title: HIMT 375 Database Structures and Management Systems

Contact Information

Email: whe@uwsp.edu

The instructor checks his email very regularly from Monday through Friday and at least every 24 hours on weekends.

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Course Description

Analyze and design databases to support computer-based health care information systems. Develop and implement relational database management systems using SQL. Topics include: data modeling techniques such as entity-relationship modeling, extended entity-relationship modeling, database constraints, database normalization techniques, and basic and advanced features of database query language SQL, etc.

Learning Outcomes/Objectives

- Understand basic and important concepts in modern database design such as entity-relationship model, extended entity-relationship model, and database normalization techniques.
- Learn and master the fundamental features of Structured Query Language (SQL) for querying databases, such as INSERT, CREATE, and simple SELECT queries.
- Learn and master the advanced features of Structured Query Language (SQL) for querying databases, such as ORDERBY, GROUPBY, and nested SELECT queries.
- Obtain essential skills to design and implement databases in health care information systems.

CAHIIM Competencies

This course will address the following CAHIIM competencies:

- I.A.1. Manage Health Data (data elements, datasets, databases).

Course Materials

Textbook

Carlos Coronel, Steven Morris and Peter Rob. Database Systems: Design, Implementation, and Management. 9th ed. ISBN-10: 0538469684 | ISBN-13: 9780538469685

Required Software

Because there are 8 lab assignments, you will need to have access to Microsoft SQL Server database. You will be using a SQL query tool named AEQ to access your database account and work on your lab assignments off-campus. AEQ is accessible by a web browser in Windows operating system, such as Internet Explorer and Firefox. Detailed instructions on connecting to database off-campus will be posted on D2L.

Course Organization

The course is organized into 5 Units with 15 Lessons.

Course Activities

The course consists of the following activities and assessments.

<i>Activity</i>	<i>Assessment</i>
Reading the textbook Listening to the lecture audios (as available)	D2L quizzes, midterm exam, and final exam
Completing the discussion assignments	(not submitted for evaluation)
Solving database queries in SQL	Lab assignments
Final exam	

Course Calendar

TBA

Course Policies

Late Assignment Submission

Late submission of assignments is discouraged. The instructor reserves the right to take partial or full points off for late assignments. If you are going to be away, it is suggested you get the assignments done and posted ahead of time to avoid losing points for late submissions.

Statement of Student Time Commitment

For each course credit, students are expected to spend a minimum of 3 hours/week on course work. Therefore, for a four-credit course, at least 9 hours/week are expected. This is a general guideline which may vary depending on the assignments and/or quizzes.

University of Wisconsin System Policies

Academic Integrity Policy

Students who engage in academic misconduct are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. Academic misconduct includes but is not limited to cheating, plagiarism, collusion, and submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such act.

University of Wisconsin System Code (UWS Ch. 14-14.03 (2) provides specific examples of academic misconduct and reads in part: "Examples of academic misconduct include, but are not limited to: cheating on an exam; collaborating with others in work presented, contrary to the stated rules of the course; submitting a paper or assignment as one's work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the source of those ideas ... knowingly and intentionally assisting another student in any of the above ..." The code is available at http://docs.legis.wisconsin.gov/code/admin_code/uws/14.pdf.

University of Wisconsin campuses have specific procedures to investigate and deal with academic misconduct.

Plagiarism

Because of paper mills selling reports, web pages, and full-text online databases, instances of plagiarism are increasing on campuses. Using someone's words without quoting the person is plagiarism. Using someone's ideas, even though the person's words are different from your words, without citing the source is plagiarism. Use in-text citations to cite your sources. For example, if you use the ideas cited in an article, place the author and publication year (e.g. Smith, 2010) at the end of the sentence. UW-System has subscribed to software that helps detect instances of plagiarism. Plagiarism will result in a failing grade. Reports of plagiarism are also made to University administration.

Netiquette

All members of the class are expected to follow the rules of common courtesy with all online and social communications. Be careful of the tone and content of online communication. Without facial expressions and voice inflections, misunderstandings can occur and the comments can be deemed as inappropriate or offensive. Unacceptable online conduct includes, but is not limited to, postings that are racist, derogatory, inflammatory, condescending, rude or in any way offensive. Persistent abuse of online etiquette may result in disciplinary action.

Refer to [The Core Rules of Netiquette](http://www.albion.com/netiquette/corerules.html) (at <http://www.albion.com/netiquette/corerules.html>).

Confidentiality

University of Wisconsin adheres to the rules and policies of Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act of 1996 (HIPAA). It is expected that students will judiciously protect the privacy of patients, peers, family, or agency/institution by not disclosing confidential information outside of the course. To maintain anonymity, methods such as alias or initials should be used.

For more information on these laws, please refer to the following websites for information on:

- FERPA: <http://www2.ed.gov/policy/gen/guid/fpco/ferpa/students.html>
- HIPAA: <http://www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html>

Social Media Policy

It is important to keep content appropriate and confidential matters private when using social media. Whatever is posted on a social media site (e.g., Facebook, Twitter, YouTube, LinkedIn, Flickr, etc.) instantly becomes available to the public. Regardless of the privacy settings, content can easily be made available to those outside of the user's preference settings. Be aware that all University and legal guidelines, such as Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act of 1996 (HIPAA), also apply in social media sites.

Student Bereavement Policy

Students who experience the death of a loved one should contact the faculty to arrange an excused absence.

Disability

Any student seeking accommodations under the Americans with Disabilities Act (ADA) should contact the disability services office on his or her home campus within the first week of the semester so that appropriate accommodations may be arranged.

Grades

Assignment	Points
Practice Activity Comments: 9 @ 1 point	9
Labs: 8 @ 5 points	40
Midterm Exam	20
Final Exam	31
Total Points	100

Final grades will be assigned according to the following scale:

- A: score ≥ 90 ,
- B: $80 \leq$ score < 90 ,
- C: $70 \leq$ score < 80
- D: $60 \leq$ score < 70 ,

F: score < 60

Depending on the overall performance of the class, the instructor may use lower cutoff points for some of the letter grades.

Faculty Profile

Dr. Weimin He is working as an assistant professor in the department of Computing and New Media Technologies at University of Wisconsin-Stevens Point. Dr. He received his Ph.D. degree in Computer Science from the University of Texas at Arlington in 2008. He received his BS. and MS. degrees in Computer Science from Yunnan University, China. Dr. He had 13 years research experience on database management with expertise in XML. His research interests span XML Data Management, Information Retrieval and Peer-to-Peer Computing. Dr. He published over 20 papers in international conferences and journals and served as program committee chairs or members of several international conferences and journals. Dr. He had many years of teaching experience on databases, programming languages, and web development. Dr. He has been teaching the core database course titled “Database Design and Implementation” at UWSP since 2009. You can learn more about Dr. He at his personal website: <http://www4.uwsp.edu/cnmt/whe>.