Course Syllabus

HI520 Database Design and SQL

COURSE INFORMATION

Course Title: Database Design and SQL

Credit Hours: 4

Prerequisites: None

COURSE DESCRIPTION

This course covers fundamental database design topics in a health care context, including data modeling, entity-relationship diagrams, the top-down database design methodology, the bottom-up database design methodology, functional dependencies, and the normalization process. You will learn about Structured Query Language (SQL), which is used to retrieve and modify health care-related data in relational databases. This course emphasizes designing queries for optimum performance and using query execution plans as a tool for creating appropriate indexes to improve query performance.

LEARNING OUTCOMES

By the end of this course, you should be able to:

HI520-1: Interpret data modeling concepts and normalized entity-relationship (ER) diagrams in healthcare database design.

HI520-2: Utilize a Relational Database Management System (RDBMS) for effective database installation and manipulation.

HI520-3: Design Structured Query Language (SQL) queries and syntax for healthcare database information analysis.

HI520-4: Create Structured Query Language (SQL) for advanced queries and reports.

PC-3.1: Conduct oneself to reflect the professional characteristics and culture of a given work setting.

COURSE MATERIALS

For courses with ebooks or digital books, click on the module titled Digital Book in the Table of Contents.

If your course has materials that need to be purchased and you have not done so, please order the necessary materials.

TEXTBOOK INFORMATION

MediaType: PG Library
Title: Databases DeMYSTiFieD
Edition: 2nd (2010)
Author: Oppel, A.
Publisher: McGraw-Hill
Book ISBN: 978-0-07-174800-1
Ebook ISBN:

MediaType: PG Library
Title: Beginning T-SQL: A Step-by-Step Approach
Edition: 4th (2020)
Author: Kellenberger, K., & Everest, L.
Publisher: Apress
Book ISBN: 978-1-4842-6605-2
Ebook ISBN:

MediaType: PG Library
Title: SQL Queries for Mere Mortals: A Hands-On Guide to Data Manipulation
            in SQL
Edition: 4th (2018)
Author: Viescas, J.
Publisher: Addison-Wesley Professional
Book ISBN: 978-0-134-85833-3
Ebook ISBN:

MediaType: PG Library
Title: PG Library Reading List
Edition:
Author:
Publisher: Various Library Resources
Book ISBN:
Ebook ISBN:

SOFTWARE REQUIREMENTS

The following software requirements are required in this course beyond the ones listed in the catalog:

SQL Server Express®; SQL Server Management Studio®; Microsoft Reports®; Microsoft Visio®; download and installation instructions are in the online classroom.

GRADING CRITERIA/COURSE EVALUATION

Gradebook	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Total
Discussion	20	20	20	20	20	20	20	20	20	20	200
Assignments	100	100	100	100	100	100		100	100		800
Total	120	120	120	120	120	120	20	120	120	20	1000

SPECIFIC PROGRAM/COURSE REQUIREMENTS

Specific Program/Course Requirements will be outlined in your course content.

PURDUE UNIVERSITY GLOBAL GRADING SCALE

Grade	Points	Percent	Grade Point
A	900-1000	90-100%	4.0
B	800-899	80-89%	3.0
C	700-799	70-79%	2.0
F	0-699	0-69%	0.0

INSTRUCTOR'S GRADING CRITERIA/TIMETABLE

Grades for each unit will be posted by the Monday of the following unit. If that Monday is an observed holiday, grades will be posted by the first business day following the observed holiday.

Late work will be graded within 5 days of the submission date unless that falls on an observed holiday, in which case late work will be graded by the first business day following the observed holiday.

POLICIES

Students who wish to review current policies (academic appeals, attendance/tardiness, etc.) should refer to the Policy Information in the current Purdue University Global's Catalog.

As a student, you work hard to earn your degree. Protect the integrity of your work. Do not share your assignments, papers, quizzes, tests, etc. with other students. Do not directly or indirectly share your work by posting it to a third party website. Do not make use of another student's work in any academic activity. Unless specifically instructed to work in groups, do not collaborate with your classmates on assignments or tests. These actions violate the Purdue University Global Code of Student Conduct policy and, as a result, carry consequences. In some cases, students who are found in violation of these policies are dismissed from the University. You can also review the Writing with Integrity document located in Academic Tools in your course.

If you have questions about these policies, please review these policies in the catalog and contact your instructor.

ACADEMIC ACCOMMODATIONS - If there are any academic accommodations you feel would be helpful to you in your classes, please do not hesitate to reach out to Student Accessibility Services (SAS) for assistance. *NOTE: The contact information below is to request academic accommodations only and should not be used to contact your instructor. You can contact your instructor through the Brightspace classroom.*

Tel: 317-208-1686

Email:sas@purdueglobal.edu
Fax:866-422-4773 (Toll Free)
TTY: TTY users may dial 711 from their TTY phone, at no charge, to be connected with a Telecommunications Relay Services (TRS) operator who will assist with the call.

Accommodations cannot be granted retroactively and you are required to submit supporting documentation needed to process the request.

COURSE SPECIFIC POLICIES

Not Applicable

LATE POLICY

You are expected to submit all assignments and projects by the end of the unit. Students may turn in late work up to 2 weeks after the due date. After that, a zero will be assigned for each assignment. Ten percent of the assignment value will be deducted after the assignment is graded for each week that an assignment is late. For example, if your assignment worth 100 points is due on Tuesday and you submit it on Wednesday, 10 points will be deducted after it is graded. If you submit it 2 weeks late, there will be a reduction of 20% of the original assignment value after the assignment is graded.

All late work must be submitted by Sunday of the last unit. No late work will be accepted after this without an [Incomplete Grade](#) approval.

Certain course activities may not be eligible for late submission. These include, but are not limited to discussions, Seminars, quizzes, labs, exams, and clinical activities.

We know that extenuating circumstances can interfere with timely submission of your work. Be sure to tell your professor and your Student Advisor right away if you are going to be late with a submission.

Your professor will determine whether an exception to the Purdue Global Late Policy is appropriate. They may also require you to provide documentation of the reason. If your professor determines that an extension is warranted, they will provide you with the expectations for your submission or assignment in writing.

Extenuating circumstances include, but are not limited to, personal/family member hospitalization, family member death, a severe weather event, a natural disaster, and an active military assignment that prevents internet connectivity. Computer-related issues, Internet connectivity, and account blocks are generally not considered extenuating circumstances.

TUTORING

Tutoring and many other resources are available in the Academic Success Center section of the **My Studies** tab on the **Purdue Global Campus home page**. You can also find a link in the Academic Tools within your course.

The Academic Success Center offers:
- Writing help and APA resources
- Math help and resources
- Business help and resources
- Science help and resources
- Information Technology help, webinars, and resources

ASSIGNMENTS

The course content is outlined within each unit and a calendar is accessible in each course. Assignments typically require you to submit coursework via the Dropbox. Directions for all assignments can be found under the units in which they are assigned. Assignments are graded according to rubrics found in the Grading Rubrics item in Course Resources or linked directly from the Assignment directions.

All Assignments are due by 11:59 p.m. ET of Tuesday of the unit for which they are assigned, with the exception of Unit 10 Dropbox submitted work. If a dropbox submission is due in Unit 10 it will be due at 11:59 p.m. ET on Sunday. **All Assignments must be submitted via the Dropbox to ensure credit.**

SEMINARS

Attending live Seminars is important to your academic success, and attendance is highly recommended. The Seminar allows you to review the important concepts presented in each unit, discuss work issues in your lives that pertain to these concepts, ask your instructor questions, and allow you to come together in real time with your fellow classmates. In most courses, there will be a Seminar held each week in Units 1 through 10.

If Seminar is graded, you must either attend the live Seminar or you must complete the Seminar alternative assignment (Option 2) in order to earn points for this part of the class.

If Seminars is not graded, you are still encouraged to attend in order to ask questions, learn about upcoming Assignments, and to interact with your instructor and classmates.

Option 1:Attend Live Seminar

Live Seminar lasts for 1 hour. If you are not able to attend the Seminar but have questions or concerns about assignments, please e-mail your instructor.

If Seminar is graded, your attendance and participation during live Seminar will be assessed using the Seminar Rubric.

Option 2:Seminar Alternative Assignment

If Seminar is graded and you are unable to attend the live Seminar, then be sure to respond to the Seminar Alternative Assignment for each unit. **All Seminar Alternative Assignments must be submitted via the Dropbox to ensure credit.** Your responses will be assessed using the Seminar Rubric.

DISCUSSION BOARDS

All discussion topics can be found within their respective units of the course.

Discussion Participation: Discussion provides a forum for you to ask questions and answer important questions about the course material. Discussion also allows you to receive feedback from the instructor and other students in the class. Your instructor will interact with the class within the Discussion Board regularly. If a discussion is graded, a grade will be posted to the Gradebook. Your discussion grade will be determined by the Discussion Board Rubric.

RUBRICS

A rubric is a tool utilized by your instructor to determine your performance on assessments (assignments, discussions, Seminars, etc.) throughout your course. The rubric lists the criteria for the assessment on which you will be graded. You should follow the rubric so you understand exactly what is expected of you in each assignment. Following the rubric will help make sure you do not lose points unnecessarily on any graded item. The rubrics for this course are contained in the Grading Rubrics item in Course Resources or linked directly from the Assignment and Discussion directions.

NETIQUETTE

Interactions in an online classroom can be in written form as well as in audio or video. Your comfort level with expressing ideas and feelings in writing will add to your success in an online course. The ability to write is necessary, but you also need to understand what is considered appropriate when communicating online.

The word "netiquette" is short for "Internet etiquette." Rules of netiquette have grown organically with the growth of the Internet to help users act responsibly when they access or transmit information online. As a student, you should be aware of the common rules of netiquette for the web and employ a communication style that follows these guidelines.

- Wait to respond to a message that upsets you and be careful of what you say and how you say it.
- Be considerate. Rude or threatening language, inflammatory assertions (often referred to as "flaming"), personal attacks, and other inappropriate communication will not be tolerated.
- Never post a message that is in all capital letters — it comes across to the reader as SHOUTING! Use boldface and italics sparingly, as they can denote sarcasm.
- Keep messages short and to the point.
- Always practice good grammar, punctuation, and composition. This shows that you have taken the time to craft your response and that you respect your classmates' work.
- Keep in mind that Discussion Boards are meant to be constructive exchanges, and it is important to respect those views that are different from yours.
- Be respectful and treat everyone as you would want to be treated yourself.
- Use spell check before sending a written message

Using a webcam in an online meeting room requires thought and consideration for the netiquette environment. Keep your surroundings free of clutter and distraction. Do not allow others in your setting to enter the webcam view. Be sure your attire and background are appropriate for a classroom setting. If in doubt, turn off your camera. When using a microphone be mindful of your mute button - stay on mute until it is an appropriate time to speak - then enable your mute button again when you have finished sharing. Also, be mindful of how you reply to differing opinions or course content that you may not agree with. Feel free to express your views and ask questions in a calm and respectful way.

You should also review and refer to the section on [Responsible Use of University Technology](#) contained in the most recent Purdue Global Catalog.

OTHER POLICIES

Not applicable

*Note: This syllabus is subject to change during this term/session or in future terms/sessions. This syllabus was published for course content as of 2304C. (**E-Track terms are 12 weeks in length and consist of two 6-week sessions**)*