# Course Syllabus

**Jump to Today** 

# **IST 210: Organization of Data**

Instructor: Dan Richert

Meeting time: Tue, Thu 3:05 - 4:20 PM

Classroom: Leonhard 102

**Learning Assistants**:

Bryce Schneider: **Tue, Thu 4:30 PM - 6:00 PM -** Zoom: (<a href="https://psu.zoom.us/j/6720189820">https://psu.zoom.us/j/6720189820</a>)

Josefina Lara Azocar: **Monday 4:45 PM - 6:45 PM and Sunday 10:00 AM - 12:00 PM** on Zoom, but happy to do them in person! (<a href="https://psu.zoom.us/j/7742421515">https://psu.zoom.us/j/7742421515</a>)

Marisa Vandenberg: Tue, Thu 12:00 - 1:00 PM and Friday 10:00 AM - 11:00 AM - Leonhard 105D

Learning assistants will have office hours every week, beginning in week 1. These will be announced in class until a regular schedule is determined.

Instructor's Office Hours:

<u>Schedule here (https://bit.ly/3sz1YKs)</u> or if day/time does not work, email me and we will set up a time to meet.

# **Course Description**

Introduction to concept of databases including the storage, manipulation, evaluation, and display of data and related issues. IST 110 (https://bulletins.psu.edu/search/?P=IST%20110) is recommended as preparation for IST 210 (https://bulletins.psu.edu/search/?P=IST%20210). IST 210 Organization of Data (3) As the database management software becomes one of the critical components in modern IT applications and systems, a solid understanding of the fundamental knowledge on the design and management of "data" is required for virtually any IT professionals.

In a business setting, such IT professionals should be able to talk to the clients to

- derive right requirements for database applications,
- ask the right questions about the nature of their entities and in-between relationships in their business scenarios
- code scripts in SQL to retrieve, update, insert, and delete data from a relational database
- analyze and develop an effective and robust design and solution to address business constraints,

IST 210 provides a fundamental understanding of database concepts and practical skills needed to analyze and implement a well-defined database design. In particular, IST 210 provides an introduction to the relational model, logical and physical database design, data modeling, and SQL query language. Students will use <a href="MySQL">MySQL</a> (<a href="https://www.mysql.com/">https://www.mysql.com/</a>), an open source SQL relational database management system that is developed and supported by Oracle.

Upon completion of IST 210, students should be able to understand the implications and future directions of databases and database technologies.

Prerequisites		
• none		

# Course Objectives

# Data Modeling – Students will be able to:

- A. Describe the concept and practical use of data modeling
- B. Model data in business environments by drawing E/R diagrams with unary, binary, or ternary relationships and different cardinality and modality
- C. Explain the concept of and specify unique keys within entities
- D. List the basic differences between different data models (e.g., OO, OR, semi-structured)

## Relational Model – Students will be able to:

- A. Define basic relational database terms such as relation and tuple
- B. Explain the concept of and identify primary and foreign keys
- C. Explain the concept of and specify referential integrity

# 3. Logical Database Design - Students will be able to:

- A. Understand the concepts of dependencies and redundancies in data
- B. Perform the data normalization process through 3NF
- C. Design relational databases by converting E/R diagrams into relational tables

# 4. SQL Query Language – Students will be able to:

- A. Describe the purpose and use of SQL
- B. Perform the basic operations of databases for DML (insert, delete, update, and select) and DDL (CREATE TABLE, ALTER TABLE, TRUNCATE TABLE and DROP TABLE)
- C. Write gueries using JOIN operators
- D. Manipulate data using a variety of SQL commands such as GROUP BY and built-in aggregate functions of AVG, SUM, etc.
- E. Understand sub queries and their relationship to JOINs.
- F. Intermediate SQL: Describe the functions of TRANSACTON, VIEW, and integrity constraints

## **Course Texts**

The **required** course text is an interactive zyBook: *Introduction to Databases with SQL* by Zyante Inc. (zybooks.com).

In order to subscribe:

- 1. Sign in or create an account at learn.zybooks.com
- 2. Enter zyBook code: PSUIST210RichertSpring2024
- 3. Subscribe

Make sure you choose Section 002

The zyBooks readings and activities are designed to give you a breadth of knowledge around the topic areas, and to provide opportunities for practicing with the different concepts, techniques, and tools covered in the course.

# Technology Requirements

Laptop that meets the <u>specifications of the College of IST</u> (<a href="https://ist.psu.edu/current/undergraduate/laptop-requirement">https://ist.psu.edu/current/undergraduate/laptop-requirement</a>).

Bring your laptop to every class.

You must run MySQL and MySQL Workbench on your laptop for in-class work, unit quizzes, and the final exam. (Instructions for installing MySQL Workbench will be provided during class.)

# Grading and Assignments

**IMPORTANT NOTE**: There are graded activities in every class including the first week of classes.

This course is assignment intensive. It is very important that you follow the deadlines and do your labs and assignments every week.

#### **Late Policy:**

- Late Submissions: All work must be completed and turned in before the due date and time.
  - Assignments submitted late are deducted 25% for each 24 hours period after the due date and time i.e max 75% within 24 hours of the due date and time, max 50% within the next 24 hours, and so on.
  - No late assignments will be accepted after 72 hours without prior approval from the instructor.

Submission Error Policy: Students have been occasionally known to "accidentally" submit a corrupted or incorrect file in order to buy more time to complete an assignment. Because of this, resubmissions will not be accepted after the assignment due date. After uploading a file to Canvas, make sure that you download your submission from Canvas to verify that you have uploaded the correct and uncorrupted file.

The sharing of knowledge is strongly encouraged. Working together to understand and learn during the semester is essential; however, **COPYING** (from the Web or peers) assignments is unacceptable. Using Generative AI on course assignments and assessments is strictly forbidden. This is cheating and will be addressed in accordance with the University's Academic Integrity policy (see below). If you have any questions about this, please ask!

### Your grade in this course will be based on the following activities:

- In-class Exercises and Unit Labs
  - These will progress from beginning activities that provide practice and test your understanding of core concepts, to more in-depth individual assignments that will require you to demonstrate your ability to construct complete solutions to increasingly difficult problems. Some in-class demonstration exercises are pulled from material on LinkedInLearning (i.e., Learning MySQL Development by Brad Wheeler).
- zyBooks Assignments
  - zyBook assignments will serve as both an interactive online textbook and as a tool to evaluate your understanding of the core concepts.
  - Only the <u>participation</u> assignments are graded; however, we strongly recommend you still attempt the challenge problems as they help solidify your understanding of the material.
- Quizzes -- zyBooks
  - Short quizzes on zyBooks will occur typically on the first class of the week, at the beginning of class.
- Quizzes -- Unit

- Unit quizzes occur every 2-3 weeks. They are to be completed during class, during the last class of the week.
- Project
  - This will occur during the last several weeks of the course.
- Final -- cumulative; sometime during finals week.

#### **Group Work**

Grading will be based on the assignment for the work submitted. Individuals can have their grade adjusted lower from the team grade based upon the performance of the members in the group. Submitted work should include the names of the members who contributed to the submission. If the member did not contribute, then please leave their name off the work submitted. If the member did not fully complete the work they said they would do or missed a team deadline, the team can submit a % (percentage) of what the person did for their grade to be adjusted.

## **Attendance**

Attendance and participation are critical components of the course. Attendance is taken using daily quizzes in the Canvas LMS.

The following table defines the attendance policy for the course:

Up to 4 missed classes	No grade deduction
5-6 missed classes	Minus one grade fraction (eg A- becomes a B+)
7-8 missed classes	Minus one full grade (eg A- becomes a B-)
9-10 missed classes	Minus two full grades (eg A- becomes a C-)
More than 10 missed classes	Fail

Allowed absences do not excuse you from quizzes and other assessed in-class activities. There are no unit make-ups, but your single lowest quiz, lab, and in-class activity score (one of each) will be dropped. For weekly 5 pt. quizzes, your lowest grade will be dropped.

Arriving late after attendance has been completed counts as a missed class.

If you have a reasonable expectation that you will have more than 4 excused absences during the semester (e.g., due to recognized Penn State activities like sanctioned sports events or club meetings, religious holidays, or any other planned excused absences), you must put this in writing to the instructor during the first week of classes and be prepared to discuss this with your instructor. Otherwise, you will be expected to adhere to the above attendance policy. A large number of excused absences will not necessarily be permitted. To learn programming typically requires more than the usual amount of focus and intensity. If you have activities going on that will interfere with this, you will need to take this course during a semester when you are not so distracted.

# **Grading Categories with Weights**

The following table shows the weighting of each activity on your grade:

Category	Percentage
Unit Quizzes	35%
Unit Labs	10%
zyBooks	5%
Quizzes	370
Zybooks	10%
In class	10%
Exercises	1070
Project	10%
Final	20%
Total	100%

# Course Grading Scale

The following are the minimum cutoffs for each grade. **NOTE: I do not round** to calculate your final grade.

- 93.00% = A
- 90.00% = A-
- 87.00% = B+
- 83.00% = B

- 80.00% = B-
- 77.00% = C+
- 70.00% = C
- 60.00% = D
- less than 60.00% = F

Please refer to the University Grading Policy for Undergraduate Courses for additional information about University grading policies.

If you are prevented from completing this course for reasons beyond your control, you have the option of requesting a deferred grade from your instructor. For more information, please see "Deferred Grades" on the Student Policies Web Site.

## COURSE CONDUCT

- Classes will start on time and end as scheduled.
- You should attend each class and actively participate in the class activities and discussions.
- Attendance will be tracked using the Canvas LMS. See table above for potential grade deductions.
- You must notify a grader before class if you are going to miss class for any reason.
- Students who participate in University-sanctioned events (such as athletics) must make prior arrangements and give ample notice.
- Engaged learning: Expect to be engaged with this course during class. Unless you are working on a course activity that explicitly requires that you use your laptop, it should be closed. Surfing the web, e-mail, and on-line chat are some of the activities that are generally considered NOT related to the course. If spurious in-class computer use becomes a problem, I reserve the right to implement changes to the syllabus and grading schema to induce compliance.
- Out-of-class workload: For every hour of class time, be prepared to budget about 3 hours of
  out-of-class time. This estimate is a guide; the time which you actually need will vary by topic and
  assignment. For example, if the material is new to you or difficult to comprehend, it will require more
  of your time.

# **UNIVERSITY and COLLEGE POLICIES**

Review current information regarding Penn State policies, including Academic Integrity, Disability Accommodations, Military Accommodations, and many others on the <a href="University Policies">University Policies</a> 

(<a href="https://policies.psu.edu">https://policies.psu.edu</a>) page.

## **Generative AI Tools NOT PERMITTED**

In this course, it is inappropriate to use AI tools in the development of responses, answers, and any code that may be submitted on homework assignments, lab activities, projects, and examinations. Why? This course teaches foundational skills. Employers expect that internship and job applicants will be able to answer questions about—and even solve a problem using—foundational skills, without using AI tools in the interview. Furthermore, to successfully use AI tools in the *future*, you need to know enough about the subject matter to discern whether the AI output is correct.

The teaching team will evaluate your work to ensure that it has not been generated by an AI tool. Additionally, I may ask you to explain the submission that you have created. Inability to present and defend one's submission may be used as evidence in an Academic Integrity filing."

## **Academic Integrity**

Review the College of IST's page on <u>Academic Integrity</u> (<a href="https://ist.psu.edu/current/undergraduate/advising/integrity">https://ist.psu.edu/current/undergraduate/advising/integrity</a>).

Penn State and the College of Information Sciences and Technology are committed to maintaining academic integrity in this and all other courses. We take academic integrity matters seriously. By acknowledging the items in this survey, you become a partner to the University/College standards of academic excellence.

Academic integrity--scholarship free of fraud and deception--is an important educational objective of Penn State. Academic dishonesty can lead to a failing grade or in extreme cases - including student misconduct - referral to the Office of Student Conduct (https://studentaffairs.psu.edu/conduct).

In cases where academic integrity is questioned, Penn State's policy on academic integrity. (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/47-00-48-00-and-49-00-grades/#49-20) requires that the instructor give the student notice of the charge as well as the recommended sanction. Procedures allow the student to accept or contest the charge through discussions with the instructor. If a student chooses to contest, the case will then be managed by the College of IST Academic Integrity Committee and from that time forward; the student will be prohibited from dropping the course. If a disciplinary sanction also is recommended, the case will be referred to the Office of Student Conduct (https://studentaffairs.psu.edu/conduct).

All Penn State colleges abide by this Penn State policy, but review procedures vary by college when academic dishonesty is suspected. Information about Penn State's academic integrity policy and college review procedures is included in the information students receive upon enrolling in a course. Additional information can be found on the College of IST website.

Additionally, students are expected to act with civility and personal integrity; respect other students' dignity, rights, and property; and help create and maintain an environment in which all can succeed

through the fruits of their own efforts. An environment of academic integrity is requisite to respect for self and others, and a civil community.

For additional information on Academic Integrity, including the process and procedure, please go to: IST Al Resources Page: <a href="https://ist.psu.edu/current/undergraduate/advising/integrity">https://ist.psu.edu/current/undergraduate/advising/integrity</a>)

<a href="https://ist.psu.edu/current/undergraduate/advising/integrity">https://ist.psu.edu/current/undergraduate/advising/integrity</a>)

## **HonorLock Proctoring for Unit Quizzes and Exams**

This course may require you to take exams using certain proctoring software that uses your computer's webcam or other technology to monitor and/or record your activity during exams. The proctoring software may be listening to you, monitoring your computer screen, viewing you and your surroundings, recording and storing any and all activity (including visual and audio recordings) during the proctoring process. By enrolling in this course, you have consented to the use of the proctoring software selected by your instructor, including but not limited to any audio and/or visual monitoring which may be recorded. You will need to use one of the compatible operating systems which are listed in <a href="Honorlock's Minimum Requirements table">Honorlock's Minimum Requirements table</a> (https://honorlock.com/support/). Additionally, you will need to use Chrome and download the <a href="Honorlock Chrome Extension">Honorlock Chrome Extension</a> (https://app.honorlock.com/install/extension). You may also review <a href="Penn State's statement on privacy in online proctoring">Penn State's statement on privacy in online proctoring</a> (https://honorlock.psu.edu/privacy/). Please contact your instructor with any questions.

Honorlock support is available 24/7/365. If you encounter any technical issues, you may contact them through live chat on the <a href="mailto:support page">support page</a> (<a href="https://honorlock.com/support/">https://honorlock.com/support/</a>) or within the exam itself. Some additional guides you should review are the <a href="mailto:Student FAQ">Student FAQ</a> (<a href="https://honorlock.kb.help/honorlock.kb.help/honorlock.kb.help/">https://honorlock.kb.help/honorlock.kb.help/honorlock</a> (<a href="https://honorlock.kb.help/how-to-use-honorlock-student/">https://honorlock.kb.help/how-to-use-honorlock-student/</a>).

## DISABILITY ACCOMMODATIONS

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities. Student Disability Resources (SDR) website provides contact information for every Penn State campus (http://equity.psu.edu/sdr/disability-coordinator) (http://equity.psu.edu/sdr/disability-coordinator). For further information, please visit Student Disability Resources website (http://equity.psu.edu/sdr/) (http://equity.psu.edu/sdr/).

In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: See (http://equity.psu.edu/sdr/guidelines)

(http://equity.psu.edu/sdr/guidelines). If the documentation supports your request for reasonable accommodations, your campus disability services office will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early as

possible. You must follow this process for every semester that you request accommodations.

## COUNSELING AND PSYCHOLOGICAL SERVICES

Many students at Penn State face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

Counseling and Psychological Services at University Park (CAPS) (http://studentaffairs.psu.edu/counseling/)

(http://studentaffairs.psu.edu/counseling/): 814-863-0395

Counseling and Psychological Services at **Commonwealth Campuses** 

(https://senate.psu.edu/faculty/counseling-services-at-commonwealth-campuses/)

(https://senate.psu.edu/faculty/counseling-services-at-commonwealth-campuses/)

Penn State Crisis Line (24 hours/7 days/week): 877-229-6400 Crisis Text Line (24 hours/7 days/week): Text LIONS to 741741

## EDUCATIONAL EQUITY/REPORT BIAS STATEMENTS

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity via the <a href="Report Bias webpage">Report Bias webpage</a> (<a href="http://equity.psu.edu/reportbias/">http://equity.psu.edu/reportbias/</a>) (<a href="http://equity.psu.edu/reportbias/">http://equity.psu.edu/reportbias/</a>) (<a href="http://equity.psu.edu/reportbias/">http://equity.psu.edu/reportbias/</a>).

# Course Summary:

Date	Details	Due
Thu lon 11, 2024		due by 3:05pm ents/15881993)
Thu Jan 11, 2024	L01: Ex. 1.1 ISTravel  (https://psu.instructure.com/courses/2312016/assignment)	due by 11:59pm ents/15881992)
Sun Jan 14, 2024	Academic Integrity  Acknowledgment for Students  (https://psu.instructure.com/courses/2312016/assignment)	due by 11:59pm ents/15881975)

**Details** Due **Date** IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493176&include contexts=course 2312016) Tue Jan 16, 2024 L02: zyBooks 2.1 - 2.5 due by 3:05pm (https://psu.instructure.com/courses/2312016/assignments/1588 Lab 1 Install MySQL (https://psu.instructure.com/courses/2312016/assignments/15882051) due by 11:59pm IST 210, Section 002: Org Data (22411--UP---P-IST-----210-----002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493177&include contexts=course 2312016) L02 zyBooks Quiz 2.1-2.5 (https://psu.instructure.com/courses/2312016/assignments/15881984) due by 3:12pm L01 zyBooks Quiz 1.1 - 1.5 (https://psu.instructure.com/courses/2312016/assignments/15881980) due by 4:12pm L02 Ex. 2.4 Create database Thu Jan 18, 2024 and tables using SQL due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15881997) L02 Ex. 2.5 Import data (https://psu.instructure.com/courses/2312016/assignments/15881998) due by 11:59pm L02 Ex. 2.2 Create database (https://psu.instructure.com/courses/2312016/assignments/15881995) due by 11:59pm L02 Ex. 2.3 Create table using due by 11:59pm wizard (https://psu.instructure.com/courses/2312016/assignments/15881996) Tue Jan 23, 2024 IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493178&include contexts=course 2312016) L02 Ex. 2.1 Exploring MySQL due by 11:59pm

workbench.docx

Date	<b>Details</b> Due	
	(https://psu.instructure.com/courses/2312016/assignments/15881994)	
L02 Ex. 2.6 SHOW and USE  (https://psu.instructure.com/courses/2312016/assignments/1588		
	L03 Ex. 3.1 Practice Data Import due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882001)	
	IST 210, Section 002: Org Data (22411UPP-IST002-) (https://psu.instructure.com/calendar? event_id=4493179&include_contexts=course_2312016)	
Thu Jan 25, 2024	Units 1 & 2 Quiz Part II SQL (use Canvas) due by 4:20pm (https://psu.instructure.com/courses/2312016/assignments/15881978)	
Fri Jan 26, 2024	Lab 2 Create database (https://psu.instructure.com/courses/2312016/assignments/15882052)	
	Units 1 & 2 Quiz Part II SQL (use Canvas) (https://psu.instructure.com/courses/2312016/assignments/15881978) (1 student)	
Mon Jan 29, 2024	Units 1 & 2 Quiz Part 1 Multiple Choice due by 12:15pm (https://psu.instructure.com/courses/2312016/assignments/15881981) (1 student)	
Tue Jan 30, 2024	IST 210, Section 002: Org Data (22411UPP-IST002-) (https://psu.instructure.com/calendar? event_id=4493180&include_contexts=course_2312016)	
	L04: zyBooks 2.6 - 2.8 due by 3:05pm (https://psu.instructure.com/courses/2312016/assignments/15882011)	

**Details** Due **Date** 

#### L04 zyBooks Quiz 2.6-2.8

(https://psu.instructure.com/courses/2312016/assignments/15881976) due by 3:12pm

### **□** L04 Ex. 4.1 Basics of selecting

data due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882002)

### L04 Ex. 4.2 Refine select

queries due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882003)

### **L04 Ex. 4.3 Filter results with**

**WHERE** due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882004)

### L04 Ex. 4.4 SELECT using IN

and LIKE due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882005)

#### **□** L04 Ex. 4.5 Practice SELECTS

(https://psu.instructure.com/courses/2312016/assignments/15882006) due by 11:59pm

Thu Feb 1, 2024

### IST 210, Section 002: Org Data

(22411--UP---P-IST-----210------002-)

(https://psu.instructure.com/calendar?

event id=4493181&include contexts=course 2312016)

3pm to 4:30pm

#### Units 1 & 2 Quiz Part II SQL

(use Canvas)

due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15881978)

(1 student)

#### **₽ L04 Ex. 4.7 UPDATE**

due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882008)

#### **₽** L04 Ex. 4.8 DELETE

(https://psu.instructure.com/courses/2312016/assignments/15882009)

## L04 Ex. 4.9 Practice INSERT,

**UPDATE, DELETE** 

(https://psu.instructure.com/courses/2312016/assignments/15882010)

due by 11:59pm

**Details** Due **Date** 

#### **Walting State of the State of**

Choice

(https://psu.instructure.com/courses/2312016/assignments/15881981)

(1 student)

#### **| ₩ L04 Ex. 4.6 INSERT**

due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882007)

#### IST 210, Section 002: Org Data

(22411--UP---P-IST-----210-----002-)

(https://psu.instructure.com/calendar?

event id=4493182&include contexts=course 2312016)

3pm to 4:30pm

#### **₽** <u>L05 zyBooks 2.9 -2 .12</u>

due by 3:05pm (https://psu.instructure.com/courses/2312016/assignments/15882016)

#### L05 zyBooks Quiz 2.9-2.12

(https://psu.instructure.com/courses/2312016/assignments/15881970) due by 3:12pm

### L05 Ex. 5.1 Brief on Data

**Integrity** 

due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882012)

#### L05 Ex. 5.2 Foreign Keys and

**Referential Integrity** 

due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882013)

#### L05 Ex. 5.3 Referential

**Integrity Constraints examples** 

due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882014)

#### L05 Ex. 5.4 Create Normalized

**Movie Database** 

due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882015)

Thu Feb 8, 2024

Tue Feb 6, 2024

#### IST 210, Section 002: Org Data

(22411--UP---P-IST-----210-----002-)

(https://psu.instructure.com/calendar?

3pm to 4:30pm

event id=4493183&include contexts=course 2312016)

#### Unit 3 Quiz Multiple Choice -

No HL

due by 3:50pm

(https://psu.instructure.com/courses/2312016/assignments/15964535)

Date	Details	Due
		/ 4:20pm
		/ 4:20pm
		/ 5:05pm
Fri Feb 9, 2024	Lab 3 SELECT INSERT  UPDATE DELETE due by  (https://psu.instructure.com/courses/2312016/assignments/15882053)	11:59pm
Mon Feb 12, 2024	Lab 3 SELECT INSERT  UPDATE DELETE  (https://psu.instructure.com/courses/2312016/assignments/15882053)  (1 student)	11:59pm
Tue Feb 13, 2024	IST 210, Section 002: Org Data  (22411UPP-IST210002-) (https://psu.instructure.com/calendar? event_id=4493184&include_contexts=course_2312016)	o 4:30pm
	L06: zyBooks 3.1 - 3.3 due by (https://psu.instructure.com/courses/2312016/assignments/15882022)	/ 3:05pm
	L06 zyBooks Quiz 3.1-3.3 due by (https://psu.instructure.com/courses/2312016/assignments/15881988)	/ 3:12pm
	L06 Ex. 6.1 Aggregate  Functions due by  (https://psu.instructure.com/courses/2312016/assignments/15882017)	11:59pm
	L06: Ex. 6.2 Practice  Aggregate Functions due by   (https://psu.instructure.com/courses/2312016/assignments/15882021)	11:59pm
Thu Feb 15, 2024	IST 210, Section 002: Org Data  (22411UPP-IST210002-)  (https://psu.instructure.com/calendar?  event_id=4493185&include_contexts=course_2312016)	o 4:30pm

**Details** Due **Date L06 Ex. 6.3 Brief: Basics of JOINs** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882018) **₽** L06 Ex. 6.4 INNER JOIN (https://psu.instructure.com/courses/2312016/assignments/15882019) due by 11:59pm L06 Ex. 6.5 Practice JOINs with two tables due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882020) IST 210, Section 002: Org Data (22411--UP---P-IST-----210-----002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493186&include contexts=course 2312016) **L07 zyBooks 3.4-3.5** (https://psu.instructure.com/courses/2312016/assignments/15882026) due by 3:05pm L07 zyBooks Quiz 3.4-3.5 (https://psu.instructure.com/courses/2312016/assignments/15881969) due by 3:12pm Tue Feb 20, 2024 **№ L07 Ex. 7.1 Multiple JOINs** (https://psu.instructure.com/courses/2312016/assignments/15882023) **₽** L07 Ex. 7.2 OUTER JOINS due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/158 Lab 4 Create Normalized **Database** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882054) IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493187&include contexts=course 2312016) Thu Feb 22, 2024 **L07 Ex. 7.3 Practice JOINs** (https://psu.instructure.com/courses/2312016/assignments/15882025) Tue Feb 27, 2024 IST 210, Section 002: Org Data 3pm to 4:30pm

(22411--UP---P-IST-----210-----002-)

**Details** Due **Date** (https://psu.instructure.com/calendar? event id=4493188&include contexts=course 2312016) **L08: zyBooks 3.6-3.7** due by 3:05pm (https://psu.instructure.com/courses/2312016/assignments/1588 **L08 zyBooks Quiz 3.6-3.7** (https://psu.instructure.com/courses/2312016/assignments/15881979) due by 3:12pm **L08 Ex. 8.1 Introduction to Subqueries** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882027) **□** L08 Ex. 8.2 More on **Subqueries** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882028) **L08 Ex. 8.3 Practice Subqueries** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882029) ist 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493189&include contexts=course 2312016) Multiple States Thu Feb 29, 2024 subqueries) due by 4:20pm (https://psu.instructure.com/courses/2312016/assignments/15881987) Multiple States subqueries) due by 4:20pm (https://psu.instructure.com/courses/2312016/assignments/15881968) □ Lab 5 JOINS (https://psu.instructure.com/courses/2312016/assignments/15882055) Fri Mar 1, 2024 IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) Tue Mar 5, 2024 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493190&include contexts=course 2312016) Thu Mar 7, 2024 IST 210, Section 002: Org Data 3pm to 4:30pm (22411--UP---P-IST-----210-----002-)

**Date Details** Due (https://psu.instructure.com/calendar? event id=4493191&include contexts=course 2312016) IST 210, Section 002: Org Data (22411--UP---P-IST-----210-----002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493192&include contexts=course 2312016) L09 Ex. 9.1 Correlated Tue Mar 12, 2024 **Subqueries** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882032) L09 Ex. 9.2 Practice Correlated **Subqueries** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882033) IST 210, Section 002: Org Data (22411--UP---P-IST-----210-----002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493193&include contexts=course 2312016) □ L09 Ex. 9.3 Practice EXISTS Thu Mar 14, 2024 **operator** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882034) L09 Ex. 9.4 More Practice on **Subqueries** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882035) Lab 6 - Complex Queries due by 11:59pm Fri Mar 15, 2024 (https://psu.instructure.com/courses/2312016/assignments/158 Tue Mar 19, 2024 IST 210, Section 002: Org Data (22411--UP---P-IST-----210-----002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493194&include contexts=course 2312016) **₽** <u>L10: zyBooks 3.8</u> (https://psu.instructure.com/courses/2312016/assignments/15882039) due by 3:05pm □ L10 Ex. 10.1 Create VIEW table (https://psu.instructure.com/courses/2312016/assignments/15882036) due by 11:59pm 2/14/24, 3:47 PM Syllabus for IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) **Details** Due **Date** | **L10 Ex. 10.2 Query VIEW** (https://psu.instructure.com/courses/2312016/assignments/15882037) due by 11:59pm ₽ L10 Ex. 10.3 Practice views and subqueries due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882038) IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493195&include contexts=course 2312016) Thu Mar 21, 2024 **March 1** Unit 5 Quiz Part I (https://psu.instructure.com/courses/2312016/assignments/15881973) due by 4:20pm **Unit 5 Quiz Part II.** (https://psu.instructure.com/courses/2312016/assignments/15881986) due by 4:20pm IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493196&include contexts=course 2312016) L11: zyBooks 4.1-4.5 due by 3:05pm (https://psu.instructure.com/courses/2312016/assignments/158 **L11 zyBooks Quiz 4.1-4.5** (https://psu.instructure.com/courses/2312016/assignments/15881982) due by 3:12pm Tue Mar 26, 2024 L11 Ex. 11.1 Brief: What are entities, relationships, and due by 11:59pm attributes? (https://psu.instructure.com/courses/2312016/assignments/15882040) L11 Ex. 11.2 Brief: What is **Cardinality?** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882041) □ L11 Ex. 11.3 ERD modeling

Thu Mar 28, 2024

IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-)

(https://psu.instructure.com/courses/2312016/assignments/15882042) due by 11:59pm

3pm to 4:30pm

2/14/24, 3:47 PM Syllabus for IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) **Details** Due **Date** (https://psu.instructure.com/calendar? event id=4493197&include contexts=course 2312016) □ L11 Ex. 11.4 Create EERD with <u>relationships</u> due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882043) L11 Ex. 11.5 Create EERD **MyFlix** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882044) IST 210, Section 002: Org Data (22411--UP---P-IST-----210------002-) 3pm to 4:30pm (https://psu.instructure.com/calendar? event id=4493198&include contexts=course 2312016) □ L12 zyBooks 4.10-4.12 (https://psu.instructure.com/courses/2312016/assignments/15882050)

L12 zyBooks Quiz 4.10-4.12

(https://psu.instructure.com/courses/2312016/assignments/15881983) due by 3:12pm

Tue Apr 2, 2024

L12 Ex. 12.1 Brief on

**Normalization Process** due by 11:59pm (https://psu.instructure.com/courses/2312016/assignments/15882047)

L12 Ex. 12.2 Normalization

with example due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882048)

L12 Ex. 12.3 Database

**Normalization Problem** due by 11:59pm

(https://psu.instructure.com/courses/2312016/assignments/15882049)

Thu Apr 4, 2024 IST 210, Section 002: Org Data

(22411--UP---P-IST-----210-----002-)

(https://psu.instructure.com/calendar?

event id=4493199&include contexts=course 2312016)

3pm to 4:30pm

**Unit 6 Quiz Part I** 

(https://psu.instructure.com/courses/2312016/assignments/15881989) due by 4:20pm

Unit 6 Quiz Part II. due by 4:20pm

Date	Details Details	
	(https://psu.instructure.com/courses/2312016/assignments/	<u>15881985)</u>
Tue Apr 9, 2024	IST 210, Section 002: Org Data (22411UPP-IST210002-) (https://psu.instructure.com/calendar? event_id=4493200&include_contexts=course_2312016)	3pm to 4:30pm
Thu Apr 11, 2024	IST 210, Section 002: Org Data (22411UPP-IST210002-) (https://psu.instructure.com/calendar? event_id=4493201&include_contexts=course_2312016)	3pm to 4:30pm
Fri Apr 12, 2024	Project Part I (https://psu.instructure.com/courses/2312016/assignments/	due by 11:59pm 15882067)
Tue Apr 16, 2024	IST 210, Section 002: Org Data (22411UPP-IST210002-) (https://psu.instructure.com/calendar? event_id=4493202&include_contexts=course_2312016)	3pm to 4:30pm
Thu Apr 18, 2024	IST 210, Section 002: Org Data  (22411UPP-IST210002-)  (https://psu.instructure.com/calendar?  event_id=4493203&include_contexts=course_2312016)	3pm to 4:30pm
Fri Apr 19, 2024	Project Part II.  (https://psu.instructure.com/courses/2312016/assignments/	due by 11:59pm 15882068)
Tue Apr 23, 2024	IST 210, Section 002: Org Data  (22411UPP-IST210002-)  (https://psu.instructure.com/calendar? event_id=4493204&include_contexts=course_2312016)	3pm to 4:30pm
Thu Apr 25, 2024	IST 210, Section 002: Org Data  (22411UPP-IST210002-)  (https://psu.instructure.com/calendar?  event_id=4493205&include_contexts=course_2312016)	3pm to 4:30pm
Mon Apr 29, 2024	Project Part III.  (https://psu.instructure.com/courses/2312016/assignments/	due by 11:59pm 15882069)
	Final Part I. Multiple Choice Old (https://psu.instructure.com/courses/2312016/assignments/	<u>15881972)</u>

Date Details Due

#### **Final Part II. SQL**

(https://psu.instructure.com/courses/2312016/assignments/15881977)

#### Final Part III. Design

(https://psu.instructure.com/courses/2312016/assignments/15881990)

#### **IST 210 Final Exam**

(https://psu.instructure.com/courses/2312016/assignments/15881991)

#### L02 zyBooks Quiz 2.1-2.5

(https://psu.instructure.com/courses/2312016/assignments/15881984) (1 student)

#### **L02 zyBooks Quiz 2.1-2.5**

(https://psu.instructure.com/courses/2312016/assignments/15881984) (1 student)

#### L09 9.3 More Practice on

**Subqueries** 

(https://psu.instructure.com/courses/2312016/assignments/15882031)

#### **₽** L11 Ex. 11.6 EERD Practice

#### **Problem**

(https://psu.instructure.com/courses/2312016/assignments/15882045)

#### Part II. Q1

(https://psu.instructure.com/courses/2312016/assignments/15882057)

#### Part II. Q2

(https://psu.instructure.com/courses/2312016/assignments/15882058)

#### Part II. Q3

(https://psu.instructure.com/courses/2312016/assignments/15882059)

#### Part II. Q4

(https://psu.instructure.com/courses/2312016/assignments/15882060)

#### Part II. Q5

(https://psu.instructure.com/courses/2312016/assignments/15882062)

#### Part II. Q6

(https://psu.instructure.com/courses/2312016/assignments/15882063)

Date Details Due

### Part II. Q7

(https://psu.instructure.com/courses/2312016/assignments/15882064)

## Part II. Q8

(https://psu.instructure.com/courses/2312016/assignments/15882065)

### Part III. EERD

(https://psu.instructure.com/courses/2312016/assignments/15882066)