Saint Peter's UNIVERSITY **Course Syllabus**

Course Title*	**Big Data and Data Management**
Course Prefix, Number, and Section*	DS530
Professor*	Jun Shan
Meeting Place and Date/Time	Listed in Blackboard Announcement section.

Professor's Contact Information

Email Address*	jshan@saintpeters.edu
Office Hours*	By Appointment

General Course Information

Learning Outcomes*	This course discusses foundational concepts of data management systems, with emphasis on the relational database design and the usage of Structured Query Language (SQL).
Learning Method	Remote learning, with instructor led sessions during fixed times. 9 teaching sessions, one midterm session, and one final exam session. Each teaching session consists of lectures and labs that must be completed and submitted on time, followed by assignments that must be completed and submitted. This format will provide you with the flexibility of virtual learning and the discipline of instructor led learning.
Textbook(s) and Readings*	**A Guide to SQL** by Philip J. Pratt, Mary Z. Last Currently 10th edition, but older editions are OK too. We will have our own teaching schedule but the book can serve as a reference to key concepts and syntax. - Internet: Google Key skill to use SQL in real world

Academic Calendar

Week	Topic
1	Introduction to Relational Database. CREATE and DROP.
2	Simple INSERT, SELECT, and Entity Relationship Model
3	Normalization and table manipulation.
4	System functions
5	WHERE clause. Set operation.
6	Midterm (2hr) and review.
7	JOIN
8	GROUP BY. View and CTE.
9	User defined functions
10	Data Warehouse. SQL recap.
11	Final Exam

Course Components

Class Sessions	Lecture will count for 8% of your grade. Lab will count for another 8% of your grade.
Assignment	Assignments counts for 24% of the final grade. Must complete all questions in the assignment to get grade.
Exams	One mid-term exam and one final exam, each counts for 30% of your final grade. Retake is allowed for mid-term but it will not exceed 24% of the final grade.

Course Policies

Grading Criteria and Weighting*	**Grade component weighting** Lecture 8% Lab 8% Assignment 24% Mid term exam 30% Final exam 30% Late submission/multiple submissions are allowed (except for final) with justified written request (doctor's note e.g.). Late submission receives up to 80% of score. **Grading scale (letter grade followed by required class average)** 94-100=A 87-89=B+ 77-79=C+ 90-93 =A- 83-86=B 73-76=C 80-82=B- 70-72=C- <70=F
Class Attendance- Absences and Lateness*	According to Saint Peter's policy, a student is allowed four absences in a term for a course that meets two times a week. If you exceed this number, you may receive an FA for failure due to excessive absences. Arriving on time is expected. It is not appropriate to leave the class during the period except for emergencies.
Plagiarism, Cheating, and Computer Piracy	Any of these acts may result in one of the following: a failing grade for an assignment, a failing grade for the course, suspension from the University, or dismissal from the University.
Students with Special Needs	Students requiring special accommodations should present the appropriate paperwork after having their accommodations determined by the Academic Dean's Office.
Title IX Compliance	In the event that you choose to write or speak about having survived sexualized violence, including rape, sexual assault, dating violence, domestic violence, or stalking, Saint Peter's University policies require that, as your instructor, I share this information with the Title IX Coordinator, Elena Serra. Elena or a trained member of her team will contact you to let you know about support services at Saint Peter's as well as options for holding accountable the person who harmed you. Whereas, you are not required to speak with them, they will share resources with you.
Instructional Continuity Plan*	This course will be conducted continuously online even if Saint Peter's University closes its campus access.