

DATA 303: Introduction to SQL – The Structured Query Language (1 credit)

Class Meeting Times: N/A Course is Asynchronously Online.

Class Meeting Location: N/A Course is Asynchronously Online.

Instructor Information:

Name: Ananth Jillepalli

Email: ananth.jillepalli@wsu.edu

Phone number:

Office:

Office hours:

Contact policy:

LMS (Learning Management System): Canvas (<https://wsu.instructure.com/>)

Class Communication Policy:

Use of LMS discussion forums is encouraged for the course discussions. Announcements and other official communications will occur via LMS as well.

<Instructor's email/phone policy to be listed here>

Course Description:

This is a 1 credit course to provide students with an introduction to the SQL ecosystem with a hands-on approach. We will discuss multiple aspects of the SQL system: basics, querying, manipulation, constraints, conditions, filtering, joins, subqueries, cases, views, programming, security, aggregation, and grouping. We will also touch upon some advanced SQL features like stored procedures, functions, triggers, and transactions.

Prerequisites: None

Corequisites: None

Required Textbook:

The SQL Workshop by F. Solomon, P. Jayaram, and A. Saqqa. Packt Publishers. ISBN: 9781838642358. URL for purchase: <https://www.packtpub.com/product/the-sql-workshop/9781838642358>

Reference Materials:

Lecture slides, references, and other reading materials will be provided through the LMS.

Course Timeline:**Summer:**

Lesson Topics	Textbook Chapter	Deliverable	Week
Lesson 0: Introduction to the course	N/A	HA0	1
Lesson 1: Introduction to SQL Basics	Chapter 1	HA1	1
Lesson 2: Data manipulation using SQL	Chapter 2	HA2	2
Lesson 3: Constraints	Chapter 3	HA3	2
Lesson 4: Data retrieval and ordering with SQL	Chapter 4	HA4	3
Lesson 5: Filtering and Shaping data with SQL	Chapter 5	HA5	3
Lesson 6: SQL Joins	Chapter 6	HA6	4
Lesson 7: SQL Subqueries, cases, and views	Chapter 7	HA7	4
Lesson 8: Stored procedures, Functions, Triggers	Chapter 8	HA8	5
Lesson 9: SQL Security	Chapter 9	HA9	5
Lesson 10: Aggregation and grouping	Chapter 10	HA10	6
Lesson 11: String functions, null handling, and transactions	Chapter 11	HA11	6

Student Performance Evaluation:

Student performance will be evaluated based on 11 assignments distributed throughout the course. These assignments need to be completed as instructed in the course modules. Students are encouraged to collaborate with other students in the class. Please mention the name and WSU ID of all collaborators on an assignment submission. All submissions will be made via the LMS. Violation of policies listed in the 'Academic Integrity Statement' section will lead to failing the assignment and consequently, the course.

Grading:

A student will have to satisfy all 11 assignments to obtain a satisfactory grade in the course. Satisfactory performance metrics for assignments vary from one assignment to another. These metrics are listed in the assignment descriptions available on the LMS.

Course assignments and their due dates will be made available on the LMS.

Grade scale:

Satisfactory or Fail grade.

Graded Content:

Eleven (11) Homework Assignments spread throughout the course.

Student Learning Outcomes (SLO):

Students who successfully complete the course will be able to do the following using Python:

1. Create and understand simple programs
2. Create functions and use standard flow-control procedures
3. Demonstrate familiarity with pre-built data types and packages
4. Load and summarize data
5. Perform basic data cleaning operations
6. Merge, Transform, and Aggregate datasets
7. Create simple visualizations
8. Solve simple problems using Python program design

SLO Assessment:

1. SLO 1 is assessed by Assignments 1, 8
2. SLO 2 is assessed by Assignments 2, 9
3. SLO 3 is assessed by Assignments 3, 4
4. SLO 4 is assessed by Assignments 4, 10
5. SLO 5 is assessed by Assignments 5, 10
6. SLO 6 is assessed by Assignments 11, 12
7. SLO 7 is assessed by Assignments 6, 7
8. SLO 8 is assessed by Assignments 13, 14

Attendance Policy:

The course will be delivered in an online fashion. As such, attendance is not required. The instructor expects the students to be mature enough to be able to manage the course items as per the course schedule listed in the LMS.

Make-up Policy:

Make-up assignments or coursework can be negotiated on a case-by-case basis. Any make-up requests should include irrefutable documentation as proof to back up any claims being made in the request.

Incomplete Grades Policy:

University policy (Academic Regulation 90) states that a grade of Incomplete may be awarded only if “the student is unable to complete their work on time due to circumstances beyond their control.” All requests for incomplete grades must include documentation to support the claim

of inability to complete the course work on time due to circumstances beyond a student's control.

Expectations for Minimum Student Effort:

Students should expect to spend a minimum of 3 hours per week for each online 1-credit course, engaged in the following types of activities: reading, listening to/viewing media, discussion, or conversation in the LMS or other academic technology, conducting research, completing assignments, and reviewing instructor feedback, studying for and completing assessments, etc.

Reasonable Accommodation Statement:

Reasonable accommodations are available for students with documented disabilities or chronic medical or psychological conditions. If you have a disability and need accommodations to fully participate in this class, please visit your campus' Access Center/Services website to follow published procedures to request accommodations. Students may also contact their campus offices to schedule an appointment with a Disability Specialist. All disability related accommodations are to be approved through the Access Center/Services on your campus. It is a university expectation that students visit with instructors (via email, Zoom, or in person) to discuss logistics within two weeks after they have officially requested their accommodations.

For more information contact a Disability Specialist on your home campus:

1. Pullman, WSU Global Campus, Everett, Bremerton, and Puyallup: 509-335-3417 Access Center (<https://www.accesscenter.wsu.edu>) or email at access.center@wsu.edu
2. Spokane: 509-358-7816 Access Services (<https://spokane.wsu.edu/studentaffairs/access-resources/>) or email j.schneider@wsu.edu
3. Tri-Cities: Access Services (<http://www.tricity.wsu.edu/disability/>) or email g.hormel@wsu.edu
4. Vancouver: 360-546-9238 Access Center (<https://studentaffairs.vancouver.wsu.edu/student-wellness-center/access-center>) or email van.access.center@wsu.edu

Academic Integrity Statement:

Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. Academic integrity will be strongly enforced in this course. Students who violate WSU's Academic Integrity Policy (identified in

Washington Administrative Code (WAC) 504-26-010(4) will receive an 'F' grade in the course, will not have the option to withdraw from the course pending an appeal, and will be reported to the Center for Community Standards.

Cheating includes, but is not limited to, plagiarism and unauthorized collaboration as defined in the Standards of Conduct for Students, WAC 504-26-010(3). Read and understand all of the definitions of cheating. If you have any questions about what is and is not allowed, ask your course instructor.

If you wish to appeal a instructor's decision relating to academic integrity, please use the form available at communitystandards.wsu.edu. Make sure you submit your appeal within 21 calendar days of the instructor's decision.

Discrimination and Harassment Policy Statement:

Discrimination, including discriminatory harassment, sexual harassment, and sexual misconduct (including stalking, intimate partner violence, and sexual violence) is prohibited at WSU (See [WSU Policy Prohibiting Discrimination and Harassment](#) (Executive Policy 15) and [WSU Standards of Conduct for Students](#)). If you feel you have experienced or have witnessed discriminatory conduct, you can contact the WSU Compliance & Civil Rights (CCR) and/or the [WSU Title IX Coordinator](#) at 509-335-8288 to discuss resources, including confidential resources, and reporting options. (Visit ccr.wsu.edu for more information). Most WSU employees, including faculty, who have information regarding sexual harassment or sexual misconduct are required to report the information to CCR or a designated Title IX Coordinator or Liaison. (Visit ccr.wsu.edu/reporting-requirements for more info).

Accommodation for Religious Observances or Activities:

Washington State University reasonably accommodates absences allowing for students to take holidays for reasons of faith or conscience or organized activities conducted under the auspices of a religious denomination, church, or religious organization. Reasonable accommodation requires the student to coordinate with the instructor on scheduling examinations or other activities necessary for course completion. Students requesting accommodation must provide written notification within the first two weeks of the beginning of the course and include specific dates for absences. Approved accommodations for absences will not adversely impact student grades. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of absence. Students who feel they have been treated unfairly in terms of this accommodation may refer to Academic Regulation 104 – Academic Complaint Procedures.

Safety and Emergency Notification:

Please sign up for emergency alerts on your account at MyWSU. For more information on this subject, campus safety, and related topics, please view the FBI's Run, Hide, Fight video and visit the classroom safety page <https://provost.wsu.edu/classroom-safety/>

Student Crisis Resources (Pullman):

It is recommended that the following list of resources be made available to Pullman campus students. This information will also be available through myWSU. Similar lists of resources will be compiled for the other campus locations.

- If you or someone you know is in immediate danger, DIAL 911 FIRST!
- Student Care Network: studentcare.wsu.edu
- Cougar Transit: 978 267-7233
- WSU Counseling and Psychological Services (CAPS): 509 335-2159
- Suicide Prevention Hotline: 800 273-8255
- Crisis Text Line: Text HOME to 741741
- WSU Pullman Police: 509 335-8548
- Pullman Police (Non-Emergency): 509 332-2521
- WSU Office of Civil Rights Compliance & Investigation: 509 335-8288
- Alternatives to Violence on the Palouse: 877 334-2887
- Pullman 24-Hour Crisis Line: 509 334-1133

Lauren's Promise:

I will listen and believe you if someone is threatening you. Lauren McCluskey, a 21-year-old honors student athlete, was murdered on Oct. 22, 2018, on the University of Utah campus by a man she briefly dated. We must all take actions to ensure that this never happens again. If you are in immediate danger, call 911.

If you are experiencing sexual assault, domestic violence, and stalking, please report it to me and I will connect you to resources or call Alternatives to Violence of the Palouse at 877-334-2887 (24-hour crisis hotline). Any form of sexual harassment or violence will not be excused or tolerated at Washington State University. WSU has instituted procedures to respond to violations of these laws and standards, programs aimed at the prevention of such conduct, and intervention on behalf of the victims. WSU Police officers will treat victims of sexual assault, domestic violence, and stalking with respect and dignity. Confidentiality is of the utmost importance and WSU Police will assist by providing resources to victims. In addition to its law enforcement efforts regarding sexual assault, domestic violence and stalking, WSU Police refer victims to the appropriate university and/or local community counseling and other resources devoted to assisting victims.

Advocates help survivors determine their own needs about their physical and emotional health, reporting options, and academic concerns. They connect survivors to campus and community services, and provide accompaniment to important appointments (court, hospital, and police) and support throughout the process. WSUPD can also connect you with advocacy services, if desired. The local advocacy group is Alternatives to Violence of the Palouse, whose services are

free, immediate, and confidential. Other confidential resources include WSU Counseling and Psychological Services. If you would like to speak with a counselor after business hours, WSUPD can contact the on-call counselor and have them call you directly or a crisis telephone number is provided. Information shared with the counselor will not be provided to WSUPD without expressed permission from you. WSU Counseling and Psychological Services 509-335-2159 (crisis services line).