

D205 DATA ACQUISITION

Welcome, Study Plan, Frequently Asked Questions, and Course Pacing Guide

last update: 11 March 2023



HOW TO START and WORK THROUGH IN THE COURSE

Your D205 instructor team has put together the following guide full of resources and course tips to help you get the most out of this course and to help you pass the course in the most efficient manner.

Welcome to D205 Data Acquisition

This course teaches relational database concepts and techniques. There will be a task to acquire data from a PostgreSQL database along with a importing dataset into the PostgreSQL database. You will use at least one table from the current PostgreSQL database along with the imported dataset to answer a SQL “research” question. Please note the SQL question you are answering should be a SQL question that will be answered by retrieving or selecting data from the database (NOT a research question where analysis or interpretation is needed). Please keep the SQL question simple.

D205 is the first course in the MSDA program that requires a performance Assessment (PA) which is a project-based deliverable of a word docx and a csv or excel file. You will work on a PA task and follow the Requirements and the Rubric (the set of evaluation criterion used by the anonymous evaluator to evaluate your submitted PA files). The remainder of the MSDA program courses all require a PA.

D205 STUDY PLAN OUTLINE

This study plan outline is a result of student feedback on what has helped your fellow Night Owls be successful.

As you work your way through the Data Camp D205 Course Materials, make sure to read the PA Requirements and Rubric after each section/module or two of the Data Camp Course Materials.

D205 RECOMMENDED STUDY PLAN

The study plan below has helped many students succeed in this course. You can create your own custom D205 pacing guide by modifying the items below to fit your individual needs.

Become familiar with the course material and performance assessment.

- a. **Start with the videos “Top D205 Performance Assessment Tips”, located in the Announcements section on the right side of the Course page. The short videos cover all the course and PA tips. Make sure to click ‘View All’ to see the links to the videos.** Learn how your

PA will be evaluated by an anonymous evaluator using a rubric, how to format and write your PA Word docx and Excel xlsx to make your PA easy to evaluate and increase your pass rate, how to navigate the course materials and the Requirements of the PA, how to find and use the Labs on Demand (LOD) for the technical part of the PA, how to write SQL and use pgAdmin4, the primary tool for SQL, and an expanded list of Frequently Asked Questions (FAQ). Additional materials are found by clicking on Course Tips and Announcements sections located to the right of the Go To Course Materials. Remember to click View All.

- b. **The course materials are located behind the “Go To Course Materials” button on the course page.** The Data Camp D205 course will help you learn SQL, relational databases, and data modeling.
- c. **The Labs on Demand (LOD) is the WGU-provided virtual server where the lab should be completed. The link to the LOD is located at the bottom of the Task page or click [here](#).**

Use pgAdmin4 to access the databases in D205

- a. pgAdmin4 is the primary tool you will use to complete the technical portion of the PA. See the Announcements and Course Tips for files to help you learn how to use the tool.
- b. You will select one of the two Add-On csv data files in the Lab File folder, located via a shortcut folder on the desktop of the LOD. One of the two add-on csv files should be imported into a new table you will create to hold the csv file.
- c. The SQL question you wrote will be answered by joining the newly created table with the imported data with, at a minimum of one, existing table.

Study SQL

Data Camp has an extensive custom track for D205. It covers six courses (Five courses are shown initially. Please make sure to click on “See all content”, located under the fifth course, to see the sixth course.

Webinars

Attend Live or Watch our Webinar recordings by Dr. William Sewell on SQL Sundays and Dr. David Gagner on Tuesdays. Be on the lookout for an email with the details and connection information. See the Announcements for webinar recording and power point links

Select one of the available databases: Churn or Medical_data in Postgres.

The databases can be found in LOD Virtual Desktop in the Postgres PgAdmin4.

1. Select one of the two available data sets already in PostgreSQL: Churn or medical_data.
2. Create a new table to hold one of the two csv files located in the Lab Files folder and that folder has a shortcut on the LOD desktop. Import the one csv file you chose.
3. Data Camp will teach you about table joins (the statement to combine data from two or more tables). Join at least one table from either the churn or medical_data data sets and join the table with the newly created table that holds the imported csv file from the Lab Files folder. Display at least one column from the churn or medical_data data sets with at least one column from the newly created table. There is no requirement to have more than two tables for the select-join statement.

4. Follow the Requirements to create your PA and pre-/self-evaluate your PA using the Rubric.
 - a. The PA requires for you to submit a docx and a csv or xlsx file as described in the Requirements and make sure meet the Rubric.
 - b. It is required to make a video on the Panopto.com website following the two requirements for the video section – show your code, the running the code, and showing the results of the executed on the screen and you verbally describing the programs you used to complete the PA. Paste the Panopto.com link in the docx in Section F. Do NOT submit a link separately.

Top Frequently Asked Questions (FAQs)

Where are the task instructions to complete the Performance Assessment (PA)? On the course page is a link task which leads to the task page. The task page includes the Requirements, Rubric, and the LOD section as well as many other useful sections and items.

Where are the course materials? From the course page, click on Go To Course Materials to go to the D205 Data Camp course.

Where is the Labs On Demand (LOD)? At the bottom of the task page is a link to the LOD.

Where is the Add-On CSV file that need to be imported into the database? On the LOD desktop, there is a shortcut to the Lab Files folder. A table will need to be created to hold the import of your choice of one of the two CSV files.

Where to find additional files to help with the PA and learning SQL? On the right side of the course page, there is a Course Tips section and an Announcements section. The platinum tips videos from the live webinars on how to prepare a WGU PA, work on the LOD, how to use pgAdmin4, importing data, SQL, and much more.

D205 COURSE PACING GUIDE

The amount of time any course will take you to complete depends on many factors, including your background, previous experience with the course material, and the amount of time you can devote to studying. Many students can complete this course in 4-7 weeks. To help you stay motivated while making progress toward your goals, your course instructor group has put together a [45-day Challenge](#) for this course. To meet the challenge, we suggest the following pacing:

- **Week 1:** First watch with all parts of the videos “Top D205 Performance Assessment Tips”, located in the Announcements section on the right side of the Course page. The short videos cover all the course and PA tips. Make sure to click ‘View All’ to see the links to the videos in the Announcements section. Watch Data Camp course 1, “Intermediate SQL Queries”. Read the Requirements and the Rubric on the Task page.
- **Week 2:** Continue Data Camp and watch or attend our Webinars. Watch Data Camp course 2, “Introduction to Relational Databases in SQL” and 3 “Database Design”.
- **Week 3:** Continue Data Camp and attend or watch our Webinars. Watch Data Camp course 4, “SQL for Joining Data” and 5 “Data Manipulation in SQL”. Read the Requirements and the Rubric on the Task page and note how your study relates to the rubric.
- **Week 4:** (remember to click ‘See all content’ under the fifth course to see the sixth course) Watch Data Camp course 6, “Applying SQL to Real World Problems”. Login to the LOD and

begin familiarizing yourself with the pgAdmin4 tool. There are pgAdmin4 videos explaining the use of pgAdmin4 with examples located in the Announcement section.

- **Week 5:** Work on the technical parts of the PA using pgAdmin4. Remember to save your work to your personal computer and off the LOD by emailing yourself any SQL code and the required csv file. Use MS Edge, Microsoft's browser, to login to outlook.com using your WGU student credentials and email yourself any work completed and files for the PA.
- **Week 6:** Complete the PA and submit your work.

WHERE TO GET HELP

Data Camp: On the course page Go To Course Material.

Live Webinars. Email invitations will be sent to you.

Videos and PowerPoints in the Course Tips and Announcements sections located to the upper right of the Go To Course Material button.

Your course instructors are here to help and encourage you with the course content. You can email or schedule an appointment with a course instructor if you have any questions. We want to help you succeed in this course!

Happy studying!

Study the Textbooks in the [Resource Library](#) on the course main page.

Follow the rubric click View Task on the course main page.

See your Course Instructor.

Your course instructors are here to help and encourage you with the course content. You can email or schedule an appointment with a course instructor if you have any questions about the course content. We want to help you succeed in this course!