(Please note that these Course objectives are drafts and are subject to change as course content is developed).

Title: Introduction to SQL for Public Health

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Course Objectives:

1) Define SQL and discuss how SQL differs from other computer languages

2) Explain the differences between one-to-one, one-to-many, and many-to-many relationships with databases

3) Write basic SELECT statements as well as use other primary syntax such as WHERE, BETWEEN, IN, OR, NOT, LIKE, ORDER BY, and GROUP BY clauses and operators.

4) Use the wildcard function to search for more specific or parts of records, including their advantages and disadvantages, and how best to use them

5) Use basic math operators, as well as aggregate functions like AVERAGE, COUNT, MAX, MIN, and others to begin analyzing our data.

6) Identify and define several types of JOINs, including the Cartesian join, an inner join, left and right joins, full outer joins, and a self join.

7) Modify strings by concatenating, trimming, changing the case, and using the substring function

8) Apply SQL in the context of public health data management.