

Exam Study Guidelines

- The following topics will be covered on the exam:
 - Git
 - SQL
 - Python (Syntax, Data Structures / Object-Oriented Programming)
 - C++ (Pointers, Memory Management, Passing by Reference vs. By Value, Class Design, Polymorphism)
 - Design Patterns & Algorithms
- There may be questions that are based on some financial results that you found on your homework or that we discussed in class.
- Having said that, the focal point will be on the technical aspects of the course, and I would focus your study on lectures 1 - 6b.

Exam Guidelines

- Your exam will focus on the technical (programming) parts of the course.
- It will involve reading code and being able to identify what it should do, what it will output, etc.
- It may also involve writing pseudocode.
- It will focus equally on Python and C++.
- Generally speaking if you understand the material covered in the lecture notes, and have done the assignments, the exam should be doable.

Topics not on the exam

- The more advanced features of SQL programming: Sub-queries, pivoting data via CASE statements.
- Creating database schemas, maintaining databases, stored procedures and views.
- Specific Python modules or functions beyond numpy and pandas (i.e. time series function names, such as `statsmodels.tsa.stattools.adfuller`).
- Python's plotting functionality
- Types of C++ projects and the C++ build process
- External C++ libraries such as Boost or QuantLib

Topics on the exam

- Everything else in the lecture notes and in the homework is fair game...good luck with your study!