

INSTRUCTOR: Jordi Navarrette, jnavarr@hunter.cuny.edu

ONLINE AVAILABILITY (INCLUDING OFFICE HOURS): Mondays & Tuesdays 10:30AM - 11:30AM, Wednesday & Thursday 7:30PM - 8:30PM

COURSE OBJECTIVES: This is a course designed to teach you to work in new ways, using a computer as a tool for thinking. You will be tackling questions related to money — stocks, credit cards, retirement savings, gambling, real estate, business investments, and many other topics — but the emphasis is always to be able to frame those questions in precise quantitative ways so that a computer can be used to generate answers. Because what you will be doing is new, it will be challenging. You will not need to buy a textbook for this course: instructional materials are provided here on Blackboard free of charge. Expect to work hard and to learn a lot!

LEARNING GOAL: This class satisfies the department's learning goal: (1a) Understand the basic foundations and relevant applications of mathematics and statistics, particularly those branches related to computer science.

COURSE ORGANIZATION: The objectives for the semester are divided into 19 units. All study materials are sectioned by unit in this module's Course Materials area. Each section contains the Unit Document, one or more Spreadsheets, a Hints for Additional Questions file, a Unit Test, as well as the all-important Video Lessons for Additional Questions. Money Concepts and/or Spreadsheet Skills covered in each unit can be seen at a glance with topics particularly crucial for future units in bold. **You must master all of them** before moving to the next unit.

Each of the 19 Unit Documents follows the same format: it starts with a main Unit Question and shows you step-by-step how to answer it by creating an Excel Spreadsheet. It then follows with important Comments relevant to the unit, and concludes with a list of Additional Questions, some directly related to the main one for the unit and others applying material from previous units or introducing new material. You must work through the units, answering each Additional Question with help from Question Videos and Additional Question Hints files by creating an appropriate spreadsheet. I will be available by email and during the online availability hours noted above to help when you get stuck, but the onus is mainly on you to work through the material. In particular, **no synchronous lessons are being planned or delivered in this course** - if you rely on this format for your learning, then you should opt for a different course.

ATTENDANCE: Aside from the hours I am making myself available, this course is completely asynchronous. Only those seeking assistance or immediate feedback on a Unit Test should consider my available online hours, and will be able to attend by opening Blackboard Collaborate Ultra from the Tools section of the Blackboard course page. During these hours, submissions for tests due that week will be given highest priority, followed by questions pertaining to the test of that week, then submissions and questions for other tests.

Once again, **these hours are not for delivering lessons, and no student should be coming to ask questions without first attempting the material, and formulating a specific question reflecting their needs.** This is an interactive course, in which the work of learning may be performed on your own at a time convenient to you on any computer with Excel, Google Sheets, or Calc (a free open source alternative from OpenOffice.org or LibreOffice.org), using the interactive tools, available to you throughout this comprehensive Blackboard module and developed especially for this course. To pass each unit you must take an Unit Test - one per each of the 19 units.

TESTING: As you complete each unit, you apply your knowledge to complete a Unit Test. Test questions are based on those you have already seen in each unit. For each test, only one spreadsheet question is chosen at random. Most often the question will be directly related to the unit you have just completed, but it may also be chosen from any of the earlier units. If you can generate a spreadsheet, use it to answer a test question and explain your work to my satisfaction, I will note that you have completed the unit and you can move on to the next one. If you cannot answer a test question to my satisfaction, there is no penalty, but you will have to take another question from the same unit the next time. The test will also contain one comprehension question to test your understanding of the material presented in the unit. Tests will only be checked during my available online hours. Whether you pass or not, you may only have two test submissions assessed per hour. Only if you pass can you move on to the next unit test. If you don't pass, you must repeat the test for the same unit until you do pass — only then can you move on to

the next unit. (The usual schedule will be applied for first week of finals only.) Moreover, in order to make sure progress is being maintained, **you will be expected to pass one unit test each week**, and those that do not meet the due date of a test will have the maximum score set to the minimum passing grade. There is no way to make up missed test deadlines: **if you register late, or only start taking tests several weeks into the semester, or are unable to study because of an emergency, the test deadlines that you missed will not be pushed back for any reason.** There are no exceptions to these rules - if your circumstances do not allow for this, you must drop this course. While working on a test, you may not use anything other than the spreadsheet program — no notes, previous spreadsheets, scrap paper, e-mail, smart phone, tablet, etc. See the note below on cheating.

HOW TO STUDY: It does not matter how you learn to answer the main question and the additional questions for each unit. You can work on your own, use the videos, ask a friend, get help from me, etc. The key is to make sure the end result is that you can start with a blank spreadsheet and answer a related question from scratch. In other words, study until you think you know how to tackle it, getting as much practice and help as necessary; then try it on your own, starting with a blank spreadsheet and creating a complete solution. If you run into trouble, go back.

Though the first few units appear easy, the level of difficulty increases quickly. Study ahead, and prepare to spend more time on this course as the term progresses. None of the test questions are purposely designed to confuse you, but there are two things that can be tricky if you are not careful:

1. Many questions sound alike. For a good example, look at the additional questions for unit four. There are seven, but all of them are variations of just two basic patterns. On a test, questions like these are easy to confuse. Read carefully to make sure you know what question you are answering.
2. Questions may also contain extraneous facts or numbers. That is not meant to throw you off, but rather to make the questions realistic. As in real life, not all information that is available will be relevant. It is part of your job to decide what is of use in answering the question.

Test questions may come from previous units. This means it is essential to review old units in addition to studying new ones. You do not need to review all questions from every unit to prepare for a test, but keep a list of the ones you find hardest and review those. It never hurts to try a test. There is no penalty if you do not pass, but since you may only take two tests per class meeting, it is essential to be prepared and review right before an attempt.

GRADING: There are 19 units in all. Your semester grade depends on how many you complete. Each Unit Test is worth three points. If you receive two or more points you must move on to the next unit. You need 32 points at the end of the semester for a C.

- F < 29
- D 29 - 31
- C 32 - 34
- C+ 35 - 37
- B- 38 - 40
- B 41 - 43
- B+ 44 - 49
- A- 50 - 52
- A 53 - 55
- A+ 56 - 57

Because this course does not have a final exam, there is no possibility of INC grade.

CHEATING: The paragraphs following this one give the standard Hunter policy on academic integrity, which naturally applies to this class. Just to be clear, though, it's fine to work together on unit material, to show each other how to solve problems and even to copy spreadsheets from a friend while you're studying and learning each unit. What's not okay, at all, is to get help of any kind when you're working on a test question. Your answers to test questions should be spreadsheets created from scratch entirely by you without reference to or input from anything or anyone else.

HUNTER COLLEGE POLICY ON ACADEMIC INTEGRITY: Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

ADA POLICY: In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772- 4857 or (212) 650-3230.

HUNTER COLLEGE POLICY ON SEXUAL MISCONDUCT: In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

- Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, or contacting the College's Public Safety Office (212-772-4444).
- All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link: <http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf>

COMMUNICATIONS POLICY: Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. Students are expected to find out about changes to the syllabus via Blackboard announcements and by email. The consequences of failing to keep up with my communications will be borne entirely by the student. Emails sent to me will be responded to **within one business day**. A discussion board will be opened, where students will be able to post questions regarding the material, in accordance with the rules stipulated therein. **Violations of discussion board policy will be penalized at a rate of one point per infraction.**