INSTRUCTOR: Jerry Wright
EMAIL: jerry.wright@seattlecolleges.edu
OFFICE: Room 217
PHONE: 206-934-4398
OFFICE HOURS:
  Tue, Wed, Fri 10:00-10:50
  Mon 1:00-1:50 in SAM 102
  or by appointment

COURSE WEBSITES:
www.seattlecentral.edu/faculty/jwright/math148 for assignments, announcements, and files to download
www.wamap.org for online homework (course id: 9997, enrollment key: 2718)

TEXT: Available for free online as a PDF file, or as a hardcopy at the Copy Center, BE 3105. The cost for a hard copy is about $14 for Project 3 and about $7 for Project 4.

PREREQUISITES: Math 116 with a 2.0 or better, and CSC 102-B (Excel course). If you have not met these prerequisites, see me right away!

REQUIRED MATERIALS: notebook, pencil, calculator, a way to store computer files (I recommend a USB flash drive), and access to a computer. (every SCCC student may use computers on campus. Go to www.seattlecentral.edu and find your login name under “Student Online Services”. Your password is the last 6 digits of your student id. number)

TEAMS: You will be assigned to a team of 2-4 people. (5 is too many) Together you will complete the projects and give a presentation on each of those projects. You will need to find time outside of class to work together.
COURSE DESCRIPTION:
This is the second course of a two-course series. (Math 116- Business Math, Math 148-Business Calculus) The main goal of this course is the same as Math 116: to equip you with the skills necessary for success after college. Employers look for people who can:

- communicate effectively
- creatively solve problems
- collaborate with colleagues on a project
- use computer software
- learn and think independently

You will continue to develop these skills as you complete two more projects. All the mathematics and computer skills you learn are directly related to helping you complete the projects. You will also work extensively with Microsoft Excel, Word, and Power Point. Although the projects are business-related, the skills learned apply to many other fields as well. The two projects are:

**Project 3:** Your team has just developed a new product and you are ready to put it on the market. You will be given information about the cost of production and demand for the product. How many items should be produced, and what should be the selling price of each item?

**Math Topics in Project 3:**
- Curve Sketching
- Mathematical Modeling
- Derivatives
- Optimization
- Integration

**Project 4:** Find the equilibrium point for your product, given information about the demand and supply elasticity of your product. Also determine the effect of taxes and subsidies on your product.

**Math Topics in Project 4:**
- Power functions
- translation of functions
- Newton's Method
- simple differential equations
- Exponential functions
ASSIGNMENTS, TESTS, QUIZZES:

Online Homework: Some homework will be completed online, on www.wamap.org. Each problem is worth 1 point, and each assignment typically will have around 20 questions. Due dates will be about once or twice per week, announced in advance.

Paper-and-Pencil Homework: There are exercises at the end of each chapter, and there could be additional exercises handed out in class. Complete these problems with paper and pencil, or by using Excel. For questions that require Excel, print out the work and attach it to the rest of the homework. Each assignment will be worth 20 points each. Due dates will be announced in advance.

Chapter Updates: After completing the regular exercises from the book, you will work on an aspect of the project. After doing the computations, fill out the "Chapter Update" for that chapter and turn it in. These can be handwritten or word processed. The Chapter Updates will be handed out in class, and they will also be available on the class website. There is a "Chapter Update" for each chapter. The teacher will grade these for accuracy, and take points off for any mistakes. If there are any incorrect calculations, make sure you figure out the correct answers... they are essential to successful completion of the project. You may resubmit your answers after re-doing them, but your original score will not change. Each student completes and turns in his or her own Chapter Update, although students are welcome to work with their teammates. Each Chapter Update is worth 10 points.

Quizzes and Tests: There will be 2 quizzes, worth 50 points each. There are 2 tests, worth 150 points each, one at the end of each project. There is no cumulative final.

Preliminary Report: At the beginning of project 3, your group will give a 5 minute presentation about the project. This will be your “first attempt” at solving the problem. This is worth 15 points, and the whole group gets the same grade.

Team Presentation: At the end of each project, each team will present their findings to the class in an oral presentation, using Power Point and presented in a professional manner. At the end of the presentation, each team member must be prepared to answer questions about the project. Each member of the team must be able to explain anything in the presentation. Each presentation is worth 80 points. Part of the 80 points is awarded to the whole group, and part of the 80 points are individual.

Written Report: Each student will write a report that is related to one of the projects. Choose one project for your report. It must be typed and mathematical formulas must be written using Equation Editor, or a similar mathematical typesetting program. This is worth 40 points.
**LATE HOMEWORK:** Online homework is due before 11:50 AM on the due date. If you submit the homework at 11:51, the computer gives you zero points, regardless of how many problems you completed. The project written report and oral presentations cannot be late. Late paper-and-pencil homework and late Chapter Updates are half credit.

**LATE HOMEWORK EXCEPTION:** Because of emergencies, illness, etc. Each student may turn in *one* Chapter Update and *one* paper-and-pencil assignment up to one week late with no penalty. If a Chapter Update or paper-and-pencil assignment is more than one week late, it is worth zero points. For online homework, you may use 3 “late passes” during the quarter. Each late pass gives you a 48 hour extension.

**MAKE-UP TEST or QUIZ:** If you miss a test or quiz due to illness, or some other unavoidable circumstance, then you will have *one* chance to make it up. The make-up test or quiz will be *much more difficult* than the original, so I strongly urge you not to miss any quizzes or tests. You may only make up *one* quiz or test during the quarter. Any other missed tests or quizzes will be zero points. All make-up quizzes and tests will be scheduled on a “test make-up day”, most likely the last day of the quarter. If you miss the day scheduled for making up tests, you will get zero points for the test you wanted to make up. There is no make up for the Project 2 test, since it’s on the last day of the quarter.

**EVALUATION:** (subject to change)

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GRADING SCALE:

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NOTE ABOUT GRADES: To earn a 2.0 in the course, you must:

- Earn at least a 65% average on the exams and quizzes and
- Earn at least a 65% average on the homework and
- Earn at least a 75% average overall.

If you do not meet all three of the above requirements, the highest grade you can receive is 1.7, regardless of your overall score.

ATTENDANCE: Attendance is mandatory. You must come to class everyday, on time, and stay until the end of class. If you miss class, you are responsible to find out what you missed.

WITHDRAWING: If you stop attending class, you must fill out the paperwork for withdrawing. See the registration office for details. If your name is on my list at the end of the quarter, and you haven’t been in class, you will get a 0.0.

ACADEMIC HONESTY: Anyone caught cheating will receive a 0 on the test or assignment and will be reported to the vice president of student development. Anyone caught cheating a second time will receive a 0.0 for the course. Examples of cheating include (but are not limited to) looking at another student’s solutions during an exam or quiz, sharing information during an exam or quiz, using unauthorized notes during an exam or quiz, copying another students homework and turning it in as your own work, or copying homework and making minor changes to make it look like you didn’t copy. To minimize temptation, students will have a random seating assignment on exam and quiz days, and there will be two versions of the exam or quiz.

PLEASE BE CONSIDERATE OF OTHERS. The following are not tolerated:
1. Talking while the teacher is lecturing or a student is asking a question.
2. Cell phones, beepers, or other disruptive noises.
3. Arriving late or leaving early.
4. Not paying attention during class.
5. Anything else that distracts others or yourself.
ADDITIONAL COMPUTER RULES:
1. No food or drink in class
2. No playing games, checking email, web-surfing, etc. during class.
3. No printing during lecture, and no last-minute printing on the day an assignment is due.

NOTICE TO STUDENTS WITH DISABILITIES:
If you need course accommodations, have emergency information to share with me, or require special arrangements in case the building needs to be evacuated, please talk with me. Also, contact special services in BE 1142.

IMPORTANT DATES:
Monday, May 25: Memorial Day, no school
Tuesday, June 16: Quiz or test makeup day
Thursday, June 18, 10:30-12:30: Last day of class (presentations and/or project 4 test on this day)