MAT-1080-J01

Instructor: Dr. Christopher Aubuchon   **Phone:**   635-1333

Office: Bentley 333
Email: Christopher.Aubuchon@jsc.edu
Webpage: http://aubuchon.jsc.vsc.edu/

What You Should Bring to <u>Class</u>:

- A <u>TI-83 (or TI-84) graphing calculator</u>: A graphing calculator is required for this course, and we will be using it regularly.

- A <u>three-ring binder</u>: This course involves keeping track of a lot of paper, so I would recommend a three-ring binder instead of just a regular notebook.

- We will also be using Excel. If you have a <u>laptop</u>, you should bring it to class with you.

Moodle: You can access Moodle through the Portal by going to https://portal.vsc.edu/. Your userid and password for the Portal and Moodle are the same as your network/email and Web Services logins. On the Portal, the course site is found under "My Moodle Courses." I will use Moodle to post activities/assignments and to provide you with links to anything else you will need for different assignments. I will also use Moodle as a way to communicate with you. This may be in the form of posting **Announcements** or by sending emails to the entire class. It is your responsibility to access your <u>JSC email account</u> on a regular basis.

Course Prerequisite: The prerequisite for this course is math placement of 3 or higher. Before beginning this course, you should already…

- be able to manipulate/work with negative numbers, fractions, decimals, and percents (a.k.a. do basic arithmetic);

- know the proper order of operations (PEMDAS) and how to apply it;

- be familiar with linear equations (graphing them, solving for one variable, slope, and y-intercept);

- be able to solve a simple formula for one of its variables if the other variables are known;

- be able to create a graph from a table of values of x and y or from a formula giving y as a function of (in terms of) x;

- have some basic graphing skills.

Course Goal: The general goal of this course is to help you become more skilled in applying simple math and logical reasoning intelligently in various situations in your profession and your daily life. The emphasis in this course is on using numerical information sensibly, rather than on developing theory or complex techniques and formulas which you may never use. In short, you should find this course to be very practical.

Course Purpose: This course serves two main purposes. 1) It counts as a fundamental skills mathematics course. 2) It satisfies Part I of JSC's Quantitative Reasoning Graduation Standard.

> **VSC Graduation Standard in Quantitative Reasoning:** Quantitative reasoning is the ability of students to perform effectively and confidently as citizens and as professionals in their chosen fields, in all contexts in which there arise problems and issues with a quantitative basis. Quantitative reasoning skills are essential to informed participation in public, private and professional debate and decision-making. The ability to understand and interpret quantitative information, evaluate the context in which it is presented, and draw valid and meaningful conclusions are the elements of such skills and underlie such participation. VSC graduates must demonstrate competency in quantitative reasoning through their ability to read, understand, interpret, and manipulate quantitative data.
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> **Upon graduation, VSC students will be able to:**
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> - **AP** (Appropriate Procedures): Select and perform appropriate procedures to solve mathematical problems arising in various disciplines.
> - **AI** (Accurate Interpretation): Interpret quantitative information accurately.
> - **EP** (Effective Presentation): Present quantitative information effectively.
> - **E** (Evaluation): Evaluate the reasonableness of quantitative conclusions.

Course Calendar and Topics: These topics were chosen based on conversations with all the departments on campus. These are the skills they would like their students to be able to do.

Day	Topics
1	Syllabus; Percentages; Math Autobio; Paying a Restaurant Bill
2	Bar Graphs and Pie Charts; Incarceration Rates
3	Fractions, Ratios, Proportions; Fibonacci; Golden Ratio/Mean
4	Average Rate of Change/Slope; Line Graphs; Weather over Time
5	Linear Eqns; Order of Operations; Exponential Growth & Decay
6	Avgs. and Weighted Avgs.; Descriptive Stats; Histograms
7	Scatterplots; Regression (Line of Best Fit); Interview?
8	Midterm Exam
9	Budgeting; Retirement Savings
10	Saving Accounts; Annuities
11	Credit Cards
12	Mortgages; Student/Car Loans
13	Percent change; Global Populations
14	Units and Measure and Conversions; Review for final
15	Final Exam

Course Assessments: I assess student knowledge and comfort with the course materials using (quantitative reasoning) assignments, writing assignments, Moodle quizzes, and a midterm and final exam.

Assignments: Assignments will normally be due at the <u>beginning</u> of class one or two class periods after they were handed out. Don't wait until the last minute to finish/start the assignments. An assignment may be turned in a little late, but up to 10% will be deducted. Any assignment turned in more than one class session late is an automatic **ZERO**. Please be aware that turning in a fully completed assignment late (but no later than the next class session) will likely result in a higher grade than turning in an incomplete assignment on time. Activities should be **neatly done and stapled.** If I can't read it, I can't grade it. I will be posting the assignments in Moodle. I may drop your lowest assignment grade before determining your final assignment average. Assignments are worth **45%** of your course grade.

Writing Assignments: There are three writing assignments in this class. Even though this is a math class, you will be graded on grammar, spelling, sentence structure, etc. The writing assignments are worth **6%** of your course grade.

Moodle Quizzes: You will have seven Moodle quizzes throughout the semester. They are designed to assess basic skills that are useful in all fields of study and in your life in general. You will have one to five days to complete each quiz. Do no wait until the last minute to do these. You may only submit your answers once. You should work on these quizzes alone, but you may get help from me. Content from the quizzes will be assessed on exams. The Moodle quizzes are worth **14%** of your course grade.

Exams: The midterm will be during class. Make-up exams will only be given under extreme circumstances **and only if** you have given me prior notification. The final exam is also scheduled during class. The midterm is **15%** of your course grade. The final exam is worth **20%** of your course grade.

Extra Credit: I do not provide individual students the opportunity to do extra credit. However, there may be a few opportunities when I give everyone in the class the chance to turn in extra credit. If you are worried about your grade, I highly suggest you avail yourself of these opportunities.

Final Grades: The letter grades will be assigned as follows:

A: ≥ 90 **B**: 80-89   **C**: 70-79   **D**: 60-69   **F**: < 60

A "+" will be given for grades ending in a 7, 8, or 9, and a "-" will be given for grades ending in a 0, 1, or 2. For example, an 87 would be a B+.

Attendance and Making Up Work: Attending class means arriving on time and **staying for the entire class period**. Arriving late or leaving early may be considered an absence. You should notify me **prior** to any absence, if possible. Otherwise you must contact me **prior** to the next class meeting to let me know why you missed, if you want to make sure that you will be able to turn in late work or make up work without penalty. This holds true only if the absence is excused. If you show up to the next class, not having spoken with me, any late work is just that – late; you will lose points or be given a zero. Missing more than **four classes** will likely adversely affect your final course grade. I consider class participation and overall attendance when figuring out final course grades that border two grades (like B+ and A-).

Getting Help: If you are having trouble, come to see me <u>ASAP</u>. Just stop by my office or make an appointment. When I am in my office, my door is usually open, and you are welcome to come in. You can learn a lot from working with your peers, so I encourage you to work together on assignments and while studying. Do **not** simply copy someone else's work. I can tell when you do this, and it won't help you when it comes time to take an exam, as all exams must be done **individually**.

Note to students with learning needs: Students with disabilities who request accommodations are asked to provide a certification letter as soon as possible. Students should contact Academic Support Services (DEW 114) to arrange for the appropriate letter to be sent or to ask any questions about access or disability accommodations.

Plagiarism Statement: Academic dishonesty is a serious offense. It includes any act of academic cheating designed to enhance one's own or another's academic standing, or to diminish one's own or another's academic standing. In particular, one form of academic dishonesty is plagiarism. Plagiarism occurs when the words or ideas of another are used without stating the source. This includes both using direct quotes from others without acknowledging the original author and paraphrasing the ideas of others without reference to the source. This also includes copying the mathematical work and/or solutions of other students. In this course, acts of academic dishonesty will be dealt with severely and can include failure on the assignment, failure in the course, dismissal from the course, and notification to the Academic Status Committee.

Personal Electronic Devices (cell phones, laptops, etc.): Please silence all personal electronic devices when you enter the classroom and put them away. Unauthorized use of any personal electronic device (for browsing the internet, checking email, texting, etc.) is both disruptive and disrespectful to me and others in the class. If there is an emergency situation in your life which necessitates that you keep your phone or other device on, please let me know. So as not to disturb the rest of the class, you can keep it on vibrate/silent and leave class quietly, if needed. There will be opportunities when using your devices will be allowed in class.

I will try as hard as I can to provide you all with a positive and safe learning environment in which you can be successful, but I'll need your help.

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Let's all have a great semester!

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