

# Johnson County Community College

Course Syllabus

Mathematics Division

**Math 120: Business Math**

Section 003 (CRN 82117)

Fall 2009

## INSTRUCTOR INFORMATION

Instructor:	Steven J. Wilson
Campus Phone:	913-469-8500, ext. 3784
Campus Office:	CLB 129
Office Hours:	Monday, 2:00-2:50 p.m. Tuesday & Friday, 11:00-11:50 a.m. Wednesday & Thursday, 9:00-9:50 a.m.
Campus Email:	<a href="mailto:swilson@jccc.edu">swilson@jccc.edu</a>
Web Page:	<a href="http://staff.jccc.edu/swilson/index.htm">http://staff.jccc.edu/swilson/index.htm</a>
Angel Page:	<a href="http://dl.jccc.edu">http://dl.jccc.edu</a>
Division Office:	CLB 235 (my campus mailbox is here)
Division Fax:	913-469-2537 (delivery to my mailbox is not instantaneous)

## COURSE INFORMATION

Credit Hours:	3
Prerequisite:	Grade of C or higher in Math 111 (Fundamentals of Math), or appropriate math assessment test score
Textbook:	<i>Business Math: Using Percents</i> , 3 <sup>rd</sup> edition, by Steven J. Wilson, available online in Angel, not yet published in paper form. (Optionally, you may use the paper 2 <sup>nd</sup> edition published by Kendall/Hunt, 2006, which is similar in most chapters. Any royalties received for the sale of the book on the JCCC campus go to scholarships through the JCCC Foundation.)
Supplies:	A financial calculator is required. We recommend either the Texas Instruments BA II Plus or the Hewlett Packard 10BII. A TI-84 is acceptable. You may not use computers (including laptops, pocket PCs, or PDAs), cell phones, or computer algebra systems (including TI-89s).
Description:	This is a course for the student who needs specific skills in mathematics to address business problems and business applications. Students will learn the mathematics involved in payroll, retailing, asset valuation, interest, finance, and the time value of money. Students will use a calculator and computer to solve a variety of applications.

Objectives:	<p>Upon successful completion of this course the student should be able to:</p> <ol style="list-style-type: none"> <li>1. Solve percent problems.</li> <li>2. Apply mathematics to payroll situations.</li> <li>3. Apply mathematics to retail situations.</li> <li>4. Apply mathematics to finance situations.</li> <li>5. Apply mathematics to the valuation of assets.</li> <li>6. Use a financial calculator and a computer to apply mathematics to business problems.</li> </ol>
Outline & Competencies:	<p>Available on the JCCC web site at:  <a href="http://www.jccc.net/home/course_outline/current/MATH120">http://www.jccc.net/home/course_outline/current/MATH120</a> .</p>

## NOTICES

Prerequisite:	<p>The majority of mathematics courses are sequential. Students must earn a grade of C or higher in a prerequisite mathematics course to progress to its subsequent mathematics course. In accordance with the assertion made on your billing statement, during the first two weeks of the semester, if a student is found not to have successfully filled the prerequisite(s) for this course, the student will be dropped from the course. He/She will be allowed to enroll in the appropriate lower level math course on a space available basis with an even exchange of tuition. After the first two weeks, students who have not met the prerequisite(s) will be dropped from the course with no refund of tuition.</p>
Academic Dishonesty:	<p>All JCCC math students are expected to comply with the Student Code of Conduct as written in the College Catalog. Students are encouraged to familiarize themselves with the topics listed in the code. Penalties could include an F in the class or an F on that particular assignment.</p>
ADA Compliance:	<p>JCCC provides a range of services to allow persons with disabilities to participate in educational programs and activities. If you desire support services, contact the Access Services office, (913) 469-8500, ext. 3521, or TDD (913) 469-3885. The Access Services office is located in the Success Center on the second floor of the Student Center.</p>

## COURSE REQUIREMENTS AND EVALUATION

Your **course grade** will be determined as follows:

TYPE OF WORK	Number	Points each	Total Points
Online Homework	31	5	155
Spreadsheets	4	20	80
Show-and-Tell	4	10	40
Chapter Reviews	7	0	0
Unit Exams	4	100	400
Final Exam	1	100	100
<b>TOTAL</b>			<b>775</b>

Grading Scale	
A	698-775
B	620-697
C	543-619
D	465-542
F	0-464

**Show your work** (or give an explanation) on any written work. Incorrect answers cannot receive partial credit without your accompanying work. Some questions may request a specific process, and no partial credit will be awarded without that particular process. Procedures and concepts are as important as answers in math.

**No makeups**, for assignments, unit exams, or final exam. However, exams may be taken early by prior arrangement, and projects and assignments may be turned into my office, my mailbox, or by email anytime on the due date.

**Low unit exam scores** will be replaced by the final exam score. Missed unit exams will also be replaced by the final exam score. For this reason, no unit exam ever needs to be made up. (Homework, spreadsheets, and show-and-tell assignments are **not** replaced by the final exam score.)

If you are **late to class**, see me at the end of class to avoid being counted absent.

**Extra credit** is available, and a maximum of 40 points of extra credit can be applied toward your grade. Extra credit possibilities include:

- Visit the professor's office and share your goals (5 points maximum).
- Monthly participation in Integermania (5 points per month maximum).
- One extra spreadsheet assignment (20 points maximum).

See the Angel course site for more information.

## TENTATIVE COURSE SCHEDULE

<b>Sections</b> (online 3 <sup>rd</sup> edition)	<b>Dates</b>	<b>Assignments</b>
2.1 Interpretation of Percents	8/17	
2.2 Percent Conversions	8/19	
2.3 Basic Percent Problems	8/21	
2.4 Percent Change	8/24	
3.1 Salaries and Wages	8/26	HW 2.1-2.4 due 8/27
3.2 Commission and Piecework	8/28	
3.3 FICA and FUTA	8/31, 9/2	
3.4 Income Tax Withholding	9/4	
3.4.1 State Withholding Tax	9/4	Show-and-Tell #1 due 9/8
3.5 After Taxes	9/9	
3.5.1 Effective Rates	9/9	
Review	9/11	HW 3.1-3.5 due 9/13
<b>Unit Exam #1</b>	9/14	
4.1 Profitability	9/16	Spreadsheet #1 due 9/16
4.2 Trade Discounts	9/18	
4.3 Cash Discounts	9/21	
4.4 Markups	9/23	
4.4.1 Converting Markups	9/23	
4.5 Shrinkage	9/25	
4.6 Markdowns	9/28	Show-and-Tell #2 due 9/29
Review	9/30	HW 4.1-4.6 due 10/1
<b>Unit Exam #2</b>	10/2	
5.2 Inventory	10/5	Spreadsheet #2 due 10/5
5.2.1 Inventory without Counting	10/5	
5.3 Basic Depreciation	10/7	
5.4 Accelerated Depreciation	10/9	
6.1 The Interest Formula	10/12	HW 5.2-5.4 due 10/13
6.2 Finding P, R, or T	10/14	Spreadsheet #3 due 10/14
6.3 Adding Interest	10/19	
6.4 Discount Interest	10/21	
6.5 Rates	10/23	
6.6 Applying Loan Payments	10/26	Show-and-Tell #3 due 10/27
Review	10/28	HW 6.1-6.6 due 10/29
<b>Unit Exam #3</b>	10/30	

7.1 TVM Variables	11/2	Spreadsheet #4 due 11/2
7.2 Lump Sum Deposits	11/4	
7.3 Savings Plans	11/6	
7.4 Savings Withdrawals	11/9	
7.5 Loans	11/11	
8.1 Total Interest	11/13	
8.2 Effective Rates & APR	11/16	HW 7.1-7.5 due 11/17
8.3 Rates of Return & APY	11/18	
8.4 Present Worth	11/20	Spreadsheet #5 due 11/20
8.5 Effects of Inflation	11/23	Show-and-Tell #4 due 11/24
Review	11/30	HW 8.1-8.5 due 12/1
<b>Unit Exam #4</b>	12/2	
Review	12/4, 12/7, 12/9	
<b>FINAL EXAM</b>	12/16	
<p><b>If classes should be cancelled</b> on the day of the final exam, you will need to make up the final exam. Check the course Angel site for possible options, then email your instructor.</p>		