Math 151 - Calculus I - Fall 2017

Instructor: Barbara Harras Email:Barbara.Harras@sfcc.spokane.edu Office: 18-212E (SFCC) Office Phone: 509-533-3676 Office Hours: Mon, Tues, Thurs, Fri: 9:00am – 11:30 am

Course Description: This is the first quarter of a three-quarter sequence in one variable Calculus and Analytic Geometry. The course will start with a brief review of the theory of functions (do be done on your own). The course will develop and study the idea of limits. This will include a graphical definition, computing limits, a precise definition of the limit complete with proofs of limits, followed by a study of continuity. The course will then delve into one of the main ideas of Calculus I, namely, derivatives. The next part of the first quarter of Calculus will be a study of Differentiation. This will include rules of differentiation such as the power rule, the product rule, the quotient rule, and the chain rule. Implicit differentiation will also be covered. This will be followed by a study of the derivatives of trigonometric functions. After studying the concept and rules of differentiation, applications of derivatives will be covered including maxima and minima, using derivatives when graphing functions, and applying derivatives to optimization problems. The course will also introduce the Mean Value Theorem, L'Hospital's Rule, Newton's Method, and Antiderivatives. The last topic in Calculus I is an introduction to Integration. The course will develop the idea of integration by approximating areas under curves, presenting the Fundamental Theorem of Calculus, and introducing the Substitution Rule for Integration.

Prerequisite: Math 141 and Math 142 with a 2.0 or better; or appropriate placement.

<u>**Text</u>**: <u>Calculus</u>, 2nd Edition, by Briggs/Cochran/Gillett Chapters: 1, 2, 3, 4, & 5</u>

Lectures: (Held on Mondays, Tuesdays, Thursdays, and Fridays @ 11:30 am). These will be face-to-face classes. They will be used to introduce the important topics and theorems from each section in the book as well as to answer questions on the online homework problems.

Homework: (Typically due at 11:59 pm on posted due dates). This is done online through MyMathLab. Students should use the access code that came with their bundle and register immediately! Note: The vast majority of students should be doing more practice problems either from the book or from MyMathLab. That is, the online homework is not sufficient to master the material!!

The MyMathLab Course ID is: **harras55629**. You will need this course ID and your personal access code to register in MyMathLab. The website is located at: <u>www.pearsonmylabandmastering.com</u>.

<u>REMEMBER: MATH IS NOT A SPECTATOR SPORT!!</u> Be sure to do your homework daily!

There are 12 online homework assignments. The first assignment covers Chapter 1. There will not be any lectures on Chapter 1, although questions will be taken on the online homework. The Chapter 1 online homework is worth 35 points.

There are 11 other online homework assignments, starting with Chapter 2. These will each be worth 15 points for a total of 165 points. As such,

Online homework is worth a total of 200 points or 25% of your grade.

<u>Chapter Exams</u>: (October 6th, November 2nd, November 21st, and December 7th). These exams are in-class exams with possible take-home portions. Exams are worth a total of 400 points or 50% of your grade.

Make-Up Exams: You are expected to take all exams <u>at the appointed time</u>. However, if an emergency should arise and you wish to take a make-up exam, you must call Mrs. Harras <u>prior</u> to the actual exam time and make the necessary arrangements. It you know ahead of time that you will miss class on a testing day, you must also make prior arrangements with Mrs. Harras in order to take a makeup exam. If at all possible, make-ups should be taken <u>within 48 hours</u> of the original exam. You will be allowed **only one** make-up exam during the quarter.

Final Exam: (December13th). This is a comprehensive exam with a 3 hour time limit. The Final Exam will be administered in the classroom. It is scheduled for Wednesday, December 13, 2017, from 11:00 am to 2:00 pm. **The final exam is worth 200 points or 25% of your grade.**

Grading:	The breakdown on the grading is	as follows:
	Homework (MyMathLab)	200
	Chapter Exams	400
	Final exam (comprehensive)	<u>200</u>
	Total	800

Note: Terminating your participation in this class without officially withdrawing will result in a decimal grade assignment. Certain circumstances may warrant a grade of Z (no grade, no credit). See the instructor in person to explain the circumstances and reasons for such a grade. Please note: Z grades are not given simply for non-attendance.

*Cheating or attempts at cheating:

- 1st offense: that assignment will receive a 0% and a student incident report will be filed.
- 2nd offense: the student will earn a class grade of 0.0 and a student incident report will be filed. Some examples of cheating include:
 - $\ensuremath{\mathfrak{S}}$ Copying or paraphrasing from someone or something and turning in the work as your own.
 - $\ensuremath{\textcircled{}}$ Attempting to look at other students' work during quizzes/exams.
 - $\ensuremath{\textcircled{\odot}}$ Using any unauthorized resource (cheat sheet, notes, phone) during quizzes/exams.
 - $\ensuremath{\textcircled{}}$ Allowing another student to copy your work.

This list is not complete... If you need further clarification, talk with your instructor and/or read your SCC/SFCC Student Handbook or the Rules of Student Conduct for SCC/SFCC.

<u>Calculators</u>: You will be allowed to use a scientific calculator on exams in this course. No graphing calculators will be allowed on exams.

Important Dates:

October 9, 2017:	Last day to drop a class and not have it show on your
	transcript
November 13, 2017:	Final day to Withdraw from any class
December 13, 2017:	Final Exam

Grade Scale:

Grade Scale: Your grade will be calculated as follows:

93 92 91	4.0 3.9 3.8
63 62	1.0 0.0

Dividing the points you have by the points possible will determine your percentage. Using your percentage, your grade point for the class can be determined using the scale to the left. A "Z" grade will only be given on an individual basis and in extenuating circumstances; it will not be given as an alternative to a 0.0, if you did not meet the prerequisites for the course, or failure to withdraw by the specified date. A "Z" if issued, it will never be changed back to a decimal grade and must be requested <u>before</u> the end of the quarter.

In general, if your overall percentage in the class is x%, then your decimal grade is determined by:

If $x \ge 93\%$, your grade is 4.0.

If x < 63%, your grade is 0.0.

Otherwise, your decimal grade is determined by: (x-53)/10.

ADA Compliance:

- Community Colleges of Spokane is committed to providing accommodations for qualified individuals with disabilities in a timely and effective manner. To request a reasonable accommodation, students must be registered with the campus Disabled Student Services (DSS) office. Accommodations will be made based on eligibility determined by Disabled Student Services. Services can be requested at any time during the quarter. Requesting services well in advance will help to ensure that resources are available when needed. If this applies to you, contact Disability Support Services in Building 17-201, phone 533-4166. Information about disability will be regarded as confidential.
- **Note:** In order for learning to take place, students must feel safe; this safety is due **all** students, not only those who share your values and beliefs. For this reason, courtesy, thoughtfulness, and acceptance are essential in our discussions in and out of the classroom. Acceptance should not be confused with agreement; one need not agree with a person to listen, and one must listen well in order to disagree respectfully. Every student in this course has a voice and so deserves the courtesy of attentive listening and the freedom to express diverse ideas.

Caveats:

- Every attempt will be made to follow the above procedures and the given schedule, but they may be changed in the event of extenuating circumstances.
- The instructor reserves the right to make changes to the syllabus and will notify students of those changes in class.
- Please turn off cell phones during class.
- Please **be on time** for class. If you must be late or leave class early, please let me know ahead of time.
- Please **no eating** during class.