Name: Blair A Seidler (as it appears in Canvas)

Preferred Name: Blair (how you would like me to address you in class)

Pronouns: he/him/his (e.g. she/her/hers, he/him/his, they/them/their, etc.)

Calculus 251:C3 Quiz #0 - 5/25/2020

Instructions. This quiz is a chance for you to provide me with some information which will help me teach you more effectively. It is also an opportunity for you to practice scanning and uploading PDF files into Canvas on an assignment which will not impact your grade. You may either print the quiz, write on it, and scan that OR do all work on your own paper and scan that. If you are working on your own paper, please number each answer clearly so I know which question it is for. You do not need to copy the questions.

IMPORTANT: Canvas will only accept a single PDF file, so you should make sure that your answer to this quiz takes up at least two pages and figure out how to upload that as a single file. This will be an important life skill for this course!

(1) Are you aware that you are expected to read sections 12.1 and 12.2 of the textbook before the first class? Are you aware that there is a reading guide posted on the course web page to assist you as you read? (Yes answers to both questions strongly preferred, but be honest!) Yes and yes.

(2) Find the derivative of the function $f(x) = e^{\cos^2 x} - \ln(4x-3)$

$$f'(x) = e^{\cos^2 x}\left(2\cos x(-\sin x)\right) - \frac{1}{4x-3}(4)$$

$$= -2\sin x \cos x\, e^{\cos^2 x} - \frac{4}{4x-3}$$

(3) Evaluate $\int_1^9 \sqrt{x}\,dx$.

$$\int_1^9 \sqrt{x}\,dx = \frac{2}{3}x^{3/2}\Big|_1^9 = \frac{2}{3}\left(9^{3/2} - 1^{3/2}\right) = \frac{2}{3}(27-1) = \frac{52}{3}$$

(4) Evaluate $\lim_{x\to -3} \log_5(-6x+7)$. Justify your answer.

$$\lim_{x\to -3} \log_5(-6x+7) = \log_5(-6(-3)+7) = \log_5 25 = 2$$

$\log_5(-6x+7)$ is continuous at $x=-3$

Answering any or all parts of the questions on this page is completely optional, but the more information you give me the better I can tailor the course to meet your individual needs. All answers will be kept completely confidential.

(5) Are you a Rutgers student? If not, what school do you attend? What year do you expect to graduate?

Yes, 2023 or 2024

(6) What is your major? If you are undeclared, what major(s) are you considering?

Mathematics (PhD program)

(7) When did you take Calculus II? When? At what school? What grade did you receive?

Fall 1987 (yes, really), at Columbia, C (yes, really)

(8) How comfortable are you with polar coordinates/integration, integration by substitution, integration by parts, and integration by trigonometric substitution?

Very comfortable with integration by substitution and by parts. A little rusty on the other two TBH.

(9) Have you taken Calculus III/Multivariable Calculus previously? When? At what school? What grade did you receive?

Yes, Spring 1988, Columbia, C+ (at least it was better than calculus II!)

(10) What are you hoping to get out of this course? (The answer "a passing grade" is allowable, but dull.)

Mostly, I am hoping that my students have a positive experience and get what <u>they</u> need out of this course.

(11) Is there anything else that you would like to tell me about yourself? This can be something that will allow me to meet your needs more effectively as your instructor or just something that you think I will find interesting/amusing/amazing about you.

(1) I have my wife check the physics problems to make sure I am using appropriate terminology. She teaches HS Physics.

(2) If it sounds like I am quoting a movie, I probably am.

(3) One of my previous careers (I have had several) was as a professional card player. (Bridge, not poker or blackjack)