Math 2574H

Honors Calculus IV Spring Semester 2019

Assignment 1 - Due Thursday 1/31/2019

The first quiz will be held on this date, on the material of the exercises listed below.

Exercises from chapter 1 of Edwards and Penney:

1.1: 3, 15, 17, 19, 28 1.2: 3, 11, 25, 27, 36 1.3: 1, 22, 28 1.4: 1, 5, 23, 26, 27, 33, 49

Assignment 2 - Due Thursday 2/7/2019

Exercises from Edwards and Penney:

1.5: 1, 5, 7, 15, 25, 33, 37 1.6: 10, 14, 22, 24, 32, 36, 48, 71

Notes:

Probably not everyone attending this class has done Calculus III already (even though this is Calculus IV). We need to know about the chain rule and partial derivatives, which are done in Calculus III. You should not buy a textbook on multivariable calculus, because these are expensive. It may work to direct you to some things online. I got the links below from Google.

Partial derivatives are described in: https://www.math.hmc.edu/calculus/tutorials/partialdifferentiation/ http://tutorial.math.lamar.edu/Classes/CalcIII/PartialDerivatives.aspx

The chain rule: <u>https://www.math.hmc.edu/calculus/tutorials/multichainrule/</u> <u>http://tutorial.math.lamar.edu/Classes/CalcIII/ChainRule.aspx</u> https://www.youtube.com/watch?v=NircIRdNUrE

I personally found the video irritating. It is not in the spirit of the matrix approach I was teaching last semester. If you find something better, let me know!