Source: [KBhMATH401SubIndex]

1 | General Aftercare

- · Assignments on Canvas (preferably a PDF)
- · Collaborate as much as possible
 - Learn and share ideas together
 - Collaborate well together
- · Nikhil TAing!! ;)
- ~30 mins of HW/class period. time the assignments and write it down on top.
- Tests are take home, duh (COVID NOISES!!), and are Assigned Wednesday, Due on Monday)

Expectations * A notebook should be maintained + some solved sample problems * Homework assigned each class * HW graded for Habits of Mind rubric * One graded assignments every two weeks or so

Textbooks: Screen Shot 2020-08-24 at 1.11.22 PM.png

2 | Knowledge Points This Semester

- · Limits
 - Eplison delta proofs
 - · Limit laws
 - Evaluating functions
 - Prove limit laws
- Continuity
 - · Types of continuity + discontinuity
 - · Define continuity
 - · Immediate value theorem
 - Application +
 - Boundedness
- Derivatives
 - · Limit definition of derivatives
 - · Define differentialibity
 - · Understand how the first and second order derivatives
 - · Talor Series approximations
 - L'Hospital rules for limits w/ indeterminate rations, indeterminate products, indeterminate products
- a final project

Everything you use on tests must be derived by you.

=> Make test corrections + consider reassessing (immediately) if necessary + meet with instructors & TAs during *Wednesday lunch* or *Friday tutorial*

3 | So, what is Calculus?

- · The analysis of change
- · Study of curves
- · Study of rate-of-change

Rate of change

We have seen this before: Slopes!

The rate of change tells you the relation in the trend of the graph. Think! Negative and positive functions!

Definition 1 · First order rate of change How much is the function changing over a period of time?

Definition 2 · **Second order difference** How much is the rate of change changing over time?