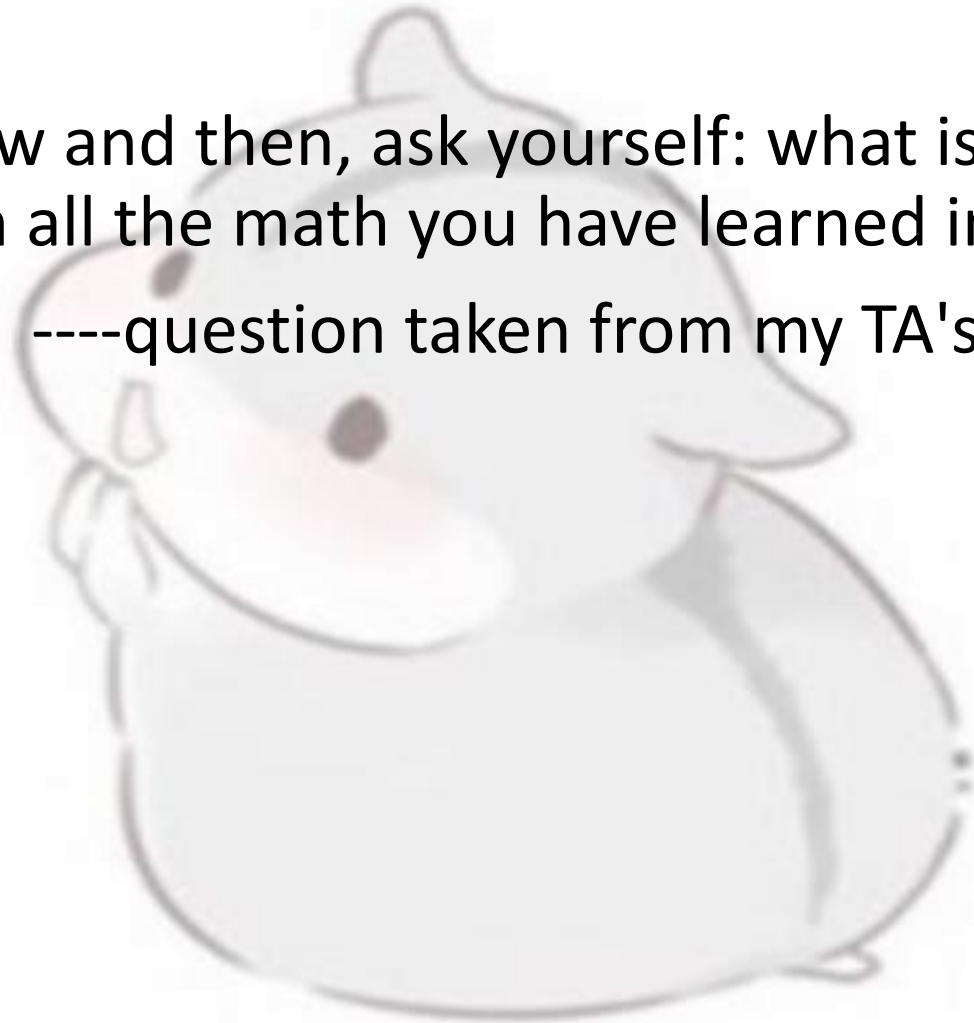# Welcome to VV186!

Hamham

2021/8/4

About me

- Major in ECE
- Nickname: Hamham/Hamster
- SJTU Piano Association
- JI Relaxation room(lbl 320)
- Tech department in Student Union
- Wechat & QQ
- email: niyinchen@sjtu.edu.cn || qqniyinchen@163.com
  - but...sometimes I would be careless...please remind me if I don't reply in 24 hours.

A simple question¿

- Every now and then, ask yourself: what is "math" based on all the math you have learned in your life?

----question taken from my TA's TA's slides

Where is this course?

- **Engineer Foundation**
- VV186-VV285-VV286
- VC210-VC211
- VE203
- VP141-VP241
- VP160-VP260

- VG100
- VG101/VG151

- …

- **Academic Writing**
- VY100-VY200

- **Program Subject:(ECE)**
- VE280
- VE215-VE216-VE311
- VE270
- …

- **Core Elective:**
- VE281
- VE373
- …

- …

What is in this course?

- VV186 - Functions of a Single Variable
  - Basic Tools & Definitions
  - Real Functions & Convergence & Continuity
  - Differential Calculus in One Variable
  - Integral Calculus in One Variable

- VV285 - Linear Algebra and Functions of Multiple Variables
  - Linear Algebra
  - Differential Calculus for Mutiple Variables --- integration bee
  - Integral Calculus in R^2 and R^3

- VV286 - Ordinary Differential Equations
  - Differential Equations of First Order
  - …

applications

Integration Bee!

But....

- How to learn well in VV186?

General Suggestions

- Do **attend** every class: Early eight is hard but worthwhile!

- Follow the lecture slides - **notations and definitions**

- Pay attention to the concepts

- Get general idea of each proof instead of reciting it

- Check the course material at least every two weeks
    - Try to do the DIY part
    - Concept checking Paper

- Keep fighting : You're not alone
    - Teammates & Classmates: learn better by teaching others
    - Piazza : raise questions and answer other's questions

Team Work Demo¿?

- A: I think the solution to this problem is applying ... theorem and get......

- B: Wow! dalao!

- C: Bow to dalaos!

- A: Let's discuss our next assignment tomorrow.

- B: ...(no respond)

- C: ...(no respond)

- A: I'll do the exercise 1-2.

- B: I do the exercise 3-4.

- C: Then I do 5-6.

- Please proactively interact with your teammate!
- If you find your teammate "dead", please contact us!
- Please don't rely on your teammate too much!

About RC & OH

- RCs are **not mandatory**.
  - If you think you have a good hold of the course contents, you can skip the RCs.
- RCs usually consist of these parts:
  - Recap of lecture contents
  - Exercises (not to difficult)
  - Solution to some assignment problems
  - Extra contents (depend on me hhh)
- Discussions are **encouraged** in the RCs, as long as you don't bother other students.
- Feel free to interupt me at anytime! Sometimes **prizes** for active interactions!
- Try to use **English** during RCs.
- OH is for you if you have any question! Try to listen to other classmate's question!

Assignments

- Do assignments yourself, don't rely your team mate too much

- Hand in assignments **on time, A4 paper** suggested.

- **Don't do too much** extra exercise, but spend time on assignments

- Pay attention to some important result in assignment, they might appear or (at least be useful) in the exam!

- Pay attention to your **writing**
  - bonus for neat and cleaning writing/well latex-typed
  - up to 10% deduction for poor writing
  - There might be a upcoming exercise for how to write proof [depends on Horst]

- Cite the source properly

- Write **your name, student number and team number**!!

Recommended reference books

- M. Spivak, *Calculus*, 3rd Edition, Cambridge University Press 2006.

- K. Jänich, *Linear Algebra*, Springer 1994. https://link.springer.com/book/10.1007/978-1-4612-4298-7

Reference

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