

INTRODUCTION TO ENGINEERING





- GRIT
- Time Management
- Procrastination
 - Manage Energy
- Study Strategies
- Test Taking Tips

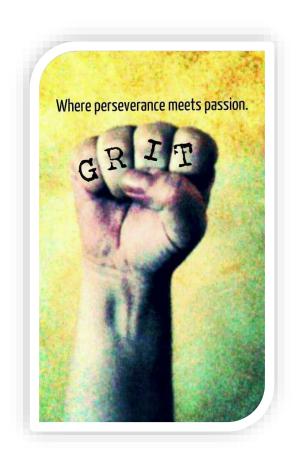






GRIT

- "Capacity to dig deep and do whatever it takes— even sacrifice, struggle, and suffer— to achieve your goals"
- "有能力深入挖掘并做任何事情——甚至牺牲、奋斗和痛苦——来实现你的目标"
- Single most powerful predictor of student success- in and beyond school







GRIT

- Growth- Tendency to see fresh angles on situations and view success as a matter of effort, more than talent or smarts
- Resilience 达观- Bouncing back when you fall, and having a support network so you don't fall as far
- Instinct 本能- capacity to pursue the right goals in the most efficient and effective ways
- Tenacity 初性- Sheer persistence, relentlessly work at whatever you choose

Decision making

Determination





Time Management

- Develop a Gritty Mindset
- Time Management Strategy
 - Resources make sure you have the tools you need to complete the work/assignment
 - Routine- set schedule, how you complete the work
 - Resilience- respond effectively when things go wrong







Avoid "Assignment Amnesia" 'Homework forgetfulness'

- Use a Calendar
 - Paper Planner
 - Web-based
 - Phone
- Daily (task based)
- Weekly/Monthly (assignments/tests/appointments)









Procrastination

'delaying/postponing something

- Avoiding/Delaying Starting a Task
 - Procrastination occurs when we are confused, afraid, or burdened by an assignment
 - Build milestones to combat procrastination
- Procrastination can generate undue emotional, physical, & social stress



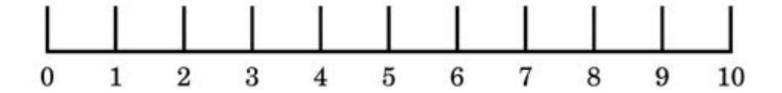






Question: Procrastination

• On the scale of 1 (very little) to 10 (very high) your typical level of procrastination when it comes to schoolwork.







Manage Energy

- Time is only valuable if you have the energy to use it WELL
- Physical and mental stamina, strength, sharpness, and focus
- Circadian Rhythm (*sleep/wake cycle*) your personal highs/lows in sharpness throughout the day
 - Pay attention and use this to your advantage –
 Schedule classes & studying when sharp
 - Take breaks, run errands, etc. during lower periods
- Energy Refill Activities







Manage Energy

- Energy Refill Activities
 - Go outside
 - Laugh
 - Sleep
 - Socialize
 - Eat healthy
 - Move (exercise)
 - Stretch
 - Drink water





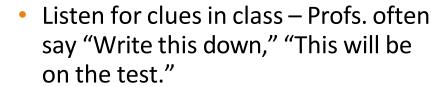
Studying Strategies

When?

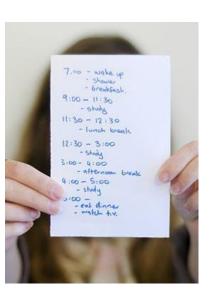
- Study for tests early Short blocks of time – 1 hour
 - In-between classes
 - Unexpected free time
 - Peak performance time

What?





- Readings & Assignments
- Look at course objectives





Question: Study Habits

 Cramming 4 hours the night before the test is proven to yield better test results than studying in increments of 30 minutes to an hour in days leading up to the test.

A.True

B.False





Question: Studying for tests

- Where can you look for clues on what material to study for tests?
- A. In the course objective found in the syllabus
- B. Ask the instructor during office hours
- C. Listen for the instructor to say something like, "this will be on the test."
- D. All of the Above





Studying Strategies

Where?

- Have a study location (or a few)
- Location where you can focus free of distractions
 - Quiet
 - Light Background Noise



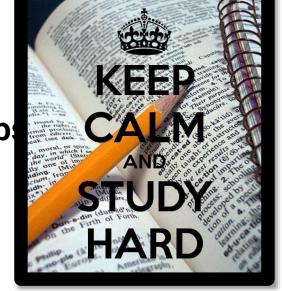






Active Studying

- Study to LEARN not to just REMEMBER
- RE-Reading Text & Notes
 Research shows it's not that effective
- Research Suggests ACTIVE Studying
 - Rewriting Notes or Summarizing Notes
 - Explain Concepts to someone else Study Group
 - Make Visual Representations
 - Reworking Problems
 - Predict Test Questions







Question: Active Studying

- Active studying is the most effective way to study. Which of the following is an example of active studying?
- A. Rereading text
- B. Rereading notes
- C. Rewriting notes
- D. Explaining concepts to someone else who is not familiar with the topic
- E. C and D





Study Groups

- Suggested no more than 4-5 people
- Discuss expectations
- Access to more notes
- Other perspectives/ explanations







ENGINEERING, ARCHITECTURE AND TECHNOLOGY

Test Taking Strategies

- Get your body ready
 - Eat, sleep, and good attitude
- Set the stage
 - Pack supplies- pencil, calculator (with backup batteries), watch
- Test Time
 - Look over the ENTIRE exam first (look at allocation of points and types of questions)
 - Read the directions on the first page
 - Work easy questions first mark the unanswered questions and come back
 - Answer all questions (credit is credit....even partial)
 - Leave 5-10 minutes to check your work









Question: Take Home Tests

- Which of the following statements is true of take home tests?
- A. You do not need to prepare
- B. They are typically more difficult and time consuming than a regular test
- C. You are free to use any resource
- D. You are allowed to give help or receive help from other students in the class









Thank you