How to Earn an "A" in a College Course
I. Introduction

A. College is not easy

1. There is a large volume of difficult material that you must know
2. Each discipline has its own vocabulary
3. It takes discipline, hard work, and dedication to be successful
B. Memory processing

- Outside stimuli
  - Sensory receptors
  - Afferent sensory input
  - Temporary storage in cerebral cortex
    - Information selected for transfer
    - Information transfer influenced by:
      - Excitement
      - Repetition
      - Association of old & new information
  - Forget
  - Information permanently lost
  - Short term memory
  - Long term memory
C. Two things you must do

1. Understanding
2. Recall
II. Understanding

A. Attend all lectures

1. The professor tells you what you need to know

2. Most exam questions come from lectures

3. If you must miss, get a copy of the notes and listen to a tape
B. Take complete notes

1. Write it down even if you understand it during lecture
2. If it is not written down you will forget it
3. Stay focused
4. Do not second guess your professor
5. Ask questions!
C. Review and rewrite your notes as soon as possible

1. Check your notes for accuracy and completeness
2. Review material that you might not understand
3. Correct obvious mistakes
4. If possible, rewrite and review your notes before you go to sleep
5. Underline sections that were emphasized
6. Mark sections that are confusing
7. Put space between separate ideas
8. Write on one side of the paper
9. Put the notes in an outline format
10. Read the textbook
11. Test your understanding with the review questions
III. Recall

A. Introduction

1. Understanding information is insufficient
2. You must be able to recall specific information
3. Requires memorizing specific information
4. Memorization is based on repetition
5. If you repeat something often enough, you will commit it to memory.
6. Start 4-5 days prior to the exam.
7. Goal should be to waste the least amount of time and still learn the material.
8. Principles of memory

i. Pay attention while you're learning
ii. Get it right the first time
iii. Fully understand the material
iv. Understand the significance of the information
v. Involve your ego
vi. Associate new material with old material
vii. Organize the material, makes it easier to memorize
viii. Outline your notes so you can learn them in smaller units
ix. Reinforce what you have learned through repetition and usage
x. Cover up the information you are studying and quiz yourself
B. How to memorize
1. Human mind recalls by association
2. Condense information into an outline of key words and phrases
3. Go through one lecture and underline the most important sections
4. Condense the underlined material into an outline
5. Use the outline as a guide to recite your notes
   i. Read the outline and then the notes
   ii. Cover your notes and try to use the outline to recite your notes
   iii. Go back and memorize your notes again if you are unable to recite them
Example

- Diffusion
- Physical process
- Law of diffusion - particles move from an area of greater concentration to one of lesser concentration until equally distributed
- Individual molecules move randomly
Diffusion

- Physical process
- Law of diffusion - particles move from an area of greater concentration to one of lesser concentration until equally distributed
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6. Memorize the outline
7. You are counting on your outline to retrieve information from your notes
8. Repeat the above process for the next lecture
9. When you start studying again, review your outlines
10. If you are unable to recite your notes, go back and repeat the above process
11. Test yourself to practice retrieving the information
IV. Other Helpful Hints:

A. Get a good nights sleep before the exam
1. An "all nighter" is extremely ineffective
2. You will go to the exam tired and unable to think
3. If you do, do not go to sleep before the exam
B. Avoid studying at the last minute

1. Go into the exam with a relaxed, open mind
2. Avoid swapping questions with your friends just before the exam
3. Review of your marginal notes on the morning of the exam
C. Human attention span is about 20 minutes

1. Study when you mind is clear
   i. Study until you become weary
   ii. Then study for five more minutes
   iii. Take a short break
   iv. Start studying again when your mind is clear

2. Study under conditions that permit you to concentrate
D. Study groups

1. Work, do not socialize
2. Be careful not to develop a group memory
3. Look up missed questions
4. Groups can come up with more potential questions and better answers
5. Best way to learn is by teaching others
6. If the class has SI sessions, attend them
E. Tie new information in with old information

1. Write difficult concepts down in your own words

2. Use your words to learn the professor’s words

3. Use mediators to memorize
   - A key word, phrase, or concept used to link words or ideas
F. Use different sensory modalities when studying

1. Multiple sensory input stores information in more places
2. Read your notes out loud
3. Write out definitions or key words
G. Eating

1. Eat several hours before an exam
2. You want your glucose level up
3. You want your blood going to your brain not your digestive system