

## TOOLS: STRATEGIES FOR EFFECTIVE STUDYING

How to approach a course when you have to...

### Memorize

A few courses require you to memorize specific factors or rules (e.g., language courses). Science courses such as Anatomy also require a large amount of information to be memorized, alongside understanding concepts.

#### How should I approach these courses?

Because memorizing is very intensive work and our brains can't take in too much at one time, it's better to spread the learning out.

1. **Swiss Cheese Method:** nibble away to make holes in the material rather than gobbling it up all at once.
2. **Distributed Learning:** Spend a short time (20-30 min) learning one thing and then take a break. Come back later and review what you've learned in the previous session. Add something new. Remember: short sessions with lots of repetition.
3. **Chunking & Making Connections:** It's important to make connections among all the details so that they are easier to remember. For example, in Biology you might make a chart of all the hormones and proteins covered in the course with the main characteristics of each one.

### Understand Concepts

Many courses, especially in social sciences, require you to understand concepts and are not about memorizing information to regurgitate on tests. Instead, they are about reaching a deep level of understanding of the concepts. To reach this level, you have to see the big picture.

#### How should I approach these courses?

Think of your course as a giant jigsaw puzzle and each lecture, each reading is a new piece of the puzzle. Your job is to fit all the pieces together.

# LEARNING

## DEVELOPMENT & SUCCESS

1. Integrate material from lectures with information from the text and additional readings.
2. Organizing information around major themes and concepts (identified by the instructor and/or in the textbook). Make mind-maps, charts and visual outlines showing how the ideas fit together. The visual needs to show how important details form a concept and how a concept fits with the course.
3. Test questions often ask you to **evaluate, compare** and **apply** the concepts. So, prepare study questions which reflect these ways of thinking. Use concrete examples to clarify.

### Solve Problems

Many courses in Science, Engineering and Commerce require problem-solving. Course material is best learned by **doing problems**. Spending time just reading your textbook is not the best use of your time. Working through the problem and then reading the theory often helps to clarify it.

#### How should I approach these courses?

1. Read your textbook like you're on a treasure hunt! Familiarize yourself with the chapter, then start on the problems at the back of the chapter. When you get stuck, go back to read the pertinent parts of the text. By doing so, you get the problem done AND understand the theory.
2. Organize problems around concepts. Each problem is not unique but rather part of a family of problems where each procedure is a variation on the concept. To help you understand discreet differences among procedures, use maps or flow charts to show how the various procedures connect to the concept.