

Structuring Information

To start thinking about structure, begin by comparing two images:

We are setting up a business office, and we are going to do it twice!

Office #1: *We have no money for furniture -- just a bare office. Every piece of paper that the office generates is placed into one of the back corners of the office. The pile of paper grows higher and higher. Each time you need to find something, you have to sit on the floor by the paper pile and sift through it.*

Office #2: *We invest in filing cabinets along the whole back wall. We label all of the drawers in the cabinets and put in dividers. Each piece of paper coming into the office has its place. When you want to find something, it's in its expected place and is easy to find.*

Relate these two images to two ways you can store academic information:

1. You can throw all of the facts that you learn into a heap in the back corner of your long-term memory; **OR**
2. You can structure the information into a filing system as it arrives, making it easier to retrieve information when you need it.

It is clear that structuring the information is the best strategy! Here are some ideas for ways to structure your academic information and, in doing so, become a more efficient and successful student.

Make Good Use of your Course Outline:

Your course outline is your guide to the course; it provides an outline of the major themes to be covered.

- **Weekly** - Take a careful look at the course outline before each class to see what topics have been completed and what is about to be covered. These topics provide a skeletal framework of the course and provide a road map to guide you. If you are as familiar as you need to be with the course outline, you will be able to recall the major topics from memory.
- **Exam Time** - Use your course outline to help you plan your review; assign a specified amount of review time to each section of the course depending on its relative importance. You can also use the outline to test whether you can recall the details under each section or major topic from memory.

Pay Attention to Headings:

Headings represent the main ideas to be learned in a course; all important details relate to these headings.

- Texts are usually structured into blocks of information, with each block having its own sub-heading. Good sub-headings will be descriptive or informative and reflect key ideas of the chapter. Many students simply skim over the headings as they read text chapters, but that is a big mistake! Focus on them sufficiently so that you'll recognize if one shows up on the test - they often do!
- When you take your own notes from a lecture, model them after the way in which textbooks are structured. Include a title for each lecture and sub-headings throughout. If your instructor has not given you a title in class or on your course outline, ask yourself, "What did we cover today?" and then add a title to your notes. As you read over your notes after class, look for the blocks of information and add appropriate sub-headings.
- In situations where you may be filling in notes beside PowerPoint slides you've printed off the web before class, spend some time either before or after class creating an outline of the main topics and sub-topics from these pre-made notes. It can be difficult to see the structure of a lecture when information is presented on pages and pages of squares that look very similar to one another; it can be a challenge to see where one topic ends and another begins without making an outline.
- Finally, pay particular attention to the HIERARCHY of headings in your text and lecture notes. What are the overarching major themes? How is each major theme divided into sub-themes? How many layers of information are there? Label the different layers of information in your textbooks and in your lecture notes using roman numerals (I, II, III); arabic numerals (1,2,3); or letters (A,B,C).

Listen and Watch for Clues and Signals:

Textbook authors and course instructors provide many hints about what information students should learn.

- In a textbook, some information will stand out giving you a signal that it is a "main" idea. Examples of typical signals include: text highlighted in **bold** or *italic* fonts; questions posed in the margin; diagrams, pictures, tables with accompanying captions; an inset box; or a glossary of terms. Some students skip over these types of information, but this is a mistake. What this text structure is saying to you is, "Pay special attention to me!" Information highlighted by text structure is likely to show up in test questions.

LEARNING

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- In class, listen for signals from your instructor such as repetition of an idea or concept, or even overt messages, such as, "This is very important!" If certain words or phrases are emphasized on PowerPoint slides, overheads, or on the board, make this clear in your own notes. When studying, think about where these details fit in the broader course context.

Get to Know the Specific Language and the Types of Main Ideas in Your Discipline:

When you are "tuned in" to a specific course, you think like someone in that field and you are knowledgeable about core vocabulary in the discipline.

- Watch out for concept names in both textbooks and lectures. Know the key terms and their definitions, and be able to generate examples to prove to yourself that you really understand the ideas they represent.
- In each course that you take, there will be other types of main ideas that you can learn to recognize and track. Once you "tune in" to a specific course and think like someone in that field, you will recognize the pattern of main ideas more readily. Consider these examples:
Thinking like a psychologist - In psychology, one key type of main idea is the "conclusion" which summarizes each study.
Thinking like a geographer - In geography, many "models" have been developed to explain the complexity of the spatial world. These "models" are a key type of main idea in the discipline of geography.
Thinking like a biologist - In biology, it is common to study a "system" such as the respiratory system; in each biological system, key types of main ideas may include the component parts and the function of each part.