Notetaking
In class, from textbooks, for review
Taking notes in class

WHY?
- Stay engaged in learning
- Reduce study time
- Store learning in long term memory

HOW?
- Preview material before class
- Pay attention
- Focus on key points
- Ask questions
- Review and recite
Taking notes from texts

- Scan material first.
- Read and note main ideas and key terms. Leave white space between concepts.
- Close the book and write your own explanations of main ideas and definitions for key terms.
- Check your explanations/definitions and add or correct as needed.

Rewriting or highlighting the text won’t help you learn. The only proven method of learning from text is to put the material in your own words and check your understanding.
**Cornell Method**

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>Key</td>
<td>Points</td>
<td></td>
</tr>
</tbody>
</table>

- **Summary**
- **Recall column**
- **Notes column**
**Cornell Method Example**

<table>
<thead>
<tr>
<th>Phylum</th>
<th>Arthropods</th>
</tr>
</thead>
<tbody>
<tr>
<td>subphylum</td>
<td>Chelicerata</td>
</tr>
<tr>
<td>Chelicerata examples</td>
<td>2 parts: prosoma, opisthoma</td>
</tr>
<tr>
<td>Prosome &amp; Opisthoma</td>
<td>sensory, feeding, and locomotor tagma</td>
</tr>
<tr>
<td>Chelicerae</td>
<td>pincerlike or chelate, first pair of appendages</td>
</tr>
<tr>
<td>Pedipalps</td>
<td>second pair of appendages, used for sensory purposes</td>
</tr>
</tbody>
</table>

**Phylum arthropods is made up of subphylum chelicerata. Subphylum chelicerata is characterized by two parts called prosoma and opisthoma. The prosoma and cephalothorax are sensory, feeding, and locomotor tagma. The chelicerae is the first appendage and refers to the pincerlike. The pedipalps are the 2nd pair of appendages, and they are used for sensory purposes: feeding, locomotion, and reproduction.**

*John Q. Student*
*Biology 101*
*April 2, 2000*
Freestyle method

- You can’t possibly write everything the speaker says. Focus on listening actively and writing key concepts and key supporting points. Write everything that’s on the board or projector, whether it fits with your notes or not. Use the top of the page or margin to note disconnected ideas.
- Develop your own shorthand for commonly used words and terminology in your field. Write a key at the front of your notebook and use it consistently.
- Leave lots of blank space so you can fill in, clarify, expand later.
- If you lose focus or don’t understand a point, make a notation, leave blank space, and restart notetaking where the speaker is at the time. Ask questions at the end and/or check notes with classmates to fill in or clarify what you missed.
- Don’t get distracted by disagreements with or confusion about what the speaker is saying. Write key points, note your points of disagreement or confusion (underline, circle, or ???,) and ask questions as appropriate.
- Rewriting notes for neatness won’t help you learn the material, unless you actively engage while rewriting by adding details, asking yourself potential test questions, and making connections between concepts.
Mind Mapping and Concept Mapping

- Use for connecting text and class notes.
- Use for review and self-testing.

Activates left and right sides of the brain. Helps you see if you understand the connections between ideas.
Proposition: Without the industrial chemical reduction of atmospheric nitrogen, starvation would be rampant in third world countries.

- Starvation and Famine
  - Predicted by Malthus 1819
    - Such as in Eastern Europe, India, Africa
  - Deprivation leads to Population Growth
- Food
  - Contains Human Health and Survival
    - Requires more Essential Amino Acids
      - Made by Plants
        - Such as Grains, Legumes
          - Required for Symbiotic Bacteria
            - “Fixed” Nitrogen
              - Produced by Haber Process
                - NH₃
              - Used for Fertilizer
                - Which significantly supplements naturally Growth of
      - Eaten by Animals
        - Includes Protein
          - Required for Agriculture Practices
            - Can be increased by
              - Climate
              - Politics
              - Economics
              - Distribution
            - Such as Pesticides, Genetics & Breeding, Herbicides, Irrigation