

Chem 406, Fall 2005

Web Termpaper Assignment Guidelines

Format A, Arranged by Example

- I.** Home page (index.html)
 - A.** Title for website
 - B.** Class
 - C.** Name
 - D.** Table of Contents with links to other pages in the site
- II.** Introduction (page1.html)
 - A.** Overview of your enzyme class
 - 1. General reaction(s) catalyzed by members of this class
 - 2. Range of reactions catalyzed by members of this class
 - B.** Introduction to the specific examples you have chosen
 - C.** Include navigation links, either to the next page in the site (serial access), or to all pages in the site (random access).
- III.** Example 1 (page2.html)
 - A.** Describe the reaction(s) catalyzed by this enzyme
 - 1. Use figures to illustrate this
 - 2. Describe the thermodynamic of the reaction; is it favorable? if not, what drives the reaction.
 - 3. Describe cofactors/coenzymes that the enzyme may require.
 - 4. Describe how the reaction might be regulated.
 - B.** Describe the cellular location of this enzyme and the metabolic pathway(s) it is found in.
 - C.** Describe the overall folding topology for the enzyme
 - 1. Use *Jmol* images to illustrate this.
 - D.** Describe how the active site is formed by the folding topology and identify the players participating in the active site.
 - E.** Describe the catalytic mechanism for the enzyme catalyzed reaction
 - 1. Figures and *Jmol* images may be used to illustrate this
 - F.** Include navigation links, either to the next page in the site (serial access), or to all pages in the site (random access).
- IV.** Example 2 (page3.html) ...
- V.** Example 3 (page4.html) ...
- VI.** Summary (page5.html)
 - A.** Summarize your enzyme class, comparing and contrasting the examples you have chosen to illustrate this class.
- VII.** References (page6.html)
 - A.** Include complete references with citations and titles.
 - B.** Include hyperlink citations in your paper to your references
 - C.** Hyperlink you references to their PubMed citations

Format B, Arranged by Topic

- I.** Home page (index.html)
 - A.** Title for website
 - B.** Class
 - C.** Name
 - D.** Table of Contents with links to other pages in the site
- II.** Introduction (page1.html)
 - A.** Overview of your enzyme class
 - 1. General reaction(s) catalyzed by members of this class
 - 2. Range of reactions catalyzed by members of this class
 - B.** Introduction to the specific examples you have chosen
 - C.** Include navigation links, either to the next page in the site (serial access), or to all pages in the site (random access).
- III.** Topic 1: Reactions catalyzed (page2.html)
 - A.** Describe and compare the reaction(s) catalyzed by your example enzyme
 - 1. Use figures to illustrate this
 - 2. Describe the thermodynamic of the reaction; is it favorable? if not, what drives the reaction.
 - 3. Describe cofactors/coenzymes that the enzyme may require.
 - 4. Describe how the reaction might be regulated.
 - B.** Include navigation links, either to the next page in the site (serial access), or to all pages in the site (random access).
- IV.** Topic 2: Biology (page3.html)
 - A.** Describe and compare the cellular locations of your example enzyme and the metabolic pathways it is found in.
 - B.** Include navigation links, either to the next page in the site (serial access), or to all pages in the site (random access).
- V.** Topic 3: Structure/Function (page4.html)
 - A.** Describe and compare the overall folding topologies for the example enzymes
 - 1. Use *Jmol* images to illustrate this.
 - B.** Describe how the active site is formed by the folding topologies and identify the players participating in the active sites.
 - C.** Describe and compare the catalytic mechanisms for the enzyme catalyzed reaction
 - 1. Figures and *Jmol* images may be used to illustrate this
 - D.** Include navigation links, either to the next page in the site (serial access), or to all pages in the site (random access).
- VI.** Summary (page5.html)
 - A.** Summarize your enzyme class, comparing and contrasting the examples you have chosen to illustrate this class.
- VII.** References (page6.html)
 - A.** Include complete references with citations and titles.
 - B.** Include hyperlink citations in your paper to your references
 - C.** Hyperlink your references to their PubMed citations