Native Plants and Wildflowers Study Guide for Midterm 1

Preparation.

The midterm is worth 50 points. It consists of 3 sections

Section 1 20 Multiple choice Questions (1 point each) Bring Green 100 answer Scantron (882-e) and a pencil

Section 2 – 10 Fill-in-the Blank Questions (2 points each)

Section 3 – 2 written questions from a choice of 6 (5 points each)

Lectures 1 and 2 Vegetative Characteristics

1. What does the term 'vegetative' mean? Provide three examples of vegetables, and identify the botanical term for the structure that we eat.

2. Provide definitions for the following terms used to categorize plants: annual, biennial, perennial, herbaceous, woody.

3. Name two substances that get transported within plants. Name the organ where each substance enters the plant, name the vessel in which it is transported and the where each substance is transported to.

4. What are vascular bundles? Discuss the arrangement of vascular bundles in the stems of monocots and eudicots.

Lectures 3 and 4 Floral Characteristics

1. Name and describe the function of each of the whorls of modified leaves that make up a typical flower (perfect and complete).

2. What is pollen? Where is pollen produced? Describe the structure and function of pollen.

3. What name is give to the transfer of pollen from one plant to another?

4. Provide definitions for each of the following terms; complete flower, incomplete flower, perfect flower, imperfect flower.

- 5. To which taxonomic Division do the flowering plants belong?
- 6. Name the male organ of a flower, what name is given to each of the two component parts? Name the female organ of a flower, what name is given to each of the three component parts?

7. Describe the location, and the appearance, and the function of sepals.

8. Describe the location, and the appearance, and the function of petals.

9. Provide definitions for each of the following terms; monoecious, dioecious, staminate, and pistillate.

10. Draw and describe the flowers unique to the Asteraceae (Daisy Family).

11. Compare and contrast the vegetative and reproductive structures of monocots and dicots.

12. What is the function of fruit?

Lectures 6 and 7 California Flora

- 1. What is a Floristic Province? Name and describe the three floristic provinces that occur in California.
- 2. Which book is recognized as being the definitive reference of California Plants?

3. Name the six plant families in California with the greatest number of species. What percentage of Californias plant species belong to these six families? 4. Which plant family contains the greatest number of species in California? How many species does it contain?

5. Describe the characteristics of plants in the Asteraceae and provide a named example of member of this family found in California.

Lecture 8 Taxonomy

1. Which person is responsible for creating system of classifying and naming organisms using latinized names?

2. List the 7 levels of plant classification from most inclusive to least inclusive.

3. Provide an example of a correctly worded latin binomial for a Californian Native plant of your choice. Indicate with arrows the genus and species names.

4. Describe the protocol for writing a plant name using binomial nomenclature [19] When is it permissible to abbreviate the genus name?

Lecture 9 Major Plant Groups

1. When (give or take a million years or so), did the first land plants appear?

- 2. Mosses are described as poikilohydric, what does this term mean, and explain why this is a useful adaptation to have.
- 3. Which familiar plants belong to the Division Pteridophyta?

4. Draw and label a diagram of the life cycle of a typical fern.

5. What does conifer mean?

6. What does gymnosperm mean?

7. What does angiosperm mean?

8. What two innovations set angiosperms apart from gymnosperms?

9. Name the two major classes within the angiosperms.

- 10. What is a cotyledon?
- 11. Construct a table in which you compare the structures of monocotyledons and dicotyledons. (you should be able to name 5 differences)

Lecture 10 Photosynthesis

1. What is photosynthesis?

2. What is the overall equation for photosynthesis? (must be balanced)

3. Describe the two processes whereby carbon dioxide and water get into plant leaves.

4. What plant pigment is primarily responsible for the capture of the suns energy during the light reactions?

5. Why do plants appear green?

6. What is an autotroph?

7. How do shade tolerant plants maintain a positive carbon balance?