

BIO 2220

SYSTEMATICS OF SEED PLANTS
SPRING 2008

8:30-9:30 WMF
Lab: 1:30-5:20 M

PROFESSOR: Dr. Rich Mayes (mayer@gborocollege.edu)

OFFICE: 205 Arts & Sciences Building

PHONE: 271-2268 (Office); 852-3062 (Home)

TEXTBOOKS: 1) VASCULAR PLANT FAMILIES, Smith.
2) PETERSON'S FIELD GUIDE TO WILFLOWERS, Peterson and McKenny.

The purpose of this course is to provide a field-oriented introduction to the habitats, structures, and classification of the major families and genera of seed plants.

<u>DATE</u>	<u>TOPIC</u>	<u>READINGS</u>
PART I: <u>INTRODUCTION</u>		
Jan 16 & 18	Course details and objectives; Classification, identification, and nomenclature	CH 1
JAN 21	NO CLASS - MLK DAY	-----
Jan 23	Principles of plant taxonomy	CHs 1 & 8
PART II: <u>PLANT MORPHOLOGY</u>		
Jan 25	Angiosperm life cycle	Handout
Jan 28 & 30	Vegetative morphology - I: Stems, roots, twigs, and buds	CH 4
Feb 1	Vegetative morphology - II: Leaves	CH 4
Feb 4 & 6	Reproductive morphology - I: Flowers and floral formulas	CH 5: pp 49-60
FEB 8	<u>FIRST EXAM</u> (covers all material through Feb 1)	-----
Feb 11	Reproductive morphology - II: Inflorescences	CH 5: pp 60-65
Feb 13 & 15	Reproductive morphology - III: Seeds and fruits	CH 5: pp 65-72

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PART III: <u>KEYS AND FLORAS</u>		
Feb 18	Keys: What they are, how to use them, and how to construct them	Handout
Feb 20	Floras and other taxonomic literature	CH 7
PART IV: <u>SYSTEMATICS AND COEVOLUTION</u>		
Feb 22	Modern taxonomic methods	-----
Feb 25	Coevolution; adaptations for pollination and seed dispersal	-----
FEB 27	SECOND EXAM (covers all material from Feb 4 through Feb 22)	-----
PART V: <u>GYMNOSPERMS</u>		
Feb 29	Taxonomy of the Gymnosperms	CH 3
MAR 3-7	SPRING BREAK	-----
PART VI: <u>ANGIOSPERM SUBCLASSES AND SELECTED FAMILIES</u>		
Mar 10	Origin and phylogeny of the Angiosperms	Handout
MAR 12	THIRD EXAM (covers all material from Feb 25 through Mar 10)	-----
A) THE DICOTS (MAGNOLIOPSIDA) <i>(Handouts for all subclasses)</i>		
Mar 14	Subclass: Magnoliidae	CH 6: p 74-85
Mar 17 & 19	Subclass: Hamamelidae	CH 6: p 86-99
MAR 21	NO CLASS - GOOD FRIDAY	-----
Mar 24 & 28	Subclass: Caryophyllidae	CH 6: p 100-113

<u>DATE</u>	<u>TOPIC</u>	<u>READINGS</u>
MAR 26	NO CLASS - ASSESSMENT DAY	-----
Mar 31 & Apr 2	Subclass: Dilleniidae	CH 6: p 114-137
Apr 4 & 7	Subclass: Rosidae	CH 6: p 138-179
Apr 9 & 11	Subclass: Asteridae	CH 6: p 180-219
APR 14	FOURTH EXAM (covers all material from Mar 17 through Apr 7)	-----
B) THE MONOCOTS (LILIOPSIDA)		
Apr 16	Subclass: Alismatidae Subclass: Arecidae	CH 6: p 220-225 p 244-251
Apr 18	Subclass: Zingiberidae	Handout
Apr 21 & 23	Subclass: Commelinidae	CH 6: p 226-243
Apr 25 & 28	Subclass: Liliidae	CH 6: p 252-261
FINAL EXAM (TBA)	FINAL EXAM (covers all material from Apr 9 through Apr 25)	-----

A. **EXPLANATION OF EVALUATION PROCEDURES:**

- 1) **EXAMS:** There will be four **HOUR EXAMS** as indicated in the syllabus. Each will count **15%** of your final grade.
- 2) **LAB:** There will be two **LAB PRACTICALS** given this semester. Each will count **10%** of your final grade.
- 3) **FINAL EXAM:** will count **20%** of your final grade.

B. **COURSE PERCENTAGES:**

Exam #1	=	15%
Exam #2	=	15%
Exam #3	=	15%
Exam #4	=	15%
Lab	=	20%
Final Exam	=	<u>20%</u>
		100%

- C. **ATTENDANCE POLICY:** You are expected to attend **ALL CLASSES**. However, you will be allowed 3 unexcused absences in case of illness, famine, or flood. More than 3 unexcused absences will negatively affect your final grade. Six or more **UNEXCUSED** absences may result in automatic failure of this course.
- D. **HONOR CODE:** This course will be conducted under the Greensboro College Honor Code which is printed in the **Academic Catalog** and **Student Handbook**. You will be expected to reaffirm this pledge by your signature on **EACH** exam.
- E. **MAKEUP EXAM POLICY:** ALL makeup exams MUST be taken within TWO days after the original exam was given. A student will not be given a makeup exam unless he/she contacts me personally (with a valid reason for missing the exam) PRIOR to the SCHEDULED exam time. **NO MAKEUP EXAMS WILL BE GIVEN AFTER THE ORIGINAL EXAM HAS BEEN RETURNED!**
- F. **GRADING SCALE:**
- | | | |
|----------|------|-----------------------------------------|
| 90 -100 | = A | |
| 89 | = A- | YOU ARE RESPONSIBLE FOR KEEPING |
| 87 & 88 | = B+ | P WITH CLASS MATERIAL AS IT IS |
| 80 - 86 | = B | BEING PRESENTED. <u>NO</u> EXTRA CREDIT |
| 79 | = B- | ASSIGNMENTS ARE ACCEPTED IN THIS |
| 77 & 78 | = C+ | COURSE. |
| 70 - 76 | = C | |
| 69 | = C- | |
| 67 & 68 | = D+ | |
| 50 - 66 | = D | |
| below 60 | = F | |
- G. The **STATE COMPETENCIES** fulfilled by BIO 2220 are on file in the Office of the Vice President of Academic Affairs and/or in the office of the Director of Teacher Education
- H. **CELL PHONE POLICY:** I realize that, at times, phones will need to be turned on. If you MUST take a call, you MUST be courteous and go into the hallway until you are finished. **CELL PHONES MUST BE TURNED OFF DURING EXAMS. FAILURE TO DO SO WILL BE TREATED AS AN HONOR CODE VIOLATION!** Thanks.
- I. Biology with Licensure majors should save at least one example of their work in this course for inclusion in their teaching portfolios. **CONTACT PERSON: MARJORIE LARKIN, ext 364.**