PLANT MORPHOLOGY (BIO 330/530)
SPRING 2013

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Office hours: T and R, 10:00-12:00.
Different meeting times can be arranged upon request.

Lectures: M and W, TNR 300 from 13:00 to 14:15.

Laboratories: F, TNR 300 from 12:00 to 14:50.

Textbook: Raven Biology of Plants by R. F. Evert and S. E. Eichhorn, 8th Edition. (Required, rental from bookstore). We will also have several reference books and journal articles available in the classroom

Course goal: To introduce the basic principles of plant structure, function, development and evolution.

Attendance: Attendance to lectures and laboratories is required. Exams are based only on material covered in class or laboratory. There is no substitute for taking your own notes, listening closely and asking questions. Makeup exams will be given only in the case of excused absence.

Conduct: An environment of respect is expected in the classroom. For any questions on your rights and responsibilities, please check:
http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilities.aspx

Exams:

Lecture exams:
There will be 3 lecture exams and a comprehensive final exam. You can expect to be tested with fill in the blank, diagram labeling/drawing, matching and essay questions. There is no correction factor but the points needed for the highest grade in the class to be a perfect score will be added to everybody.

Laboratory exams:
There will be 2 laboratory exams. The exams will be practical and will consist of stations with questions from material covered in laboratory, unknown samples may be included.

Laboratory notebook:
Handouts will be available for every lab. You are required to keep handouts and diagrams with notes and answers to questions in a binder (please bring some extra paper). Laboratory notes will be turned in during lab exam days.

Paper presentation:
Students will be required to present and lead the discussion of one scientific paper (classic or recently published). Topics will be assigned at the beginning of the semester. Presentations will take place during scheduled lecture time. Students are required to select a paper from a scientific journal (American Journal of Botany, Botanical Gazette, etc.). The main topic of the paper has to deal with the **morphology** of the assigned group of plants or topic. Present your paper to your professor for approval, 2 weeks before the due date. It is your responsibility to make sure that everybody has access to the paper 1 week before presentation to be ready for discussion.

Class project: Students are required to prepare a class project that will involve microscopic work. Time to work on this project will be available at the end of the semester (see lecture and lab schedules). The project will be assigned to groups of 2 or 3 students. Your findings will be presented in front of the class as scheduled. A power point presentation and paper will be turned in the day of the presentation. Project guidelines will be available with plenty of time.

Points:

Lecture exams (1-3 = 100 points each)	300 points
Laboratory exams (1 and 2) = 100 points each)	200 points
Final exam	100 points
Lab. notebook	30 points
Paper presentation	50 points
Participation	20 points
Class project	100 points
Total	800 points

Scale: Your grade is based on a total of 800 points. The grading scale for the course is:

800 – 744	(93%)	A
743 – 720	(90%)	A-
719 – 696	(87%)	B+
695 – 664	(83%)	B
663 – 640	(80%)	B-
639 – 600	(75%)	C+
599 – 560	(70%)	C
559 – 520	(65%)	C-
519 – 496	(62%)	D+
495 – 440	(55%)	D
< 440		F

TENTATIVE LECTURE SCHEDULE

DATE	TOPIC	Book chapter
01/23	Syllabus, general information.	
01/28	Introduction. Origin and evolution of plants	15
01/30	From algae to plants, early land plants and plant characters	15,16
01/28	The sporophyte	23, 24, 25, 26
01/30	The sporophyte, sporangia	23, 24, 25, 26
02/04	The gametophyte, gametangia	16, 17, 18, 19
02/06	The embryo	22
02/11	**Exam 1**	
02/13	Bryophytes	16
02/18	Bryophytes, paper presentation	16
02/20	Introduction to vascular plants, evolution of seedless vascular plants, Lycopodiophyta	17
02/25	Lycopodiophyta, paper presentation	17
02/27	Monilophyta, Psilotopsida, paper presentation	17
03/04	Monilophyta, Marattiopsida, paper presentation	17
03/06	Monilophyta, Polypodiopsida, paper presentation	17
03/11	Monilophyta, Equisetopsida, paper presentation	17
03/13	**Exam 2**	
03/18	Introduction to seed plants	18
03/20	Introduction to gymnosperms, progymnosperms, extinct gymnosperms	18
04/01	Seed ferns, Cycadophyta, paper presentation	18
04/03	Ginkgophyta, paper presentation	18
04/08	Coniferophyta, paper presentation	18
04/10	Gnetophyta, paper presentation	18
04/15	Introduction to Angiosperms	19, 20
04/17	Angiosperms (Anthophyta), paper presentation	19, 20
04/22	Angiosperms (Anthophyta), paper presentation	19, 20
04/24	TBA	
04/29	**Exam 3**	
05/01	Project preparation	
05/06	Project preparation	
05/08	Project preparation	
05/13	**Final exam (10:15 to 12:15)**	

TENTATIVE LABORATORY SCHEDULE

02/01	From algae to plants
02/08	Sporophyte, sporangia
02/15	Gametophyte, gametangia, embryos
02/22	Bryophytes
03/01	Lycopodiohyta,
03/08	**Exam 1. Lab notebooks are due.**
03/15	Psilotopsida, Marattiopsida, Polypodiopsida
03/22	Equisetopsida
04/05	Gymnosperms I
04/12	Gymnosperms II
04/19	Angiosperms
04/26	**Exam 2. Lab notebooks are due**
05/03	Project preparation
05/10	**Project presentation**