

BIOLOGY/WATER 338/538 PHYCOLOGY - FALL 2017

LECTURE: M/W: 9:35 – 10:50AM, TNR 300 **LAB:** F: 9:00 – 11:50AM, TNR 153

INSTRUCTOR: DR. ROBERT BELL **EMAIL:** rbell@uwsp.edu

OFFICE: TNR 476 **PHONE:** 346-2074

OFFICE HOURS: M/W: 11:00 – 12:00
T: 12:00 – 1:00
and any time the door is open or by appointment.

TEXTBOOKS: ALGAE, BY GRAHAM, GRAHAM AND WILCOX, 2ST EDITION (REQUIRED RENTAL FROM BOOKSTORE)

FRESHWATER ALGAE OF NORTH AMERICA: ECOLOGY AND CLASSIFICATION, BY WEHR, ET AL., (REQUIRED RENTAL FROM BOOKSTORE)

HOW TO KNOW THE FRESHWATER ALGAE, BY G. PRESCOTT (OPTIONAL)

NOTEBOOK: You will be required (for points) to draw the organisms you work with in lab. A ring-binder notebook with both lined (for notes) and unlined paper (for pictures) works well. #3 pencils work best for drawings, a small set of colored pencils is essential.

COURSE DESCRIPTION Taxonomy, morphology and ecology of algae with emphasis on local species using fresh, cultured and herbarium specimens.

GRADES: Your course grade is based on 600 possible points as follows:

300 points	unit lecture exams (3 - 120 points)
200 points	lab practicals (2 - 100 points each)
45 points	lab unknowns (15 points each, best 3 of 4)
25 points	lab notebook
30 points	field work/field report

SCALE: The grading scale is as follows:

600 - 558 (93%)	A	497 - 480 (80%)	B-	419 - 390 (65%)	D+
557 - 540 (90%)	A-	479 - 462 (77%)	C+	389 - 360 (60%)	D
539 - 522 (87%)	B+	461 - 438 (73%)	C	<360 (<60%)	F
521 - 498 (83%)	B	437 - 420 (70%)	C-		

LECTURE EXAMINATIONS: Examinations may consist of multiple choice, short answer, drawing/labeling, definitions and examples, and discussion questions. The Monday night before exams there will be optional review sessions. There will be no make-up exams without good reason (one satisfactory to me) AND contacting me BEFORE the exam.

EXAMINATION DATES: *****NOTE: Lecture exams take place during test periods outside of class.

- #1: Tuesday, 10 October, 6:00 – 8:00PM, TNR 300
- #2: Tuesday, 14 November, 6:00 – 8:00PM, TNR 300
- #3: Wednesday, 20 December, 8:00 – 10:00AM, TNR 300

LABORATORY PRACTICALS: Laboratory practicals cover lab material only, and will include identifying unknown algal specimens and identifying structural and functional components of discussed in lab.

ADVICE FROM DR. BELL Tip #1: The best strategy you can use in this course is to attend every class. My exams are drawn entirely from class discussions UNLESS SPECIFIED IN CLASS. Getting the material from me, hearing from me what is most important and why is vastly more effective than copying someone else's notes or simply trying to read the book. I will be adding material that is not in the book and I will certainly not be able to cover everything that is in the book.

Tip #2: Take advantage of my office hours. You cannot wear out your welcome. Please come in as soon as you feel you have any difficulties with the material, do not wait until after the first exam.

DISHONESTY: Academic dishonesty in any form will not be tolerated. In addition to losing points on a particular exercise the students involved will be identified to the administration for possible punitive actions. The following link takes you to the UWSP Community Rights and Responsibilities document that delineates your rights and responsibilities as part of this academic community.

<http://www.uwsp.edu/admin/stuaffairs/rights/rightsCommBillRights.pdf>

TENTATIVE LECTURE CALENDAR

DATE	TOPICS	CHAPTERS
09/06	Syllabus; Intro to Algae	1, 3
09/11	Intro to Algae, Lineages	1, 3
09/13	Lineages, Algae and Earth History	1, 3
09/18	Endosymbiotic origin of plastids	7
09/20	Endosymbiotic origin of plastids, Algal Ecology	7
09/25	Algal Ecology	
09/27	Phyla definitions and thumbnails	
10/02	Phyla definitions and thumbnails	
10/04	Phyla definitions and thumbnails	
-----	END OF UNIT #1 EXAM: TUESDAY, 10/10, 6:00 - 8:00PM, TNR 300	
10/09	Review Session	
10/11	Cyanobacteria	6
10/16	Cyanobacteria	6
10/18	Cyanobacteria, Glaucophyta	6, 7
10/23	Chlorophyta	16-20
10/25	Chlorophyta	16-20
10/30	Chlorophyta	16-20
11/01	Chlorophyta	16-20
11/07	Chlorophyta	16-20
11/09	Euglenophyta	8
-----	END OF UNIT #2 EXAM IS TUESDAY, 11/14, 6:00 - 8:00PM, TNR 300	
11/13	Rhodophyta	15
11/15	Rhodophyta	15
11/20	Stramenopiles	12-14
11/22	Stramenopiles	12-14
11/27	Stramenopiles	12-14
11/29	Stramenopiles	12-14
12/04	Stramenopiles	12-14
12/06	Cryptophyta, Haptophyta	10
12/11	Dinophyta	11
12/13	Dinophyta	11
-----	END OF UNIT #3 EXAM IS FRIDAY, 12/20, 8:00 – 10:00AM, TNR 300	

TENTATIVE LABORATORY CALENDAR

<u>DATE</u>	<u>TOPIC</u>
09/08	Scopes and calibration, drawing, field material, handouts
09/15	Lake assignments, practice microscopy and keying
09/16****	First Saturday Field Trip
9/22	Practice microscopy and keying, Nonmotile Unicells and Colonies 1
09/29	Nonmotile Unicells and Colonies 2
10/06	Unknown #1, Unbranched Filaments 1
10/13	Unknown #2, Unbranched Filaments 2
10/20	LAB PRACTICAL #1
10/21****	Second Saturday Field Trip
10/27	Branched Filaments 1
11/03	Unknown #3, Branched Filaments 2
11/10	Unknown #4, Marine Algae 1
11/17	Marine Algae 2
11/24	THANKSGIVING BREAK – NO CLASS
12/01	Motile Unicells and Colonies 1
12/08	Motile Unicells and Colonies 2
12/15	LAB PRACTICAL #2