

The Ohio State University
Colleges of the Arts and Sciences Course Change Request

EVOLUTION, ECOLOGY, AND ORGANISMAL BIOLOGY

Academic Unit

EEOB

413.02

Book 3 Listing (e.g., Portuguese)

Course Number

Summer Autumn Winter 2008 Spring Year

Proposed effective date: choose one quarter and put an "X" after it; and fill in the year. See the OAA curriculum manual for deadlines.

A. Course Offerings Bulletin Information. Follow instructions in the OAA curriculum manual. Before you fill out the "Present Course" information, be sure to check the latest edition of the *Course Offerings Bulletin* and subsequent Circulating Forms. You may find that the changes you need have already been made or that additional changes are needed. If the course offered is less than quarter or term, please also complete the Flexibly Scheduled/OffCampus/Workshop Request form.

COMPLETE ALL ITEMS THIS COLUMN

Present Course

1. Book 3 Listing: EEOB
 2. Number: 413.02
 3. Full Title: ECOLOGY LABORATORY
 4. 18-Char. Transcript Title:
 5. Level and Credit Hours
 6. Description: CRITIQUE OF ECOLOGICAL LITERATURE & DATA, AND DESIGN AND EXECUTION OF EXPERIMENTS
(25 words or less)
 7. Qtrs. Offered: Aut, W.
 8. Distribution of Contact Time: 2 cl
(e.g., 3 cl, 1 3-hr lab)
 9. Prerequisite(s): 413.01 (or concur)
 10. Exclusion:
(Not open to...)
 11. Repeatable to a maximum of _____ credits.
 12. Off-Campus Field Experience:
 13. Cross-listed with:
 14. Is this a GEC course?
 15. Grade option (circle): Ltr S/U P
If P graded, what is the last course in the series?
 16. Is an honors version of this course available? Y N
- Is an Embedded Honors version of this course available? Y N

17. Other general course information:

COMPLETE ONLY THOSE ITEMS THAT CHANGE Changes Requested

- 1.
2. 513.02
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
9. 513.01 (or concur)
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.

17.

B. General Information

1. Do you want the prerequisites enforced electronically (see the OAA manual for what can be enforced)?

YES

2. Does this course currently satisfy any GEC requirement, if so indicate which category?

NO

3. What other units require this course? Have these changes been discussed with those units?

NOT APPLICABLE

4. Have these changes been discussed with academic units that might have a jurisdictional interest in the subject matter? Attach relevant letters.

NOT APPLICABLE

5. Is the request contingent upon other requests, if so, list the requests?

CHANGE OF 413.01 TO 513.01

6. Purpose of the proposed change. (If the proposed change affects the content of the course, attach a revised syllabus and course objectives and e-mail to ascurofc@osu.edu.)

THIS REQUEST PARALLELS THE REQUEST TO CHANGE THE LECTURE PORTION OF OUR INTRODUCTORY ECOLOGY EXPERIENCE EEOB 413.01 TO EEOB 513.02. IN ADDITION TO MAINTAINING CONSISTENCY IN COURSE NUMBERING, THE CHANGE OF 413.02 TO 513.02 WILL BE ACCOMPANIED BY COURSE REVISIONS THAT WILL INCREASE THE EMPHASIS ON EXPERIMENTAL DESIGN, DATA ANALYSIS, AND TECHNICAL WRITING. A PROPOSED SYLLABUS IS ATTACHED.

7. Please list Majors/Minors affected by the proposed change. Attach revisions of all affected programs. This course is (check one): Required on major(s)/minor(s) A choice on major(s)/minors(s)


An elective within major(s)/minor(s) A general elective:

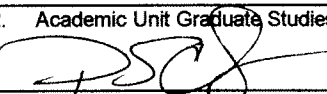
REQUIRED FOR EVOLUTION AND ECOLOGY MAJOR AND ZOOLOGY MAJOR, BOTH OF WHICH ARE OFFERED BY THIS DEPARTMENT.

8. Describe any changes in library, equipment or other teaching aids needed as a result of the proposed change or if the proposed change involves budgetary adjustments, describe the method of funding:

NONE

Approval Process The signatures on the lines in ALL CAPS (e.g. ACADEMIC UNIT) are required.

 T.E. HETHERINGTON MAY 17, 2007
1. Academic Unit Undergraduate Studies Committee Chair Printed Name Date

 Peter S Curtis 5/20/07
2. Academic Unit Graduate Studies Committee Chair Printed Name Date
3. ACADEMIC UNIT CHAIR/DIRECTOR Printed Name Date

4. After the Academic Unit Chair/Director signs the request, forward the form to the ASC Curriculum Office, 106 Brown Hall, 190 West 17th Ave. or fax it to 688-5678. Attach the syllabus and any supporting documentation in an e-mail to ascurofc@osu.edu. The ASC Curriculum Office will forward the request to the appropriate committee.

5. COLLEGE CURRICULUM COMMITTEE Printed Name Date

6. ARTS AND SCIENCES EXECUTIVE DEAN Printed Name Date

7. Graduate School (if appropriate) Printed Name Date

8. University Honors Center (if appropriate) Printed Name Date

9. Office of International Affairs (study tours only)	Printed Name	Date
---	--------------	------

10. ACADEMIC AFFAIRS	Printed Name	Date
-----------------------------	---------------------	-------------

Colleges of the Arts and Sciences Curriculum Office. 10-02-06

EEOB 513.02: Laboratory in Ecology Winter 2008

Course Coordinator:

Dr. Ralph E.J. Boerner
318 W. 12th Ave., Telephone: 292-6197
e-mail: boerner.1@osu.edu
Office Hours: T, Th 10:30-12:00

Lead Lab Instructor:

LABORATORY SECTION MEETING TIMES:

Monday	12:30-4:18
Wednesday	8:30-12:18
Wednesday	12:30-4:18
Thursday	11:30-3:18
Friday	8:30-12:18

All laboratory sections meet in 130 Jennings Hall, at the corner of 12th Avenue and Neil Avenue

REQUIRED TEXTS:

Boerner, R.E.J. 2007. *EEOB 513.02 Laboratory Manual*. Available at Cop-Ez, 1664 Neil Avenue.

Used copies are not acceptable as they will be missing the report sheets and will not contain all of the exercises present in this manual.

Day, R.A. 1998. *How to Write and Publish a Scientific Paper, 5th Edition*. Oryx Press. Available at the Bookstore.

COURSE STRUCTURE:

EEOB 513.02 meets for a single, four hour laboratory meeting per week. Reading assignments for the laboratories are all from the laboratory manual or from Day's book. Supplemental material will be made available on Carmen (<https://carmen.osu.edu/>). This course is taught by EEOB Graduate Teaching Associates who are working toward and M.S. or Ph.D. degree. These students bring their talent, experience, and intelligence to bear in making the laboratory an exciting, thought-provoking experience.

The laboratory experiences are designed to complement and extend the material covered in the lecture course EEOB 513.01, and will include simple experiments, demonstrations, problems, and discussion of scientific writing. Most exercises will require further data analysis and a brief written summary of the results to be prepared outside of class.

Most of the laboratory experiences contained in this manual follow a consistent format:

- 1) A background segment that provides the ecological theory and relevant information you will need to place that laboratory experience into the larger, ecological context;
- 2) A general methods section that provides the "big picture" of what we hope to achieve during that lab exercise;
- 3) A set of detailed, step-by-step instructions of what you are to do during the lab.
- 4) All necessary assignments and datasheets which are perforated for easy removal. You will be expected to complete them and turn them in as part of your lab reports.

At the end of this manual, you will find all the appendices.

COURSE EVALUATION:

The course grade will be calculated on the basis of three criteria: 1) lab exercise write-ups, 2) scientific papers, and 3) participation.

1) Lab Exercises: Most labs will include a written assignment summarizing the lab exercise. Your Lab Instructor will tell you more about each assignment as it approaches.

2) Scientific Papers: You will write two full scientific reports covering the two phases of the Radish Competition Experiments. To help you learn the basics of technical writing, you will submit first drafts of the various parts of the first report for peer-review and do peer-review of a classmate's drafts.

3) Participation: If you wish to understand the relationships between organisms and their environment, it is essential that you attend class. Therefore, attendance and reasonable levels of participation will be required of all students, with 2 points deducted from the possible points for that week's assignment for each unexcused absence. Evaluation of your efforts as a peer reviewer will also be included here.

Other important points

Late assignments: Assignments submitted late will have 5% of the maximum possible points deducted per day late. For example, a student who turns in a 50-point assignment two days late will only be able to earn a maximum of 45 points. If you think you will have trouble turning in an assignment on time, discuss the situation with your Lab Instructor as soon as you can.

Sharing lab report data: Often laboratory exercises involve group participation while conducting experiments and collecting data. During this part of the process we encourage active participation and discussion among students. However, unless otherwise specified by your instructor, *preparing (i.e., writing, graphing, etc.) laboratory reports must be an individual exercise.* This practice is designed to ensure that each student takes an active role in analyzing data, graphing results, and interpreting his/her results in writing. Your Lab Instructor will not accept laboratory reports that have been prepared as a group effort.

If you have any questions, feel free to call or email your Lab Instructor. Better yet, drop by his/her office and he/she will work to answer any and all of your questions. The Lab Instructors will work to make the laboratory portion of the course a good learning experience, as well as an enjoyable one.

Calculating the final course grade: Depending on overall, group student performance, the total number of points earned by each student may be adjusted upward so as to make it consistent with the level of mastery of the course objectives demonstrated by the students as a group. Individual quizzes and assignments will not be curved. The following scale will be used to determine the final overall course grade you earned:

94-100% - A	90-93% - A-	
87-89% - B+	84-86% - B	80-83% - B-
77-79% - C+	74-76% - C	70-73% - C-
67-69% - D+	60-66% - D	0-59% - E

Accommodation. Anyone who feels he/she may need an accommodation based on the impact of a disability or other special need should contact his/her Lab Instructor to arrange an appointment as soon as possible. At the appointment we can discuss the course format, anticipate your needs, and explore potential adaptations to meet your needs. We rely on the Office for Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies. If you have not previously contacted the Office for Disability Services, we encourage you to do so.

Alternate Materials: This manual can be converted to alternate materials for those who require. Please notify us if you require this service and give us sufficient time to prepare them.

Note on Authorship: This manual has been developed over the last decade as a collaborative effort of many EEOB faculty and graduate associates. It is copyrighted by EEOB and may not be duplicated without permission.

LABORATORY INSTRUCTOR INFORMATION

Instructor's Name:			Office Phone:	
Office Address:			Mailbox:	
Office Hours:			E-Mail:	

ACHIEVEMENT DATA

Assignment	Points		
	Available	Earned	Cumulative
Statistics Problem Set	40		
Human Demography Report	40		
Niches and Competition Report	40		
Radish Competition Pre-Class Assignment	30		
Oil Spills Report	40		
Radish Phase I Introduction and Methods	35 ¹		
Radish Phase I Results and Discussion	35 ¹		
Corridors, Stepping Stones and Butterflies Lab	40		
Radish Phase I Competition Report	100		
Radish Phase II Report	100		
TOTAL	500		

¹25 points for your own work and 10 points for your peer review of another's work

LABORATORY SCHEDULE AND READING ASSIGNMENTS

Lab Week	Topic	Required Reading (M=manual, D=Day's book)
1 (R 9/20 – W 9/26)	Activities: Orientation to the laboratory Set up Phase I Radish Competition Experiment Brainstorm for Phase II Radish Experiments	M: pp. 1-3
2 (R 9/27 – W 10/3)	Activities: Statistical Analysis of Ecological Data In-class work on statistics problem set and excel Formalize Phase II Radish Experiments	M: pp. 4-11 M: pp. 12-13
3 (R 10/4 – W 10/10)	Activities: Set-Up Phase II Radish Experiment Niches and Competition Lab Exercise Due: Statistics Problem Set	M: pp. 24-36
4 (R 10/11 – W 10/17)	Activities: Human Demography Exercise <i>(Field trip: Greenlawn Cemetery)</i> Due: Niches and Competition Report	M: pp. 14-23
5 (R 10/18 – W 10/24)	Activities: Visit Radish Experiments and Take Preliminary Data Scientific Paper Analysis, Part I: Discuss Abstract, Introduction, and Methods Sections Due: Human Demography Report	D: pp. 1-7, 29-41
6 (R 10/25 – W 10/31)	Activities: Radish Experiment: Final data collection for Phase I Scientific Paper Analysis, Part I: Discuss Results, Discussion, and References Sections Due: Radish Experiment Pre-class Assignment	M: pp. 40-49 D: pp. 42-48, 51-60
7 (R 11/2 – W 11/7)	Activity: Ecobeaker: Oil spills Due: Draft of Introduction and Methods of Phase I Radish Paper for Peer Review	M: pp. 50-59 D: pp. 200-221
8 (R 11/8, F 11/9, T 11/13, W 11/14, M 11/19)	Activity: Radish Experiment: Final data collection for Phase II Due: Draft of Results and Discussion for Peer Review Peer Reviews of Introduction and Methods Oil Spill Report	
9 (R 11/15, F 11/16, T 11/20, W 11/21, M 11/26)	Activity: Corridors, Stepping Stones, and Butterflies Lab Discussion of Phase II results Due: Peer Reviews of Results and Discussion	M: pp. 63-72
10 (F 11/30)	Due: Corridors, Stepping Stones, and Butterflies Report In your lab instructor's mail box by 3 PM on F 11/30	
Final Exam Week:	Due: Final Reports for Phase I and Phase II Radish Experiments In your lab instructor's mail box by Noon on M 12/3:	