New Course Request

Indiana University
South Bend Campus

Check Appropriate Boxes:  Undergraduate credit [x]  Graduate credit [ ]  Professional credit [ ]


3. Course Number: 2383  (must be cleared with University Enrollment Services)  4. Instructor: Dr. Thomas Clark

5. Course Title: Laboratory in Entomology

Recommended Abbreviation (Optional) ____________________________________________________________

(Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall, 2004

7. Credit Hours: Fixed at _______2_______ or Variable from ________ to ________

8. Is this course to be graded S-F (only)? Yes [ ]  No [x]

9. Is variable title approval being requested? Yes [ ]  No [x]

10. Course description (not to exceed 50 words) for Bulletin publication:

P or concurrent: 2373: Examine structure, classification of insects, prepare a collection.

11. Lecture Contact Hours: Fixed at ________ or Variable from ________ to ________

12. Non-Lecture Contact Hours: Fixed at ________ or Variable from ________ to ________

13. Estimated enrollment: _______16____ of which _______0____ percent are expected to be graduate students.

14. Frequency of scheduling: alternate yrs  Will this course be required for majors? No

15. Justification for new course: Increase offerings with organismal/field components

16. Are the necessary reading materials currently available in the appropriate library? Yes

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by: [Signature]
Department Chairman/Division Director

Date: 12/1/04

Dean of Graduate School (when required)

Date: ______________________

Approved by: [Signature]
Chancellor/Vice-President

Date: 2/3/04

University Enrollment Services

Date: ______________________

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UP 724  University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow;
Department/Division—Pink; University Enrollment Services Advance—White
Z373 Entomology

Instructor: Dr. Thomas M. Clark
Textbook: Daly HV, Doyen JT, Purcell AH III. Introduction to insect biology and diversity.

Outline: Students will be introduced to the biology of insects. Insect Anatomy and physiology, behavior, ecology, and diversity will be discussed. The lecture will be accompanied by a laboratory.

Z383 Laboratory in Entomology

Instructor: Dr. Thomas M. Clark
Textbook: none

Outline: Students will examine the structure and diversity of insects. Early in the semester, we will go on field trips to observe and collect insects. Some live insects will be observed more closely in the laboratory. The students will learn to use dichotomous keys to identify insect orders and families, and will prepare a collection. They will also be held responsible for identifying insects to order.
Indiana University Bloomington

*College of Arts and Sciences
  *School of Journalism
  *School of Business
  *School of Continuing Studies
  *School of Education
  *School of Health, Physical Education, and Recreation
  *School of Law-Bloomington
  *School of Music
  *School of Optometry
  *School of Public and Environmental Affairs
  *Graduate School
  *School of Library and Information Science
  *University Division

Indiana University-Purdue University at Indianapolis

*School of Business
*School of Continuing Studies
*School of Dentistry
*School of Education
School of Engineering and Technology (Purdue University)
*Herron School of Art
*School of Law-Indianapolis
*School of Liberal Arts
*School of Medicine
*Division of Allied Health Sciences
*Division of Continuing Medical Education
*School of Nursing
*School of Physical Education
*School of Public and Environmental Affairs
School of Science (Purdue University)
*School of Social Work
IUPUI University Division
Columbus (Indiana) Campus of IUPUI

The Regional Campuses

Indiana University East (Richmond)
Indiana University at Kokomo
Indiana University Northwest (Gary)
Indiana University at South Bend
Indiana University Southeast (New Albany)
Indiana University-Purdue University at Fort Wayne (IPFW)

Bulletins for the divisions of the University marked (*) above may be obtained from the Office of Admissions, Student Services Building, Indiana University, Bloomington, Indiana 47405. (Please note that there are two Indiana University Schools of Law and be sure to specify whether you want a bulletin of the Bloomington or the Indianapolis School.)

IUPUI bulletins for Purdue programs and for the IUPUI University Division may be obtained by writing directly to these units on the Indianapolis campus.

Write directly to the individual regional campus for its bulletin.

1 Two bulletins are issued: graduate and undergraduate.
2 Brochure on Independent Study Division, Labor Studies, External Degrees, and Real Estate Certification is available from this School (Change 5/81)

While every effort is made to provide accurate and current information, Indiana University reserves the right to change without notice statements in the Bulletin series concerning rules.
L376 Biology of Birds (3 cr.) N&M P: L105. Avian systematics, distribution, evolution, ecology, and behavior; emphasis on migration and orientation, territoriality, communication, reproductive behavior. Field trips will concentrate on identification, interpretation of behavior, and research methods. Intended for Biology majors.

Z383 Laboratory in Entomology (2 cr.) P or concurrent: Z373. Laboratory and field study of insects, with emphasis on collecting, preserving and studying insects, with intensive study of classification. Preparation of insect collection required.

Z385 Laboratory in Parasitology (2 cr.) P or concurrent: Z375. R: Chemistry C101 or C105. Methods of finding, mounting, and identifying animal parasites with emphasis on projects involving culture methods and techniques of research on living parasites.

I390 Current Problems in Biology (1 cr.) P: senior standing or consent of instructor. Lectures, demonstrations, and discussions of current biological research in the sciences. May be repeated once for credit.

M400 Biomedical Sciences Documentation (1 cr.) P: 10 credits in microbiology or senior major in science or library science, with written permission of instructor. Discussions and library problems concerned with the technique of searching current and past periodical and other literature in the biological and biomedical sciences.

M403 Proseminar (1 cr.) (S/F grading) P or concurrent: M400. Individual presentations of topics of current importance, particularly those not included in other courses.

Z406 Vertebrate Zoology (5 cr.) N&M P: 8 hours of biology, upperclass standing or consent of instructor. Morphology, evolution, adaptations, and general biology of vertebrates.

B415 Phytogeography (2 cr.) P: B101 or equivalent. R: B205 or equivalent. Study of world vegetation. Historical perspective of plant distribution and evolution of current vegetational associations. Local and world distribution of plant families and genera.

L417 Molecular Aspects of Development (3 cr.) N&M P: L364 or S306, and organic chemistry. Study of the embryological development of representative organisms, with emphasis upon genetic and molecular control mechanisms. Credit not given for both L417 and S307.

L418 Analysis of Development Laboratory (2 cr.) P or concurrent: L417, or Z217 and L364. Laboratory study and analysis of development.

B420 Comparative Morphology of Vascular Plants (3 cr.) N&M P: B205 or consent of instructor. Comparative studies of the structure and development of the vegetative and reproductive systems of vascular plants. Emphasis on relationships of the groups of vascular plants.

L455 Experimental Laboratory Techniques in Modern Biology (3 cr.) P: L267, Chemistry C343. R: B369. Lectures examine theory involved, potential applications, limitations of the various techniques with laboratory sessions to provide practical experience for students.

B460 Biology of Ferns (3 cr.) N&M P: B205 or consent of instructor. Lecture and laboratory study of the extant ferns, including their morphology, taxonomic diversity, sexual and asexual life cycle strategies, breeding and genetic systems, spore production, and the regulation of gametophyte and spore development.

M460 Biology of the Procaryotes (3 cr.) N&M P: M310 and M350 or Chemistry C483 or S305. Nutritional, physiological, and cultural properties of the major groups of nonpathogenic bacteria and their relationships as revealed by modern taxonomic methods.

Z460 Ethology (3 cr.) N&M P: senior or graduate standing in psychology or biology and permission of instructor. Introduction to the zoological study of animal behavior. Emphasizes both internal and external factors involved in the causation of species-specific behavior of animals (protozoa-primites) in their natural environment.


B463 Bioecology (3 cr.) N&M P: B104 or B161, and S306 or L364 or Z420. Methods and literature of new taxonomies, dealing with taxonomic, geographic, and cytogenetic analyses of natural populations and problems of speciation and evolution, with particular reference to higher plants.

Z464 Biology of Unicellular Eukaryotes (3 cr.) N&M P: L267 and L364 or equivalents. Juniors require instructor's consent. Aspects of protozoa related to current research in cell biology. Emphasis will be placed on free-living forms; their behavior, physiology, genetics, morphogenesis, ultrastructure and life cycles. Lecture plus laboratory.

L465 Advanced Field Biology (3 cr.) N&M P: L417 or equivalent and consent of instructor. Lectures and two-weeks of fieldwork on various problems of ecosystem structure.