New Course Request

Indiana University

Indianapolis Campus

Check Appropriate Boxes:
Undergraduate credit X
Graduate credit □
Professional credit □

1. School/Division Science / Psychology
2. Academic Subject Code PSY-B

3. Course Number 433 (must be cleared with University Enrollment Services)
4. Instructor

5. Course Title Capstone Laboratory in Applied Psychology
   Recommended Abbreviation (Optional) Capstone Lab in Applied Psych
   (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Spring / 2009

7. Credit Hours: Fixed at 3 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: B305 and B311 and at least one 300-level "PSY core course." This advanced research course builds on the skills and knowledge students have acquired during their undergraduate education that will enable them to conduct a team research project in order to further develop and consolidate their understanding of psychology as an applied science.

11. Lecture Contact Hours: Fixed at 0 or Variable from to

12. Non-Lecture Contact Hours: Fixed at 48 or Variable from to

13. Estimated enrollment: 30 of which 0 percent are expected to be graduate students. not required, but satisfies a psy major requirement

14. Frequency of scheduling: every semester
   Will this course be required for majors? Yes __ No X
   Justification for new course: To allow students to meet the capstone requirement with applied psychology research.

15. Are the necessary reading materials currently available in the appropriate library? Yes __ No X

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: ____________________________ Date 10/9/08
Department/Chairman/Division Director

Approved by: ____________________________ Date 10/15/08
Dean

Dean of Graduate School (when required) ____________________________ Date

Chancellor/Vice-President ____________________________ Date

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.

B 81 62000 UPS 724
University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow;
Department/Division—Pink; University Enrollment Services Advance—White
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT: Psychology

EFFECTIVE SESSION: Spring 2009

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

- [x] 1. New course with supporting documents
- 2. Add existing course offered at another campus
- 3. Expiration of a course
- 4. Change in course number
- 5. Change in course title
- 6. Change in course credit/typle
- 7. Change in course attributes (department head signature only)
- 8. Change in instructional hours
- 9. Change in course description
- 10. Change in course requisites
- 11. Change in semesters offered (department head signature only)
- 12. Transfer from one department to another

PROPOSED:

Subject Abbreviation: PSY-B
Course Number: 433
Long Title: Capstone Laboratory in Applied Psychology
Short Title: Capstone Lab in Applied Psych

EXISTING:

Subject Abbreviation:
Course Number:

TERMS OFFERED

Check All That Apply:
- Summer
- Fall
- Spring

CAMPUS(ES) INVOLVED

- Calumet
- Cont Ed
- Ft. Wayne
- Indianapolis

CLASSROOM(S) INVOLVED

- N. Central
- Tech Statewide
- W. Lafayette

CREDITS

1. Fixed Credit: Cr. Hrs. 3
2. Variable Credit Range: Minimum Cr. Hrs.
   (Check One) To Maximum Cr. Hrs.
3. Equivalent Credit: Yes No

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Minutes Per Mig</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
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<tbody>
<tr>
<td>Lecture</td>
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<td>Recitation</td>
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<td>Presentation</td>
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<td>Laboratory</td>
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<td>Lab Prep</td>
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<td>Experience</td>
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<td>Research</td>
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<td>Ind. Study</td>
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<td>Pract/Observ</td>
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CROSS-LISTED COURSES

- Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

P: B305 and B311 and at least one 300-level PSY core course. This advanced research course builds on the skills and knowledge students have acquired during their undergraduate education that will enable them to conduct a team research project in order to further develop and consolidate their understanding of psychology as an applied science.

Calumet Department Head: Date
Calumet School Dean: Date

Fort Wayne Department Head: Date
Fort Wayne School Dean: Date

Indianapolis Department Head: Date
Indianapolis School Dean: Date

North Central Department Head: Date
North Central Chancellor: Date

West Lafayette Department Head: Date
West Lafayette College/School Dean: Date
West Lafayette Registrar: Date

OFFICE OF THE REGISTRAR
Credit: Three semester hours

Course Description
B433 Capstone Laboratory in Applied Psychology (3 cr.) P: B305 and B311 and at least one 300-level core course. This advanced research course builds on the skills and knowledge students have acquired during their undergraduate education that will enable them to conduct a team research project in order to further develop and consolidate their understanding of psychology as an applied science.

Prerequisites
You must have successfully completed (i.e., with a grade of C- or higher) B305 Statistics and B311 Introductory Laboratory in Psychology, as well as one additional 300-level core course before you can enroll in this class. The instructor will assume you are able and willing to demonstrate the skills you acquired in these classes.

Course Rationale (What is a capstone class, and why am I required to take one?)
In an architectural context, a capstone is the top-most stone that completes a building. In an academic context, a capstone is the final class that completes a student’s curriculum. Capstone classes provide students with an opportunity “to demonstrate comprehensive learning in their major through some type of product or performance” (Palomba & Banta, 1999, p. 124). In other words, a capstone is a class in which senior psychology majors are required to pull together what they have learned in their previous classes and use this integrating experience to demonstrate they are capable of doing what they should be able to do when they graduate from the program (e.g., think critically, perform research, and write in APA style). This process serves a dual purpose. First, it allows psychology majors with a final opportunity to practice and demonstrate the skills they will need to succeed after graduation on the job or in graduate school. Second, it provides the Psychology Department with a final opportunity to assess whether or not it has been successful in its mission to produce competent psychology majors.

What is Applied Research? (Henrichsen, Smith, & Baker [1997])
Research is an organized and systematic way of asking questions and finding their answers.
- Research is organized and systematic because a specified method must be chosen and employed when it is performed and its successful completion requires a researcher to follow the set of specific procedures and steps required by that method.
- Research is focused on interesting, relevant, useful, and/or important questions. Without such a question to answer, research has no focus, drive, or purpose.
- Research is focused on finding answers. Whether it is the answer to a formal experimental question (e.g., Does the careful manipulation of an independent variable in a well-controlled laboratory environment bring about the change in a dependent variable that a particular theory would predict?) or a less formal, but equally important educational question studied in a less-well-controlled setting (e.g., Does a particular teaching strategy in the classroom produce an increase in student learning?), research is successful when an answer is found. Sometimes the answer is no, but no is still an answer.

Research can be either basic or applied.
- Basic research is performed to further the theoretical understanding of the relationship among important variables without necessarily looking for outcomes other than the advancement of knowledge. This type of research can be driven by the interest, intuition, and/or curiosity of the researcher and conducted without any practical application in mind.
• Applied research is performed to acquire new knowledge that can help to solve a specific problem that exists in a personal, social, educational, healthcare, organizational, or workplace setting. The type of work done in this class is research because it involves the systematic and organized selection and implementation of established methods of psychological inquiry. It is applied research because it focuses on questions whose answers can have a direct and positive impact in a variety of real-life settings.

B433 is designed to be broad enough to be taught by many faculty members in the Psychology Department. Each B433 instructor will be free to choose (1) the area of applied research in which students will engage and (2) the specific research methods students will use to investigate this area. At present, no faculty member has been officially assigned to offer the initial section of this course. Kathy Johnson has graciously consented to have the following portions of her existing B461 Capstone Laboratory in Developmental Psychology syllabus provided so those who read this syllabus can form an accurate impression of the types of objectives, requirements, grading scales, schedules, and policies that future B433 classes will contain.

Course Objectives
The overarching objective of this Capstone Laboratory in Developmental Psychology is to help students to integrate and synthesize their knowledge of human development, research methods, testing and the measurement of behavior, research ethics, written and oral communication, and statistical analysis. This objective will be attained through reading and critiquing research articles pertaining to human development, by applying developmental methods to selected problems, through selecting and interpreting statistical analyses, and by developing, conducting, and presenting (in both oral and written forms) a group research project. This course has 10 specific learning objectives that represent six IUPUI Principles of Undergraduate Learning. Students are expected to master the following specific objectives:

<table>
<thead>
<tr>
<th>Principle</th>
<th>Specific Learning Objective</th>
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<tbody>
<tr>
<td>Intellectual Depth and Adaptiveness</td>
<td>1. Describe and carry out the steps of the research process</td>
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<td>2. Describe and evaluate research in the areas of infancy, cognitive development, social development, and aging</td>
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<tr>
<td>Critical Thinking</td>
<td>3. Describe the advantages and disadvantages of different research designs</td>
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<tr>
<td>Application and Integration of Knowledge</td>
<td>4. Describe and apply developmental research methods</td>
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<td>Communication Skills</td>
<td>5. Conduct literature reviews of topics in developmental psychology, synthesizing results of relevant research on the topic</td>
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<td>6. Translate an idea into a research proposal</td>
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<td>7. Write a research report using APA format</td>
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<td>8. Communicate your results to others through an oral presentation of your research.</td>
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<td>Quantitative Skills</td>
<td>9. Select and conduct appropriate statistical analyses on research data and interpret the output from those analyses.</td>
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<tr>
<td>Values and Ethics</td>
<td>10. Identify and evaluate ethical issues in research</td>
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</table>

While this course will probably be one of the most challenging courses that you take, I hope that it also will prove to be among the most rewarding and fun. In order for this to happen, it is critical that you accept responsibility for your own learning and commit yourself to “owning” this course and engaging yourself completely in course-related activities. This is NOT a course that you can take “from the sidelines.” You will be DOING developmental research, or spending a lot of time analyzing and critiquing research that already has been done. While I will clarify text material and introduce new material, discussions and small group activities will be used extensively to help you learn about and practice research skills. Regular class
attendance is essential in order to complete this course successfully. Your failure to attend class or to engage
yourself in class activities will negatively impact your grade, and could jeopardize the success of your
group’s research project:

Course Requirements

• **Discussions (40 course points for Discussion Participation, 20 course points for Discussion
Facilitation).** Research has shown that students learn best when they take an active role in their learning
(i.e., when they discuss what they are reading, practice what they are learning, and apply concepts and
ideas). Therefore, a portion of Tuesday class periods will usually be devoted to small-group
discussions. You will be expected to read (before class meets) an assigned research article pertaining to
applied psychology. Some research articles have been selected for their methodological rigor and
because they provide excellent examples of how to communicate developmental research. Others have
been chosen because they fit well with lab activities or because they illustrate the application of a
particular statistical technique. Each week, 1 or 2 students will be responsible for facilitating the
discussion – Discussion Facilitators should read the articles by Friday of the previous week, coordinate
with co-facilitators over the weekend via Oncourse, and post “reflection” questions to the entire class
(via the Oncourse Messages tool) by Sunday at 5 PM. All students are expected to be present for 12
research discussions (10 as a participant and 2 as a facilitator). Participation in each discussion is worth
up to 4 points (4: very good; 3: average, 2: poor, 1: unacceptable, 0: not present) for a total of 40 points.
Facilitation of discussions is worth up to 10 points (assessed based on the caliber of your “thought
questions,” the promptness of your posting the questions to Oncourse, and your actual role as a
discussion leader), for a total of 20 points (5 points will be deducted if reflection questions are not posted
by Sunday at 5 PM. Thirteen discussions are scheduled, so you have the opportunity to earn “extra
credit” points by being present for more than 12 discussions.

• **Class Activities (24 points).** A portion of one class period each week (typically Thursdays) will entail
activities centered on data analysis and interpretation. Involvement in these activities will be awarded 2
course points (2: acceptable performance; 1: less than acceptable performance; 0: not present). Up to 24
course points will be awarded for participation in class activities. If you are present for more than 12
classes, additional points will be allocated as extra credit.

• **Pretest and Post-test (20 course points).** Because we are interested in consistently improving this
capstone course, we need to engage in some pre- vs. post-testing. A pretest is available through the
Original Oncourse Test and Surveys tool (entitled Pre-semester Questionnaire) and needs to be
completed on or before August 29. A post-test will be administered at the end of the semester. Each
questionnaire is worth 10 course points (to earn points, all items must be completed, though not
necessarily correctly).

• **Lab Experiment Participation (6 course points).** You are required to complete 2 experiments (each
worth 3 points) by the dates specified in the course schedule. I have registered our course with
PsychExperiments, an online psychology laboratory site that was developed at the University of
Mississippi with funding from the U.S. Department of Education and the National Science Foundation.
All lab experiments have been developed to replicate past research related to psychological science, and
students from all over the world can participate in the experiments and access archived data for
classroom assignments. All experiments have been approved by Institutional Review Boards, and you
have the option to withdraw from participation in any experiment at any time. Experiments should be
completed from computer laboratories on campus, or through computers linked to the internet via cable
or Ethernet connections (phone modems generally are too slow for collecting reaction time data). To
receive course credit for participating in experiments, be sure to log into PsychExperiments as a
student in Dr. Johnson’s Capstone Laboratory at IUPUI. When you are asked to provide a user name, use
your Oncourse UserID. Write down your unique identifier (provided by PsychExperiments) and send this
to me in an Oncourse mail, along with the name of the experiment in which you participated. All
experiments should be completed by the dates specified in the course schedule.
• **Homework Assignments (100 course points).** Five homework assignments (each worth 20 points) will be due on dates specified in the course schedule. Assignments generally will entail working on a small section of a research task (e.g., conducting observations, writing a method section, or running and interpreting a statistical test). Details of the assignments will be distributed in class. Late assignments will have 3 points deducted for each day that the homework assignment is overdue.

• **Research proposal (50 course points), Final Research Report (75 course points), and Presentations (20 course points).** Research teams will be formed in the third week of classes (the ideal team size is 4-5 students, and we will discuss in class how these should be created). Each team will formulate two testable hypotheses to address using the data made available to you by your instructor. This data generally will need to be coded and/or “cleaned” prior to analysis. Although you will conduct the research as a team, each student is expected to write their own research proposal and final research report. Both assignments should be written in APA style, using guidelines specified in the 5th edition of the Style Manual (available through the bookstore or through the University Library). At the end of the semester, all students will anonymously rate the members of their research teams to let me know how much each person participated in research activities. These ratings will be used to adjust the Final Research Report and presentation grades upwards (if peer ratings are higher than average) or downwards (if peer ratings are lower than average). The **Research Proposal** (7-10 typed pages; due 10/18) should include an introduction section (see [http://www.psychology.iupui.edu/capstone/introduction/write_your_intro.htm](http://www.psychology.iupui.edu/capstone/introduction/write_your_intro.htm) for suggestions), a method section, a proposed analyses section that describes how you will examine your data in order to test your hypotheses, and references. Detailed assessment rubrics will be distributed in class. Five points will be deducted for each day that the proposal is late, so it’s in your best interest to get it in on time.

• The **Final Research Report** (15-20 pages) will “build” on the research proposal and should include a title page, abstract, introduction, method, results, and discussion sections, as well as a complete list of scholarly references. All reports are due on the day of the final poster session (12/10). Under extreme circumstances, extensions may be granted if you discuss the situation with me at least 2 days prior to the due date. Otherwise, late papers will have 5 points deducted for each day that the paper is late. Again, detailed assessment rubrics will be distributed in class to guide you in your writing.

• **Presentations.** You will present each of the written products described above. However, oral presentations will be made by teams of students, rather than individually. The presentation of the research proposal (10/18) should be conducted through PowerPoint, and is expected to take approximately 10 minutes, followed by 5-10 minutes for questions. The presentation of the final research report will be conducted through poster symposium scheduled for December 10. 12:1:30 (note that this is a Monday – not our typical meeting time). The poster should graphically summarize the aims, methods, results, and conclusions of your research project. Members of your research team will be expected to stand near your poster and explain your findings to visitors. You are welcome to bring guests (parents, children, and friends) to the poster session, and refreshments will be provided.
Grades: Grades are based on the point system described below:

<table>
<thead>
<tr>
<th>COURSE ACTIVITY</th>
<th>TOTAL COURSE POINTS AWARDED</th>
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<tbody>
<tr>
<td>Research Discussion Participation (10 required: 4 points each)</td>
<td>40</td>
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<tr>
<td>Research Discussion Facilitation (2 required: 10 points each)</td>
<td>20</td>
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<tr>
<td>Class Activity Participation (12 required: 2 points each)</td>
<td>24</td>
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<tr>
<td>Capstone Laboratory Pretest (by 1/17) and Post-test (by 4/24)</td>
<td>20</td>
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<tr>
<td>Homework Assignments (5 total; 20 points each)</td>
<td>100</td>
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<tr>
<td>Lab Experiment Participation (via PsychExperiments) (2 total; 3 points each)</td>
<td>6</td>
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<tr>
<td>Written Proposal and Literature Review</td>
<td>50</td>
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<tr>
<td>Group Presentation of Research Proposal</td>
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<tr>
<td>Written Research Report</td>
<td>75</td>
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<tr>
<td>Group Poster Presentation of Research Project</td>
<td>10</td>
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<td><strong>Total</strong></td>
<td><strong>355</strong></td>
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**Academic Integrity**

Students are expected to be above reproach in scholastic activities. Students who violate university rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. "The university may discipline a student for academic misconduct, which is defined as any activity which tends to undermine the academic integrity of the institution and undermine the educational process." Code of Student Rights, Responsibilities, and Conduct, Part III, Section A. Since scholastic dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced.

If you cheat on an assignment or use someone else's words/ideas without giving them proper credit, you will automatically be assigned a grade of 0 for that assignment, and your case will be reported in writing to the department chairperson and to the Dean of Students, as outlined in the IUPUI Academic Handbook. All references to Internet sites must be accompanied by a complete URL citation. **Pasting text directly from Internet sites into written assignments clearly is a form of plagiarism.** Electronic search engines will be used periodically to guard against plagiarism.

**Incompletes**

I will follow the School of Science guidelines pertaining to grades of I (Incomplete). "Incomplete" grades will be assigned only if (a) you have completed the majority (75%) of the coursework; (b) you are passing the course; and (c) you have contacted me to make arrangements for completing the remainder of the course requirements and you have completed the Department of Psychology Incomplete Contract. If you simply stop coming to class and do not complete all of your coursework, your final grade will be calculated based on "0" grades for the assignments/exams that are missing.
Course Schedule: [to be inserted]

Course Websites:
- This course will use Oncourse to disseminate course-related information and grades, and as a way for us to communicate with each other. Check Oncourse at least once each week for course announcements, and to access course readings and data. Oncourse can be run from any computer that has access to the Internet. Log in to: https://oncourse.iu.edu/portal. You must know your IUPUI User ID and password to access course materials. To make changes to your computer accounts, go to the UITS web site at http://uits.iu.edu/ or call the UITS help desk at (317) 274-HELP.
- A capstone website has been developed by Dr. Silvia Bigatti in the Department of Psychology to serve as a supplementary form of instruction for students enrolled in Capstone Laboratories. This website would be particularly useful if it’s been a while since you’ve taken Statistics or Research Methods. Go to: http://www.psychology.iupui.edu/capstone/

Important Note
Psychology majors must earn at least a C- in B433 for it to fulfill the Psychology Department's capstone graduation requirement.

References
