New Course Request

Indiana University

Indianapolis Campus

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

1. School/Division: Science/Forensic and Investigative Science
2. Academic Subject Code: FIS

3. Course Number: 69700
   (must be cleared with University Enrollment Services)

4. Instructor: Siegel

5. Course Title: Design of a Research Project
   Recommended Abbreviation (Optional)
   (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year):
   Fall 2010

7. Credit Hours: Fixed at [ ] 4 [ ] 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: Consent of instructor. Fall, Spring, Summer. Develop a graduate level research project in forensic science, including literature searches, writing a research proposal, and defending the proposal.

11. Lecture Contact Hours: Fixed at [ ] 4 [ ] or Variable from ________ to ________

12. Non-Lecture Contact Hours: Fixed at [ ] 0 [ ] or Variable from ________ to ________

13. Estimated enrollment: 10 of which 100 percent are expected to be graduate students.

14. Frequency of scheduling: every semester
   Will this course be required for majors? Yes, non-thesis option.

15. Justification for new course: This is a requirement for the new M.S. Forensic Science program.

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 notified.

Submitted by:

Department Chair/Division Director

Date: 10/5/09

Dean of Graduate School (when required)

Date

Approved by:

Dean

Date: 10/30/09

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.

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 A GRADUATE COURSE  
50000-60000 LEVEL

DEPARTMENT: Forensic and Investigative Sciences  
EFFECTIVE SESSION: Fall 2010

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

1. New course with supporting documents (complete proposal form)
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 type
7. Change in course attributes
8. Change in instructional hours
9. Change in course description
10. Change in course requisites
11. Change in semesters offered
12. Transfer from one department to another

**PROPOSED:**

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>FIS</th>
<th>Subject Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>69700</td>
<td>Course Number</td>
</tr>
<tr>
<td>Long Title</td>
<td>Design of a Research Project</td>
<td></td>
</tr>
<tr>
<td>Short Title</td>
<td>Design of a Research Project</td>
<td></td>
</tr>
</tbody>
</table>

Abbreviated title will be entered by the Office of the Registrar if omitted, (50 CHARACTERS ONLY)

**CREDIT TYPE**

1. Fixed Credit: Cr. Hrs: 4
2. Variable Credit Range: Minimum Cr. Hrs: (Check One) To Cr. Hrs.
3. Equivalency Credit: Yes No
4. Thesis Credit: Yes No

**COURSE ATTRIBUTES:** Check All That Apply

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
4. Credit by Examination
5. Special Fees
6. Registration Approval Type: Department Instructor
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off Campus Experience

**SCHEDULE TYPE**

<table>
<thead>
<tr>
<th>Type</th>
<th>Minutes Per Mth</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
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<td></td>
</tr>
<tr>
<td>Recitation</td>
<td></td>
<td></td>
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<tr>
<td>Presentation</td>
<td>75</td>
<td>2</td>
<td>2</td>
<td>13</td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>Lab Prep</td>
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<tr>
<td>Clinic</td>
<td></td>
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<tr>
<td>Experiential</td>
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<td></td>
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<tr>
<td>Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind. Study</td>
<td></td>
<td></td>
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<tr>
<td>Pract/Oberv</td>
<td></td>
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</tr>
</tbody>
</table>

**COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):**
P: Consent of Instructor. Fall, Spring, Summer. Develop a graduate level research project in forensic science, including literature searches, writing a research proposal, and defending the proposal.

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**OFFICE OF THE REGISTRAR**

Calumet Department Head:  
Date:  
Calumet School Dean:  
Date:

Calumet Undergrad Curriculum Committee:  
Date:

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

Undergraduate Curriculum Committee:  
Date:

Indiana's Department Head:  
Date:  
Indiansapolis School Dean:  
Date:  
Indiansapolis School Dean:  
Date:

North Central Department Head:  
Date:  
North Central Chancellor:  
Date:

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

Graduate Council Secretory:  
Date:

West Lafayette Registrar:  
Date:
Supporting Document for a New Graduate Course

To: Purdue University Graduate Council
From: Faculty Member: Jay A. Siegel
       Department: Chemistry and Chemical Biology
       Campus: Indianapolis
Date: October 9, 2009
Subject: Proposal for New Graduate Course—Documentation Required by the Graduate Council to Accompany Registrar’s Form 40G

Contact for information if questions arise: Name: Jay A. Siegel
                                          Phone Number: (317) 274-6883
                                          E-mail: jasiegel@iupui.edu
                                          Campus Address: Chemistry and Chemical Biology, LD 326, Indpls

Course Subject Abbreviation and Number: FIS 69700
Course Title: Design of a Research Project

A. Justification for the Course:

   • Provide a complete and detailed explanation of the need for the course (e.g., in the preparation of students, in providing new knowledge/training in one or more topics, in meeting degree requirements, etc.), how the course contributes to existing fields of study and/or areas of specialization, and how the course relates to other graduate courses offered by the department, other departments, or interdisciplinary programs.

   • Justify the level of the proposed graduate course (50000- or 60000-level) including statements on, but not limited to: (1) the target audience, including the anticipated number of undergraduate and graduate students who will enroll in the course; and (2) the rigor of the course.

B. Learning Outcomes and Method of Evaluation or Assessment:

   • Describe the course objectives and student learning outcomes that address the objectives (i.e., knowledge, communication, critical thinking, ethical research, etc.).

   • Describe the methods of evaluation or assessment of student learning outcomes. (Include evidence for both direct and indirect methods.)

   • Grading criteria (select from dropdown box); include a statement describing the criteria that will be used to assess students and how the final grade will be determined.

criteria | Papers and Projects
• Identify the method(s) of instruction (select from dropdown box) and describe how the 
methods promote the likely success of the desired student learning outcomes.

**Method of Instruction**: Lecture

C. **Prerequisite(s):**

• List prerequisite courses by subject abbreviation, number, and title.

• List other prerequisites and/or experiences/background required. If no prerequisites are 
indicated, provide an explanation for their absence.

D. **Course Instructor(s):**

• Provide the name, rank, and department/program affiliation of the instructor(s).

• Is the instructor currently a member of the Graduate Faculty?  
  X Yes  _ No  
  (If the answer is no, indicate when it is expected that a request will be submitted.)

E. **Course Outline:**

• Provide an outline of topics to be covered and indicate the relative amount of time or 
emphasis devoted to each topic. If laboratory or field experiences are used to supplement a 
lecture course, explain the value of the experience(s) to enhance the quality of the course 
and student learning. For special topics courses, include a sample outline of a course that 
would be offered under the proposed course.

F. **Reading List (including course text):**

• A primary reading list or bibliography should be limited to material the students will be 
required to read in order to successfully complete the course. It should not be a compilation 
of general reference material.

• A secondary reading list or bibliography should include material students may use as 
background information.

G. **Library Resources**

• Describe the library resources that are currently available or the resources needed to support 
this proposed course.

H. **Example of a Course Syllabus**  (While not a necessary component of this supporting document, an 
example of a course syllabus is available, for information, by clicking on the link below, which goes to 
the Graduate School's Policies and Procedures Manual for Administering Graduate Student Programs. 
See Appendix K.)


(Revised and Approved by the 
Graduate Council 2/08)
FIS 69700 Design of a Research Project

A. Justification for the Course:

This course will teach students how to develop a graduate level research project in forensic science, including literature searches, writing a research proposal, and defending the proposal. It is also required for the M.S. in Forensic Science degree.

B. Learning Outcomes and Method of Evaluation or Assessment:

Course objectives.
1. To learn how to develop an idea for a graduate level research project in forensic science.

2. To learn to use the printed and electronic literature in the development of a research proposal.

3. To learn how to write a research proposal.

4. To be able to defend the research proposal to a group of faculty and peers.

Activities and assignments.
1. Students will study the forensic science literature to determine what research is being carried out currently in various areas of forensic science.

2. Each student will select an area of forensic science related to their work (as appropriate).

3. Each student will determine an idea for a research project in that area.

4. Each student will then develop a research proposal for that project.

5. After the proposal is approved by the instructor, the students will each defend the proposal before a group of faculty and students.

6. On the basis of the defense, the student will revise the proposal and develop a final version.
Grading.

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature search</td>
<td>100</td>
</tr>
<tr>
<td>Preliminary research proposal</td>
<td>100</td>
</tr>
<tr>
<td>Oral defense of proposal</td>
<td>100</td>
</tr>
<tr>
<td>Final proposal</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total points:</strong></td>
<td><strong>400</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Points Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>361-400 points</td>
<td>4.0</td>
</tr>
<tr>
<td>341-360</td>
<td>3.5</td>
</tr>
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<td>321-340</td>
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<td>301-320</td>
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<td>281-300</td>
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<td>261-280</td>
<td>1.5</td>
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<tr>
<td>241-260</td>
<td>1.0</td>
</tr>
<tr>
<td>&lt;241</td>
<td>0.0</td>
</tr>
</tbody>
</table>

C. Prerequisite(s):

Open only to part time students in the Master of Science in Forensic Science. Consent of instructor.

D. Course Instructor(s):

Jay A. Siegel, Professor, Chair of the Department of Chemistry and Chemical Biology and Director of the FIS Program.

Graduate Faculty membership: Yes.
E. Course Outline:

Schedule of activities.

The class will not meet every week. There will be meetings to explain and discuss each activity and then the students will be able to use the class time during other weeks to research their topics.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to the course and syllabus</td>
</tr>
<tr>
<td>2</td>
<td>Research in Forensic Science. Areas and current activities. What is a research proposal?</td>
</tr>
<tr>
<td>3</td>
<td>Forensic science literature and how to search it</td>
</tr>
<tr>
<td>4-7</td>
<td>Development of a research topic and brief student explanations of each proposal</td>
</tr>
<tr>
<td>8-12</td>
<td>Development of compete research proposal</td>
</tr>
<tr>
<td>13-14</td>
<td>Oral defenses of proposal</td>
</tr>
<tr>
<td>15</td>
<td>Final proposals due</td>
</tr>
</tbody>
</table>

F. Reading List (including course text):
There will be no assigned textbook for this course. Instead there will be a packet of readings that will be available at a local bookstore. This will be a collection of articles covering various aspects of topics of this course.

G. Library Resources.

H. Example of a Course Syllabus.

Attached.
FIS 69700 – Design of a Research Project

PROFESSOR: Jay A. Siegel

COURSE DESCRIPTION: (6 cr.) Permission of instructor. Fall. Design of a research project. How to develop a graduate level research project in forensic science. Literature searches, the research proposal, defending the proposal. Open only to part-time students in the Master of Science in Forensic Science.

TEXT MATERIALS: There will be no assigned textbook for this course. Instead there will be a packet of readings that will be available at a local bookstore. This will be a collection of articles covering various aspects of topics of this course.

COURSE OBJECTIVES:

1. To learn how to develop an idea for a graduate level research project in forensic science
2. To learn to use the printed and electronic literature in the development of a research proposal
3. To learn how to write a research proposal
4. To be able to defend the research proposal to a group of faculty and peers

ACTIVITIES AND ASSIGNMENTS:

1. Students will study the forensic science literature to determine what research is being carried out currently in various areas of forensic science
2. Each student will select an area of forensic science related to their work (as appropriate)
3. Each student will determine an idea for a research project in that area
4. Each student will then develop a research proposal for that project
5. After the proposal is approved by the instructor, the students will each defend the proposal before a group of faculty and students
6. On the basis of the defense, the student will revise the proposal and develop a final version
The Academic Handbook states that faculty members have the responsibility of fostering the “intellectual honesty as well as the intellectual development of students....The faculty member should explain clearly the meaning of cheating and plagiarism as they apply to the course....Should the faculty member detect signs of plagiarism or cheating, it is his or her most serious obligation to investigate these thoroughly, to take appropriate action with respect to the grades of students, and in any event to report the matter to the Dean of Students. The necessity to report every case of cheating, whether or not further action is desirable, arises particularly because of the possibility that this is not the student’s first offense, or that other offenses may follow it. Equity also demands that a uniform reporting practice be enforced; otherwise, some students will be penalized while others guilty of the same actions will go free.” (p. 200).

Academic Misconduct: (from the Code of Student Rights, Responsibilities, and Conduct)

1. Cheating
Cheating is considered to be an attempt to use or provide unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment.

a. A student must not use external assistance on any “in-class” or “take-home” examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.

b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advance authorization from the instructor to whom the work is being submitted.

c. A student must not use materials from a commercial term paper company; files of papers prepared by other persons, or submit documents found on the Internet. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student’s individual work.

d. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.

e. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.

f. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom he work is being submitted.
g. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.

2. Fabrication
A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.

3. Plagiarism
Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered “common knowledge” may differ from course to course.

   a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.

   b. A student must give credit to the originality of others and acknowledge indebtedness whenever:
      (1) Directly quoting another person’s actual words, whether oral or written;
      (2) Using another person’s ideas, opinions, or theories;
      (3) Paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
      (4) Borrowing facts, statistics, or illustrative material; or
      (5) Offering materials assembled or collected by others in the form of projects or collections without acknowledgment.

4. Interference
A student must not steal, change, destroy, or impede another student’s work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student’s grade or the evaluation of academic performance. Impeding another student’s work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.

5. Violation of Course Rules
A student must not violate course rules established by a department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.
6. Facilitating Academic Dishonesty
A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

Faculty Action
If a faculty member has information that one of his/her students committed an act of academic misconduct, the faculty member is required to hold an informal conference with the student. The conference should be prompt and private. If the faculty member concludes that the student is responsible for the misconduct, then the faculty member is authorized to impose an appropriate academic sanction (i.e., lower or failing grade on the assignment, assessing a lower or failing grade for the course).

After reporting the information to the Dean of Students, he/she will review the information to determine if additional sanctions should be applied.

Sanctions are outlined in the Code of Student Rights, Responsibilities, and Conduct, section Part V, Section B: Procedures for Academic Misconduct Related to a Course. This document appears on the web at the following address: http://www.iupui.edu/code/

Policy on Student Academic Misconduct
Faculty are required to report all incidents of academic misconduct to the Dean of Students. For information about policies and procedures, including due process requirements, see the Code of Student Rights, Responsibilities, and Conduct, especially Part V: Student Disciplinary Procedures. The code is accessible online at http://www.iupui.edu/code/.

ADAPTIVE EDUCATIONAL SERVICES
If you need any special accommodations due to a disability, please contact Adaptive Educational Services at (317)-274-3241 or http://www.iupui.edu/~divrsity/aes/.
The office is located in Joseph T. Taylor Hall (UC), Room 137.
GRADING:

Literature search: 100
Preliminary research proposal: 100
Oral defense of proposal: 100
Final proposal: 100
Total points: 400

361-400 points 4.0
341-360 3.5
321-340 3.0
301-320 2.5
281-300 2.0
261-280 1.5
241-260 1.0
<241 0.0

SCHEDULE OF ACTIVITIES

The class will not meet every week. There will be meetings to explain and discuss each activity and then the students will be able to use the class time during other weeks to research their topics.

WEEK ACTIVITIES
1 Introduction to the course and syllabus
2 Research in Forensic Science. Areas and current activities. What is a research proposal?
3 Forensic science literature and how to search it
4-7 Development of a research topic and brief student explanations of each proposal
8-12 Development of complete research proposal
13-14 Oral defenses of proposal
15 Final proposals due