



The University Of Toledo

JAN 162013

# New Graduate Course Proposal

COLLEGE OF GRADUATE STUDIES

|  | * denotes r   | equired fields                               |                                    |  |
|--|---|--|------------------------------------|--|
| 1. College*: College of Pha  | rmacy   |  |                                    |  |
| Department*: [Pharmacc   | logy  |  |                                    |  |
| 2. Contact Person*: Surya N  | lauli Phone: 38   | 3-1910 (xxx-xxx                              | xx) Email:                         |  |
| surya.nauli@utoledo.edu  |   |  |                                    |  |
| 3. Alpha/Numeric Code (S   | ubject area - number)*:   | PHCL   | - 6300                             |  |
| 4. Proposed title*: Res Expe   | rience in Exp   |  |                                    |  |
| Proposed effective term*   | : 201340 ( e  | .g. 201140 for 2011                          | Fall)                              |  |
| 5. Is the course cross-listed  | l with another academic v   | init?  | O<br>Yes                           | ③<br>No                                      |
| Approval of other acader   | nic unit (signature and tit   | tle)   |                                    |  |
| Is the course offered at r   | nore than one level?  |  | O<br>Yes                           | ③<br>No                                      |
| If yes, an undergraduate<br>new, complete the <u>New 1</u><br>an <u>Undergraduate Course</u> | course proposal form mu<br><u>Undergraduate Course Pr</u><br>e Modification Proposal. | st also be submitted<br>oposal; if the under | 1. If the underg<br>graduate cours | graduate course is<br>se is existing, submit |
|  | Fixed:  | or   | Variable:                          | 2  |
| to 6   |   |  |                                    |  |
| 7. Delivery Mode:  | Primary*  | Secondary                                    | Terti                              | ary  |
| a. Activity Type *   | Regular Lab   | Lecture                                      | ‡) Se                              | minar 🛟                                      |
| b. Minimum Credit<br>Hours *   | 2   | 2  | 2                                  |  |
| Maximum Credit<br>Hours *  | 6   | 6  | 6                                  |  |
| c. Weekly Contact  | 6   | 6  | 6                                  |  |

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| 8.      | Hours *             |  |         |          |
|---------|---------------------|--|---------|----------|
| 0.      | Terms offered:      | ☑ ☑ ☑<br>Fall Spring Summer  |         |          |
|         | Years offered:      | <ul> <li>O</li> <li>Every Year Alternate Years</li> </ul>  |         |          |
| 9.<br>A | Are students permi  | nitted to register for more than one section during a term?  | 🕑<br>No | )<br>Yes |
| N       | May the courses be  | be repeated for credit? O O Maximum Hours  | 12      |          |
| 10      | Grading<br>System*: | <ul> <li>Normal Grading (A-F, PS/NC, PR, I)</li> <li>Passing Grade/No Credit (A-C, NC)</li> <li>Credit/No Credit</li> <li>Grade Only (A-F, PR, I)</li> <li>Audit Only</li> <li>No Grade</li> </ul> |         |          |

11. Prerequisites (must be taken **before**): i.e. C or higher in (BIOE 4500 or BIOE 5500) and C or higher in MATH 4200

| -                                       |                                  |
|---|----------------------------------|
|   |                                  |
| 0                                       | 0                                |
| PIN (Permisson From Instructor)         | PDP (Permission From Department) |
| Co-requisites (must be taken together): |                                  |
|   |                                  |

12.

# Catalog Description\* (75 words Maximum)

The course is intended for laboratory rotations to familiarize students with research topics in various clinical/basic science laboratories. A primary focus is to allow students to shadow, learn, experience and perform specific laboratory techniques.

| 8.      | Hours *             |  |  |  |          |          |            |       |          |          |
|---------|---------------------|--|--|--|----------|----------|------------|-------|----------|----------|
| 0.      | Terms offered:      | ⊠<br>Fall                              | ⊠<br>Spring                                | ⊠<br>Summer  |          |          |            |       |          |          |
|         | Years offered:      | ③<br>Every                             | Year                                       | ⊖<br>Alternate Y                                     | ears     |          |            |       |          |          |
| 9.<br>A | re students permi   | tted to                                | register                                   | for more than  | one sect | ion duri | ng a term? |       | ()<br>No | )<br>Yes |
| N       | lay the courses be  | e repeat                               | ed for cr                                  | edit? O<br>No  | )<br>Yes |          | Maximum    | Hours | 12       |          |
| 10      | Grading<br>System*: | O<br>Passi<br>O<br>Credi<br>O<br>Grado | ing Grad<br>it/No Cr<br>e Only (<br>t Only | ing (A-F, PS<br>e/No Credit (<br>edit<br>A-F, PR, I) |          | ,        |            |       |          |          |

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|   | $\bigcirc$                       |
|---|----------------------------------|
| PIN (Permisson From Instructor)                 | PDP (Permission From Department) |
| Co-requisites (must be taken <b>together</b> ): |                                  |
|   |                                  |
|   |                                  |

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13. Attach a syllabus and an electronic copy of a complete outline of the major topics covered. Click <u>here for template</u>.

| File Type | View File   |
|-----------|-------------|
| Syllabus  | <u>View</u> |

## **Course Approval:**

Department Curriculum Authority:

Department Chairperson:

College Curriculum Authority or Chair:

College Dean:

Graduate Council:

Dean of Graduate Studies:

Office of the Provost :

| Ezilchen   |                   |
|--|-------------------|
| Ezdihar Hassoun  | Date 2012/11/09   |
| Notes & Mr 1   |                   |
| William S. Messer, Jr  | Date 2012/11/09   |
| William S. Messel, JI  |                   |
| and the first  | ADate 2012/12/04  |
| Surya Nauli  |                   |
|  | Date 2012/12/04   |
| Wayne Hoss Mayneek-Ho  | m Date 2012/12/04 |
| 10   |                   |
| DICEAS   | Date 2 - 5 - 2013 |
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| TO ALCON   | Date 2-5-2013     |
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### **Administrative Use Only**

| Effective Date:      | (YYYY/MM/DD) |
|----------------------|--------------|
| CIP Code:            |              |
| Subsidy Taxonomy:    |              |
| Program Code:        |              |
| Instructional Level: |              |

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# The following requirements will be differentiated for courses that are co-listed for Masters (5000 or 6000) and Ph.D. (7000 or 8000) levels:

Masters students will need to complete successfully all course requirements as indicated in the syllabus. They should be able to achieve and demonstrate comprehensive understanding of course topics through class discussion, assignments, quizzes and exams.

To complete the course requirements, Ph.D. students will need to demonstrate an extended expertise in the course topics. They also should demonstrate independent scholarly activity and creativity to the class instructor. The ability of the Ph.D. level students to synthesize scientific data/information, develop original ideas/hypotheses and Formulate independent research studies/proposals will be evaluated through additional assignments and readings, or by demonstrating leadership roles in class discussion or other collaborative settings."

# PHCL 6300/8300 Research Experience in Experimental Therapeutics Course Syllabus

| Instructor(s):       | Drs. Salah Ahmed, Miles Hacker, Ezdihar Hassoun, Ming Liu, William Messer,<br>Surya Nauli, Ana Oyarce, Youssef Sari, Caren Steinmiller, Frederick<br>William. |
|----------------------|---|
| Office/Office Hours: | HEB / to be announced   |
| Phone:               | 419-383-1910  |
| Contact Email:       | surya.nauli@utoledo.edu   |

Class Time and Location: To be announced

Primary Communication Method: Research, Lecture, Discussion and/or Presentation

**Course Description:** The course is intended for laboratory rotations to familiarize students with research topics in various clinical/basic science laboratories. A primary focus is to allow students to shadow, learn, experience and perform specific laboratory techniques.

#### **Course Objectives:**

- 1) Students will be able to identify a primary research topic for their dissertation project.
- 2) Students will shadow, learn, experience and perform various laboratory techniques.
- 3) Students will be able to develop and design experiments pertinent to their research interests.
- 4) Students will be able to explore literatures on the laboratory techniques and scientific knowledge of their research topics.
- 5) Students will be able to apply the basic principles of pharmacology and toxicology to their dissertation research projects.

#### Credit Hour: 2-6

#### Required/Recommended Texts: none

#### **Course Policies:**

General- Students are expected to attend classes, although attendance is not routinely taken. In the event of absence from class, students will be responsible for completing all assignments.

Research paper- may be assigned by the individual instructors.

Research presentation- may be required by the individual instructors.

#### Exams- not applicable

Academic Dishonesty Statement- Cheating on laboratory tasks or other forms of academic dishonesty will not be tolerated. Students guilty of cheating or plagiarism will be prosecuted according to College and University policies.

**Students with Disabilities -** The University of Toledo abides by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. If you have a disability and are in need of academic accommodations but have not yet registered with the Office of Accessibility (Rocket Hall 1820; 419.530.4981; <u>officeofaccessibility@utoledo.edu</u>) please contact the office as soon as possible to initiate the process. Students with disabilities receiving accommodations through OA are encouraged to discuss these with course instructors, after class or during office hours, so that we may be better informed on how to assist you during the semester.

**Course Grade:** Final course grades will be determined based on the attendance, professionalism, quality of the laboratory performance, ability to conduct and learn laboratory techniques, and ability to work as a team and to communicate clearly.

Grading Scale: Pass/Fail grading will be used.

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