The University Of Toledo
New Graduate Course Proposal

1. College*: College Pharmacy, Pharm Sciences
   Department*: Pharmacology

2. Contact Person*: Ezdihar Hassoun Phone: 383-1917 (xxx-xxxx) Email: ezdihar.hassoun@utoledo.edu

3. Alpha/Numeric Code (Subject area - number)*: PHCL 7500

4. Proposed title*: From Experimental to Applied Therapeutics
   Proposed effective term*: 20140 (e.g. 201140 for 2011 Fall)

5. Is the course cross-listed with another academic unit? 🌟Yes 🌟No

   Approval of other academic unit (signature and title)

   Is the course offered at more than one level? 🌟Yes 🌟No

   If yes, an undergraduate course proposal form must also be submitted. If the undergraduate course is new, complete the New Undergraduate Course Proposal; if the undergraduate course is existing, submit an Undergraduate Course Modification Proposal.

6. Credit hours*: Fixed: 4 or Variable:

7. Delivery Mode:
   a. Activity Type *
      Primary*: Lecture
      Secondary: Seminar
      Tertiary: Independent Study

   b. Minimum Credit Hours *

   Maximum Credit Hours *

   c. Weekly Contact Hours *

8. Terms offered: ☑ Fall ☑ Spring ☑ Summer

Date Added: 4-14-14
Graduate Council Approved: 4-28-14
To Provost: 5-8-14
Years offered:  (☐) Every Year  (☐) Alternate Years

9. Are students permitted to register for more than one section during a term?  (☐) No  (☐) Yes

May the courses be repeated for credit?  (☐) No  (☐) Yes  Maximum Hours

    - Satisfactory/Unsatisfactory (A-C, less than C)
    - Grade Only (A-F, WP/WF, PR, I)
    - Audit Only
    - No Grade

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

   PHCL-3700 or PHCL-5700

   PIN (Permission From Instructor)
   PDP (Permission From Department)

Co-requisites (must be taken together):

12. Catalog Description* (75 words Maximum)

The course focuses on bridging the gap between experimental and clinical applications of drugs. It will discuss groups of structurally related drugs designed to treat certain conditions, their basic molecular pharmacological action and how that is applied clinically. The course will also include discussing toxicity of some drugs and xenobiotics manufactured for certain applications, their basic molecular actions and their clinical toxicity. PHCL-3700 or PHCL-5700 as pre- or co-requisite.

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

   Syllabus:  Choose File  no file selected

   Additional Attachment 1:  Choose File  no file selected

   Additional Attachment 2:  Choose File  no file selected

14. Comments/Notes:
This course is an alternative to MBC 6190/8190 Advanced Medicinal Chemistry. Completion of this course is therefore required for the Experimental Therapeutic program if a student does not take MBC 6190/8190.

15. Rationale:
The course focuses on bridging the gap between experimental and clinical applications of drugs.

Course Approval:

Department Curriculum Authority:  
Department Chairperson:  
College Curriculum Authority or Chair:  
College Dean:  
Graduate Council:  
Dean of Graduate Studies:  
Office of the Provost:

Submit New Course Proposal
University of Toledo
Course PHCL-S500 /7500: From Experimental to Applied Therapeutics
Fall 2014

SYLLABUS
Instructor: Ezdihar Hassoun (course coordinator)
Faculty Office: HEB 274C
Faculty/Department website: http://www.utoledo.edu/pharmacy/depts/pharmacology/index.html
Class meeting time: TBD
Office Hours: TBD
Phone: 419-383-1917
E-Mail: ezdihar.hassoun@utoledo.edu
Class Meetings Location: TBD

Course Description including course pre-requisites or co-requisites:
The course focuses on bridging the gap between experimental and clinical applications of
drugs. It will discuss groups of structurally related drugs designed to treat certain
conditions, their basic molecular pharmacological actions and how that are applied
clinically. The course will also include discussion on toxicity of some drugs and xenobiotics
manufactured for certain applications, their basic molecular actions and their clinical
toxicity. PHCL-3700, or PHCL-5700 as pre- or co-requisite

Note: This course is an alternative to MBC 6190/8190 Advanced Medicinal Chemistry.
Completion of this course is therefore required for the Experimental Therapeutic program if a
student does not take MBC 6190/8190.

Texts (Required and Recommended, Reserve Materials, etc.):
The course will be team-taught and each instructor will suggest references, including
mainly published articles for the part they teach.

Course Requirements: Expectations of students in course:
The course will be delivered in a lecture format. Students will be also asked to conduct an
independent study by selecting a drug or xenobiotic and searching its chemical design,
basic therapeutic toxicity experiments conducted on it, and clinical trials or epidemiological
studies related to its application. A paper should be written and submitted by each student
at the end of the course. However, the progress of their independent study will be followed
up on weekly basis.

Grading policy or criteria:
The final grade will be the sum of two exam grades (20% each), plus class attendance and
participation (10%), and written/oral report on the independent study (50%). Grades can
range from A-F.

Assessment of Learning:
1. Exam grades
2. Quality of independent study
3. Independent study, oral presentation
4. Independent study, writing skills
**Classroom Procedures:**
1. Class attendance and participation are mandatory. Each time a student misses a class without a legitimate excuse, will lose grades. Make-up exams are only administered for students with legitimate excuse.
2. Academic Accommodation/Accessibility:
   Students with disabilities who believe they may need academic accommodations are encouraged to speak with me after class and will need to contact the Office of Accessibility (Rocket Hall 1820; 419-530-4981; officeofaccessibility@utoledo.edu) as soon as possible for more information and/or to initiate the process for accessing academic accommodation.

**Tentative Class Schedule/Activities/List of Topics Covered**

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<th>Week</th>
<th>Topic</th>
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<td>Experimental and applied therapy: The renal system</td>
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<td>4-5</td>
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<td>Experimental and applied therapy: Antibiotics</td>
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<tr>
<td>15</td>
<td>Experimental and applied therapy: Antioxidants</td>
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