The University Of Toledo

New Graduate Course Proposal

* denotes required fields

1. College*: College of Pharmacy
   Department*: Pharmacology

2. Contact Person*: William Messer  Phone: 383-1958 (xxx-xxxx)  Email: william.messer@utoledo.edu

3. Alpha/Numeric Code (Subject area - number)*: PHCL 6390

   Proposed effective term*: 201340 (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: or Variable: 1
   to 6

7. Delivery Mode:
   Primary*
   Secondary
   Tertiary
   a. Activity Type *
      Recitation
      Independent Study
      Open Lab
   b. Minimum Credit Hours *
      1
   c. Weekly Contact
      1

https://curriculumtracking.utoledo.edu/GradNewCourse.aspx?Mode=View&ID=PHCL6390
Hours *
8. Terms offered: ✔ ✔ ✔
    Fall   Spring   Summer

Years offered: ☐ ☐
    Every Year   Alternate Years

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 24

Grading System*:
☐ Normal Grading (A-F, PS/NC, PR, I)
☐ Passing Grade/No Credit (A-C, NC)
☐ Credit/No Credit
☐ Grade Only (A-F, 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

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

Co-requisites (must be taken together):

12. Catalog Description* (75 words Maximum)

The course will examine current topics and trends in the field of experimental therapeutics. The nature of the course will vary from student to student, depending on their background in the field, and the nature of their interest. For example, a new student may be assigned a literature search to identify papers that describe current approaches toward the treatment of human disease. A more advanced student might be given the task of researching and developing new laboratory techniques to initiate a
8. Terms offered: ✔ Fall  ✔ Spring  ✔ Summer

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 24


Pin (Permission From Instructor)  ☐ PDP (Permission From Department)

Co-requisites (must be taken together):

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

12. Catalog Description* (75 words Maximum)

The course will examine current topics and trends in the field of experimental therapeutics. The nature of the course will vary from student to student, depending on their background in the field, and the nature of their interest. For example, a new student may be assigned a literature search to identify papers that describe current approaches toward the treatment of human disease. A more advanced student might be given the task of researching and developing new laboratory techniques to initiate a...
13. Attach a syllabus and an electronic copy of a complete outline of the major topics covered. Click here for template.

<table>
<thead>
<tr>
<th>File Type</th>
<th>View File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabus</td>
<td>View</td>
</tr>
</tbody>
</table>

Course Approval:

Department Curriculum Authority:  
Ezdihar Hassoun  
Date 2012/11/09

Department Chairperson:  
William S. Messer, Jr.  
Date 2012/11/09

College Curriculum Authority or Chair:  
surya Nauli  
Date 2012/12/04

College Dean:  
Wayne Hoss  
Date 2012/12/04

Graduate Council:  
Date 2-5-2013

Dean of Graduate Studies:  
Date 2-5-2013

Office of the Provost:

Administrative Use Only

Effective Date:  
(YYYY/MM/DD)

CIP Code:  

Subsidy Taxonomy:  

Program Code:  

Instructional Level:  

https://curriculumtracking.utoledo.edu/GradNewCourse.aspx?Mode=View&ID=PHCL6390
PHCL 6390
Problems in Experimental Therapeutics
Course Syllabus Fall 2013
1-6 Credit Hours

Instructor(s): Graduate Faculty in the Department of Pharmacology
Office/Office Hours: HEB, TBA
Phone: 419-383-1958
Contact email: william.messer@utoledo.edu

Class Time and Location: TBA

Primary Communication Method: Lecture, class discussion, laboratory instruction, web assisted

Course Description: The course will examine current topics and trends in the field of experimental therapeutics. The nature of the course will vary from student to student, depending on their background in the field, and the nature of their interest. For example, a new student may be assigned a literature search to identify papers that describe current approaches toward the treatment of human disease. A more advanced student might be given the task of researching and developing new laboratory techniques to initiate a research project. The overall goal will be to introduce students to current problems in experimental therapeutics, and help them identify an approach toward solving these problems.

Course Objectives:
1) By the end of the semester, students will be able to critically evaluate the scientific literature.
2) Students also will be able to identify current approaches toward studying human disease and/or developing new therapies.
3) Students also will be able to synthesize information regarding research techniques into a research plan that can be implemented in the laboratory.

Required/Recommended Texts: Readings will be assigned from the current literature. Alternatively, students may conduct a literature search to identify important research trends, which will be the subject of class discussions.

Course Policies:
General- Students will meet regularly with the instructor throughout the semester.

Class discussions- Students will be assigned research papers to read, review and present during the class session. Depending on the number of students in the class, students may either present a paper or participate in discussion each week.

Research paper- A research paper will be due by Friday of the 15th week of class.
Academic Dishonesty Statement- Cheating on exams and 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; officeofaccessibility@utoledo.edu) 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 on the basis of class participation (both presentations and discussions) and the research paper.

Grading Scale: The following grading scale will be used:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numerical average (%)</th>
<th>Quality points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90.0-100</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>88.5-89.9</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>86.5-88.4</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>80.0-86.4</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>78.5-79.9</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>76.5-78.4</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>68.5-76.4</td>
<td>2.0</td>
</tr>
<tr>
<td>D+</td>
<td>66.5-68.4</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>60.0-66.4</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>58.5-59.9</td>
<td>0.67</td>
</tr>
<tr>
<td>F</td>
<td>0-58.4</td>
<td>0</td>
</tr>
</tbody>
</table>

List of Potential Topics:

- Receptor signaling
- High throughput screening
- Molecular biology of disease (e.g., Alzheimer's disease, rheumatoid arthritis, diabetes)
- Pharmacogenomics
- Receptor structure
- In vivo testing of efficacy
- Determination of ADME properties of drugs
- Molecular modeling and in silico drug design
- Animal models for human disease
**Academic Dishonesty Statement**: Cheating on exams and 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; officeofaccessibility@utoledo.edu) 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 on the basis of class participation (both presentations and discussions) and the research paper.

**Grading Scale**: The following grading scale will be used:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numerical average (%)</th>
<th>Quality points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90.0-100</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>88.5-89.9</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>86.5-88.4</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>80.0-86.4</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>78.5-79.9</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>76.5-78.4</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>68.5-76.4</td>
<td>2.0</td>
</tr>
<tr>
<td>D+</td>
<td>66.5-68.4</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>60.0-66.4</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>58.5-59.9</td>
<td>0.67</td>
</tr>
<tr>
<td>F</td>
<td>0-58.4</td>
<td>0</td>
</tr>
</tbody>
</table>

**List of Potential Topics**:
- Receptor signaling
- High throughput screening
- Molecular biology of disease (e.g., Alzheimer's disease, rheumatoid arthritis, diabetes)
- Pharmacogenomics
- Receptor structure
- In vivo testing of efficacy
- Determination of ADME properties of drugs
- Molecular modeling and in silico drug design
- Animal models for human disease