

**COURSE APPROVAL FORM, Graduate
School University of Arkansas for Medical
Sciences**

This form and attached materials are due in the Graduate School Office on the first Monday of the month. All forms will be submitted to the UAMS Graduate Council Curriculum Committee for review and approval prior to consideration by the Graduate Council.

This form is not required for minor stylistic or editorial corrections to the title or course descriptions. These may be made when revising the catalog copy.

1. **Program:** Pharmaceutical Sciences Graduate Program | P | S | G | P | 6 | 1 | 1 | 4 |
Department Alpha (Department) Code

2. **Action proposed** (indicate one or more items): Effective term: Spring 2017

- | | | | |
|--|---|--|--|
| <input checked="" type="checkbox"/> Add course | <input type="checkbox"/> Change title | | |
| <input type="checkbox"/> Eliminate course
(No outline needed) | <input type="checkbox"/> Change credit hours from: _____ to _____ | | |
| | <input type="checkbox"/> Change course number
from: _____ to _____ | | |
| | _____ Change description | | |

3. **Course ID, title and description:**

P S | G P | 6 1 | 1 4 Prac Drug Disc Devel
prefix number title (20 characters)

Practice in Drug Discovery and Development

Scheduled Offering: Fall Spring Summer On demand

To cross list a course, use the Course Cross Listing Form.

Describe the course in sentence form using 50 words or less as it is to appear in the catalog. List prerequisites, co-requisites and possible off-site instructional opportunities or requirements.

This course will introduce students to the principles of drug discovery and design as well as illustrate the process of drug development. After an introduction to the principles, a representative group of approved drugs and target platforms will be discussed in relation to their receptor interactions and associated medicinal chemistry.

4. **Justification:**

Justify this change in terms of course needs or curriculum improvement. State the effect of this change on any degree programs. Identify the courses to be eliminated, if any, if this course is approved. (Course Approval Forms must also be submitted for these courses) Identify any existing course or courses that would extensively overlap or be duplicated if the proposed curricular change occurs. Provide statements of concurrence with the change from the chairperson(s) and dean(s) of the programs/areas offering the affected courses.

Many graduates from the UAMS graduate programs will eventually pursue their careers in the pharmaceutical industry. This course will provide the general knowledge on how a drug is discovered and developed, which would help them to land jobs and perform better at those jobs.

5. Course Information: *This information is not required for seminars, special problems, research, thesis, dissertation, colloquia, practica, etc.*

Course Title and Course number: *Practice in Drug Discovery & Development PSGP 6114*

Credit Hours: 2

Proposed Date/Semester: Spring 2017

Course Description:

This course is designed to introduce students to the general practice in drug discovery and development. There will be two 90 minute lecture style classes each week. After an introduction to the principles (eight lectures, first four weeks), a representative group of approved drugs and target platform will be discussed in relation to their receptor interactions and associated medicinal chemistry.

Course Prerequisites: "No prerequisites."

Attendance:

Attendance is required for all classes. Excused absences may be obtained only by permission from the course director. Make-up exams will only be given under the most extenuating circumstances.

Student Evaluation:

One take-home exam will be distributed by email at the end of the first four weeks.

Student presentations will be scheduled during the last two lecture periods. Specific details regarding the presentations will be provided at the start of the course.

The take home exam and the student presentations will carry equal weight in grade determination.

Assigned outside reading may also be required.

Student Grades

Take home exam	50%
Student Presentation	50%
TOTAL.....	100%

Course Evaluation:

At the end of the course, students will be provided with a Course Evaluation Form to anonymously assess the content and delivery of the course. Faculty will assess the course each term and make any appropriate modifications and updates.

Textbooks/Reading Materials:

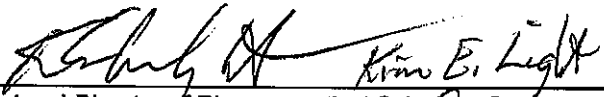
Assigned outside reading may be required

Course Director(s): Dr. Hong-yu Li

Tentative Course Schedule:

Week	Topic	Instructor
1 & 2	Introduction & Overview of Drug Discovery, Design & Development	Hong-yu Li
3	Drug Discovery in Industry Labs	Hong-yu Li
4	Drug Discovery in Academic Labs	Hong-yu Li
5	DNA Targeted Cancer Drugs	Hong-yu Li
6	A Case Study for a Kinase Inhibitor: Gleevec	Hong-yu Li
7		Peter Crooks
8		Peter Crooks
9		Guangrong Zheng
10		Guangrong Zheng
11	Kinase Drug and Drug Design	Brendan Frett
12	Targeting protein-protein Interactions	Brendan Frett
13	Student Presentations	Group
14	Student Presentations	Group

6. Program Approvals:


 (Print or type) Director of Pharmaceutical Sciences Graduate Program


 (Signature) Chairperson, Academic Department or Area

07/22/14
 Date

College Dean

Date

7. Graduate School Approvals


 Chairperson, Graduate Council

8/18/2016
 Date


 Dean of the Graduate School

3-22-10
 Date

**University of Arkansas for Medical Sciences
Office of the University Registrar
GUS Course Catalog Form**

This form should be used for courses offered at UAMS. If a course addition will change the curriculum for one or multiple degree plans, you will be asked to update a curriculum template for each degree program affected. Please remember to submit a copy of the syllabus with this form.

Course Changes and Additions Submission Timeline

Fall Semester February 1st (same calendar year)
Spring Semester September 1st (preceding calendar year)
Summer Semester December 1st (preceding calendar year)

This request is for a: New Course Course Change Course Retirement (skip to p. 4)

College: Graduate School

Department/Program: Pharmaceutical Sciences Graduate Program

Course Title: Practice in Drug Discovery and Development

Course Description: This course will introduce students to the principles of drug discovery and design and to illustrate the process of drug development. After an introduction to the principles of drug discovery, a representative group of approved drugs and target platform will be discussed in relation to their receptor interactions and associated medicinal chemistry.

Course Instructor: Hong-yu Li, Ph.D.

Course Instructor Email: lihongyu@uams.edu Course Instructor Phone: 296-1154

Additional Instructors: Peter Crooks, Ph.D. pacrooks@uams.edu

Guangrong Zheng gzheng@uams.edu

Click here to enter additional instructor names and email addresses

GENERAL COURSE INFORMATION

First term course will be offered/changed: Fall Spring Summer

First year course will be offered/changed: 2017

Meeting dates differ from standard semester? Yes No

If yes, describe meeting pattern:)

Grading Basis: Letter Grade Number of Units: 2

If Variable Credit, list the maximum number of units: *Choose an item.*

Component Type: *Lecture*

Repeat for credit? Yes No

If yes, limit to number of enrollments allowed per student: *Click here to enter max enrollments.*

Preferred Catalog Number: PSGP 6114

*Note: Preferred Catalog Numbers are not guaranteed to be used.

ENROLLMENT CONTROLS

PREREQUISITES

Subject Area	Catalog #	Course Title	Course ID (if known)
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>

CO-REQUISITES

Subject Area	Catalog #	Course Title	Course ID (if known)
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>
<i>Subj. Area</i>	<i>Catalog #</i>	<i>Course Title</i>	<i>Course ID</i>

Please list any other non-course prerequisites attached to this course (e.g. minimum GPA, exam, year in program)
Click here to enter text.

Minimum Number of Students to Enroll: 1

Maximum Number of Students who may Enroll: 15

Is enrollment in this course limited to certain groups of students (i.e. PhD students only)? Yes No

Please describe enrollment limits by groups: M.S., Ph.D., Pharm.D., M.D.

Is advisor or instructor consent required for students to take this course? Instructor Consent

INSTRUCTION MODE

Please provide information about the first semester this course will be offered. You will have the opportunity to change this information if this form is provided prior to the last date for scheduling requests.

INSTRUCTION INFORMATION

Instruction Mode: *Face-to-face*

FOR ONLINE COURSES ONLY: Will this course be offered to students out of state? Yes No

Please select all locations where this course will be taught:

Main Campus

Northwest Campus

UAMS Southwest

Other

If "Other" Location, please describe: *Click here to enter text.*

EXAM AND PROGRESSION

Will the course have a final exam? Yes No

Will the final exam occur during the normally scheduled course time? Yes No

Is there a minimum grade required for the student to progress? C

ADDITIONAL INFORMATION

Are any degrees affected by this course addition? Yes No

If "Yes," please list all degrees affected by this change: *Click here to enter text.*

Does this course address/include:

Service Learning¹:

Partially 100%

Does not address

Inter-professional Education² (IPE)

Partially 100%

Does not address

Cultural competency³

Partially 100%

Does not address

Patient-Family Centered Care⁴

Partially 100%

Does not address

Interdisciplinary Education⁵

Partially 100%

Does not address

ADDITIONAL INFORMATION:

¹ A structured learning experience that combines community service with preparation and reflection. Students engaged in service-learning provide community service in response to community-identified concerns and learn: the context in which the service is provided, the connection between their service and their academic coursework, and their roles as citizens.

² Defined as students of two or more professions engaged in learning with, from and about each other.

³ An ability to interact effectively with people of different cultures and ethnic backgrounds. Comprises four components: Awareness of one's own cultural worldview, attitude towards cultural differences, knowledge of different cultural practices and worldviews, and cross-cultural skills. Developing cultural competence results in an ability to understand, communicate with, and effectively interact with people across cultures.

⁴ An approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patients, and families. It redefines the relationships in health care. The core concepts include: Dignity and respect, information sharing, participation, and collaboration.

⁵ Defined as the degree to which individuals have the capacity to obtain, process and understand basic health information and services need to make appropriate health decisions.

