

**SYLLABUS****PHA6521C****Research Techniques in Pharmacodynamics****1 Credit Hour****Fall 2022****OBJECTIVES**

This course provides a general overview, to first year doctoral students of the graduate program of the Department of Pharmacodynamics, of federal and state regulatory guidelines, certification, and research techniques pertinent to conducting scientific research as an integral component required for obtaining a Doctor of Philosophy (Ph.D.) degree. Interactions with faculty and their laboratory members will help students identify potential laboratories for rotations to eventually select a mentor for dissertation research.

Upon completion of the course, students will have:

1. Completed University of Florida's required training in laboratory safety and hazardous material handling;
2. Completed University of Florida's required training in working with laboratory animals;
3. Developed an understanding of the fundamentals of biomedical research;
4. Developed a basic understanding of the research fields/interests of faculty in the department;
5. Matched with laboratories in the department for research rotation

**FACULTY**

| <b>Instructor</b>       | <b>Office</b> | <b>Email</b>   |
|-------------------------|---------------|--|
| Ms. Lauren Adkins       | HSC Library   | lauren.adkins@ufl.edu  |
| Dr. Thomas Burris       | ICBR-GI       | burris.thomas@ufl.edu  |
| Dr. Jason Frazier       | P2-29         | <a href="mailto:frazier@cop.ufl.edu">frazier@cop.ufl.edu</a>         |
| Dr. Maureen Keller-Wood | HPNP          | kellerwd@cop.ufl.edu   |
| Dr. Eric Krause         | MBI           | ekrause@cop.ufl.edu  |
| Dr. Bin Liu             | P2-31         | liu@cop.ufl.edu  |
| Dr. Siobhan Malany      | P1-31         | SMalany@cop.ufl.edu  |
| Dr. Jay McLaughlin      | P1-33         | <a href="mailto:jmclaughlin@cop.ufl.edu">jmclaughlin@cop.ufl.edu</a> |
| Dr. Joanna Peris        | P1-29         | peris@cop.ufl.edu  |
| Dr. Brandon Warren      | P1-07         | brandon.warren@cop.ufl.edu   |

**Course Coordinator:** Dr. Liu

Administrative Assistant: Me. Samantha Hart, P1-20, E-Mail: [shart2208@cop.ufl.edu](mailto:shart2208@cop.ufl.edu)

**COURSE FORMAT**

The course consists of multiple components:

- (a) Self-directed online training modules for laboratory safety and experimental animal handling
- (b) Mini-laboratory rotations with faculty

**ATTENDANCE AND ADHERENCE POLICY**

Students are required to complete the self-directed online training modules on time and attend all required sessions.

**LABPRAOTRY SAFETY TRAINING MODULES**

EHS Risk Assessment  
 EHS Biomedical Waste Training  
 AALAS Training Modules

**LAB ROTATION SELECTION**

At the end of the mini laboratory rotation sequence, students are required to submit, in writing, to the Course Coordinator, the following information for their laboratory rotations in the Fall and Spring semester of their first year in the program:

- Names three laboratories of the list of participating laboratories in the mini-rotation sequence,
- Number of rotations in each laboratory with a limit of two rotations in the same laboratory, and
- Sequence of the three three laboratory rotations.

The course coordinator will work with the student's selected laboratories to develop an action plan for the three rotations to set in force.

**EVALUATION OF PERFORMANCE**

Grades will be based on timely completion of the online training modules, attendance of the required sessions and overall performance during mini-rotations.

| Activity                              | Percentage |
|---------------------------------------|------------|
| Completion of online training modules | 20%        |
| Performance during mini-rotations     | 80%        |

**Grading Scale**

| Percent Grade | Letter Grade   | GPA  |
|---------------|----------------|------|
| ≥ 93.0%       | A              | 4.00 |
| 90.0% - 92.9% | A <sup>-</sup> | 3.67 |
| 87.0% - 89.9% | B <sup>+</sup> | 3.33 |
| 83.0% - 86.9% | B              | 3.00 |
| 80.0% - 82.9% | B <sup>-</sup> | 2.67 |
| 77.0% - 79.9% | C <sup>+</sup> | 2.33 |
| 73.0% - 76.9% | C              | 2.00 |
| 70.0% - 72.9% | C <sup>-</sup> | 1.67 |
| 67.0% - 69.9% | D <sup>+</sup> | 1.33 |
| 63.0% - 66.9% | D              | 1.00 |
| 60.0% - 62.9% | D <sup>-</sup> | 0.67 |
| < 60.0%       | E              | 0.00 |

**PROFESSIONAL CONDUCT**

Students are expected to adhere to the University of Florida Honor Code "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity". Academic dishonest will result in earning a failing grade (i.e., E) for the entire course and additional consequences dictated by University of Florida code of conduct.

## Course Schedule

| <b>Date</b> | <b>Time</b> | <b>Location</b> | <b>Topic/Activity</b>  | <b>Instructor</b>  |
|-------------|-------------|-----------------|--|--|
| 08/24-08/25 |             |                 | Ms. Samantha Hart<br>Complete AALAS online courses<br>(See Appendix A for instructions)<br>Complete online Hazardous Waste Training<br>( <a href="http://www.ehs.ufl.edu/programs/chemrad_waste/hazardous-waste-training/">http://www.ehs.ufl.edu/programs/chemrad_waste/hazardous-waste-training/</a> ) | EHS Risk Assessment Form<br>Self-directed<br><br>Self-directed |
| 08/26       |             | P2-20           | Course Introduction and<br>Laboratory Research Overview (10 am -11 am)   | Dr. Liu  |
| 08/29       |             | TBD             | Laboratory Research Overview   | Dr. Frazier  |
| 08/30       |             | TBD             | Laboratory Research Overview   | Dr. Burris   |
| 08/31       |             | TBD             | Laboratory Research Overview   | Dr. Malany   |
| 09/01       |             | TBD             | Laboratory Research Overview   | Dr. Warren   |
| 09/05       |             |                 | Holiday  |  |
| 09/07       |             | TBD             | Laboratory Research Overview   | Dr. Krause   |
| 09/08       |             | P2-20           | Library Resources (10-11 am)   | Ms. Adkins   |
| 09/09       |             | TBD             | Laboratory Research Overview   | Dr. McLaughlin   |

## Appendix A: AALAS Courses

Completion of relevant American Association for Laboratory Animal Science (AALAS) training courses is a requirement of the University of Florida Institutional Animal Care and Use Committee (IACUC) for any researcher to have the privilege to work with research animals under the supervision of University of Florida Animal Care Services (ACS).

The training courses are located on the AALAS website with a collection of courses specifically grouped together for University of Florida researchers.

The procedure to access the courses is as follows:

1. Access the AALAS website at the portal of [https://dotnet.research.ufl.edu:4431/aalas\\_login/](https://dotnet.research.ufl.edu:4431/aalas_login/),
2. Log on to the page with your Gatorlink credentials,
3. Click on the “Tack” tab on the left side of the Welcome/home screen,
4. Click on the “UF Researchers –IACUC Training Modules” sub tab,
5. Select and complete relevant individual training modules. The following list of courses is generated assuming a researcher will be working with laboratory rats and mice and will need to perform experimental surgeries on those animals:
  - a. “Working with IACUC”
  - b. “Working with the Laboratory mouse”
  - c. “Working with the Laboratory Rat”
  - d. “Aseptic Technique for Rodent Survival Surgery”
  - e. “Pain Management in Laboratory Animals”
  - f. “Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress”

***\* Certain labs may require students to complete additional IACUC training modules before starting a lab rotation. Students are required to contact the PI of the lab for IACUC training module requirement and complete the additional modules if required well ahead of the start of the rotation in the lab.***