

## **SYLLABUS: ANAT 6275**

### **Advanced Studies in Translational Sciences**

#### **COURSE DESCRIPTION:**

ANAT 6275 is designed to provide a semester-long research opportunity to students in a laboratory conducting translational and/or clinical research in order to apply fundamental concepts learned in didactic courses and become versatile with cutting edge technologies. Students are expected to spend the equivalent of three full days in a research laboratory. The course director will meet with students in the first two weeks of the course to assist students in finding mentors. The course director must approve rotation mentors and projects prior to students initiating research.

#### **LEARNING OBJECTIVES:**

- 1) Conduct an independent research project in the field of translational sciences and/or clinical research under the mentorship of a faculty member approved by the course director.
- 2) Prepare a scientific PowerPoint presentation describing the research and results obtained.
- 3) Deliver a scientific oral presentation to the course director and other students in the program.
- 4) Write a structured abstract describing the research presented in the oral presentation including references.

#### **CREDIT HOURS: 3**

**PREREQUISITES:** Introductory Biology for Science or non-Science Majors. Enrollment in the GCATS-MATS Program and permission of the Program Director.

**CONTACT TIME/HOURS:** Each rotation will be 12-13 weeks long and will be carried out in the Fall and/or Spring semester. Students are expected to be in the laboratory working with their mentor the equivalent of three full days per week.

**METHOD OF ASSESSMENT:** The grading method for this course is a LETTER GRADE. A letter grade will be assigned if students have spent the required number of hours in a research laboratory and successfully complete the assignments listed below:

- 1) Mentor evaluation (90% of the final grade): Student's performance will be evaluated by the mentor using the form included with this syllabus.
- 2) Presentation (5% of final grade): At the end of a rotation, students will give an oral presentation to the class with 8-10 PowerPoint slides (as a guide; more slides are permitted), which will include a brief introduction, the main objective of the research conducted, methods, results, discussion and future questions.
- 3) Abstract (5% of final grade): At the end of each rotation, students will submit a structured abstract (the length is flexible) with the title of the project and a summary of the research to be presented in the oral presentation. Structured abstract guidelines can be found at: [https://www.nlm.nih.gov/bsd/policy/structured\\_abstracts.html](https://www.nlm.nih.gov/bsd/policy/structured_abstracts.html)

**GRADING SCALE:**

A (4.0) = 90 – 100	C+ (2.3) = 78 – 78.9
A- (3.7) = 89.0 – 89.9	C (2.0) = 75 – 77.9
B+ (3.3) = 87.0 – 88.9	C- (1.7) = 72 – 74.9
B (3.0) = 80.0 – 86.9	F (0) = < 71.9
B- (2.7) = 79.0 – 79.9	Grades of D+, D, and D- are not used for graduate students at GW

**FACULTY:** Robert G. Hawley, Ph.D., Course Director, Professor of Anatomy & Cell Biology; Ross Hall 461B; Email: [rghawley@gwu.edu](mailto:rghawley@gwu.edu)

**TEXTBOOK:** None

**READING LIST:** To be determined by the mentor chosen for the rotation.

**CLASS POLICIES:**

Mandatory presence in the mentor's laboratory the equivalent of three full days per week for 12-13 weeks.

Late work: accepted with permission. Penalty may be incurred if unduly late as determined by mentor and course director. Religious Holidays will be accommodated.

**ACADEMIC INTEGRITY**

“Students are responsible for the honesty and integrity of their own academic work, ... Academic integrity violations are cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” Please read the entire code:

<https://studentconduct.gwu.edu/code-academic-integrity-0>

**SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM***DISABILITY SUPPORT SERVICES*

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information, please refer to: <https://disabilitysupport.gwu.edu/>

*COUNSELING SERVICES*

The University offers 24/7 counseling assistance by calling 201-994-5300. For additional information, please refer to: <https://healthcenter.gwu.edu/counseling-and-psychological-services>

**SAFETY AND SECURITY**

For help in an emergency, call 911 or GW Police (202-994-6111).

For additional information on this important topic, please see: <https://safety.gwu.edu/>

**IMPORTANT DATES**

September 24, 2023: Last day to drop a course on GWeb

November 5, 2023: Last day to withdraw from a course with a grade of ‘W’ on GWeb

# ANAT 6275 (Advanced Studies in Translational Sciences)

## MENTOR'S GCATS-MATS STUDENT EVALUATION FORM

**Mentor Name:** \_\_\_\_\_ **Date** \_\_\_\_\_

**Student Name:** \_\_\_\_\_ **Semester/Year** \_\_\_\_\_

**Recommended Letter GRADE\*** \_\_\_\_\_

\* The final grade will be assigned by the Course Director with input from your mentor upon successful completion of the laboratory report and the in class oral presentation which will be given during the scheduled PowerPoint presentation session at the end of the course. Failure to complete these assignments will result in a grade of F.

This form will serve as a written evaluation for the performance of the graduate student indicated above. It is to be filled out by the person who accepted responsibility for setting the objectives of the rotation and directed the training of the student and who was approved by the course director.

Please assess the performance of the student. Circle a number between **1** (excellent)- **6** (failure) for each item below.

<b>I. DEPENDABILITY AND COMMITMENT:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>II. EFFORT IN THE LABORATORY</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>III. FUND OF KNOWLEDGE:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>IV. LABORATORY SKILLS:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>V. PROBLEM SOLVING &amp; THOUGHT PROCESSES:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>VI. ABILITY TO LEARN NEW TECHNIQUES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>VII. RESEARCH ABILITIES:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>VIII. INTERPERSONAL SKILLS (teamwork)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>IX. ETHICAL LABORATORY PRACTICES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>X. ADMINISTRATIVE QUALITIES (time management, efficiency, follow-through, adequate laboratory records, etc ...)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

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**XI. SPECIFIC COMMENTS:**

Did the student spend adequate time to accomplish research?

Student Strengths:

Student Weaknesses (areas for the student to work on):

**Circle the word that best describes your rating of the student for this rotation:**

**Excellent    Very Good    Good    Average    Poor**

Please sign and date this form.

**Faculty Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Course Director Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Note: Please email the signed evaluation form to Dr. Robert Hawley ([rghawley@gwu.edu](mailto:rghawley@gwu.edu)) before the end of the research period. The course director cannot submit the student's grade without receiving the signed evaluation form from the mentor.