
ANAT 7820

Research Design and Methods II

Goals

1. To develop the skills required for tissue processing and obtaining information from tissue through chemical and biochemical interactions using reagents
 2. To understand how to interpret results from tests of protein chemistry and interactions
- Students will be expected to have achieved theoretical and preliminary laboratory competence in these techniques by the end of the course.

Course format

In-depth study and practicum of research methods used in biomedical research.

Students will attend a series of lectures and practical sessions on the principles of tissue processing for microtomy, tissue microtomy for light microscopy, paraffin types and paraffin embedding of tissue, and histochemistry of tissue staining. Students will also learn about the principles of immunohistochemistry and antigen-antibody reactivity in tissue including antibody labeling.

Attendance at all sessions for the course is mandatory.

Grading

The course will be assessed by multiple choice examination and/or short answer questions. Final grade for the course will be presented as a letter grade according to the BMS grading scheme.

| DATE | TOPIC |
|-------|-----------------------|
| Jan 6 | Introduction/Overview |
| 13 | |
| 20 | |
| 27 | |
| Feb 3 | |
| 10 | SPRING BREAK |
| 17 | |
| 24 | |
| Mar 2 | MID-COURSE EXAM |
| 9 | |
| 16 | |
| 23 | |
| 30 | |
| Apr 6 | |
| 13 | |
| 20 | |
| 27 | FINAL EXAM |

Course Director:

Dr. Zhang

Credits: 3

Dates of class:

Wednesdays 2:00-4:00PM

Required:

Attendance at lectures and labs

Grades:

Final grades will be posted in Blackboard at the end of the course
