

**SYLLABUS**  
**Projects in Anatomical Sciences (ANAT 6292)**  
Ross Hall Room 117  
Tuesdays 3:35-5:35pm

**DESCRIPTION:**

ANAT 6292 is a graduate course for certificate level designed to introduce students to functional medical imaging. The syllabus of this course has been adapted from that of the ANAT 6291 “Special Projects in Anatomy” offered to medical students as an elective. This course complements the new graduate course ANAT 6181 offered to students enrolled in the graduate certificate. Students will develop an appreciation for the use of various imaging techniques and approaches to visualize normal anatomy. The course will help develop students’ teamwork skills, presentation and discussion skills, and introduce them to performing a literature search.

**LEARNING OBJECTIVES:**

- 1) Describe an overview of diagnostic medical imaging
- 2) Participate in discussion groups on topics covering the multiple diagnostic imaging modalities that are used today (X ray radiography, ultrasound sonography, computed tomography, and magnetic resonance imaging) to provide a foundation for medical education.

**CREDIT HOURS:** 2

**PREREQUISITE:** Human Clinically-Oriented Gross Anatomy (ANAT 6181), either previously or simultaneously. Enrollment in the Graduate Certificate in Anatomical and Translational Sciences or permission of the Director of the Graduate Certificate.

**LECTURE CONTACT TIME/HOURS:** Weekly one 2-hour session.

**METHOD OF ASSESSMENT:**

- Two in-class project presentations (50%)
- Two Papers (25%)
- One multiple-choice exam at the end of the class (25%)
- Class participation

**FACULTY:**

**1) Kirsten M. Brown, Ph.D., (Course Co-Director)**, Assistant Professor, Department of Anatomy & Regenerative Biology; Ross Hall 462A, [kmbrown@gwu.edu](mailto:kmbrown@gwu.edu), 202-994-6705

**2) Rosalyn Jurjus, M.D. Ph.D., (Course Co-Director)**, Assistant Professor, Department of Anatomy & Regenerative Biology; Ross Hall 461B, [rajurjus@gwu.edu](mailto:rajurjus@gwu.edu), 202-994-5840

## **TEXTBOOKS:**

Radiology 101: The Basics and Fundamentals of Imaging, Smith and Farrell, 4<sup>th</sup> ed. (available as e-text through Himmelfarb via

[http://catalog.himmelfarb.gwu.edu/iii/encore/record/C\\_Rb1624809\\_Sradiology%20101\\_Originalresult\\_U\\_X7?lang=eng&suite=gwmed](http://catalog.himmelfarb.gwu.edu/iii/encore/record/C_Rb1624809_Sradiology%20101_Originalresult_U_X7?lang=eng&suite=gwmed))

Radiographic Anatomy by Frank Slaby and Eugene Jacobs, 1<sup>st</sup> ed. Lippincott Williams & Wilkins. ISBN: 068-3-06266-2 (available as hard copy through Himmelfarb or on Amazon.com)

**READING LIST:** Appropriate Reference Articles (TBD)

## **CLASS POLICIES**

Attendance policy: mandatory

Late work: accepted with permission, penalty may be incurred if unduly late as determined by instructor. Religious Holidays will be accommodated, if requested

[NOTE: for university policies on teaching, see

<http://www.gwu.edu/~academic/Teaching/main.htm>

## **ACADEMIC INTEGRITY**

I personally support the GW Code of Academic Integrity. It states: “Academic dishonesty is defined as 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.” For the remainder of the code, see: <http://www.gwu.edu/~ntegrity/code.html>

## **SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM**

### *DISABILITY SUPPORT SERVICES (DSS)*

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 the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: <http://gwired.gwu.edu/dss/>

### *UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300*

The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:

- crisis and emergency mental health consultations
  - confidential assessment, counseling services (individual and small group), and referrals
- <http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

## **SECURITY**

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

**CLASS SCHEDULE:**

<b>Session</b>	<b>Topic for week</b>
1/12	Introduction to Project Presentation Assignment of Projects for Course
1/19	No class: Work Independently on Projects (Schedule Meeting with faculty for mentoring)
1/26	Imaging Techniques (Ultrasound, CT, MRI, X-ray)
2/2	No class: Work Independently on Project
2/9	Lower Limb Project Presentations
2/16	No class: Work Independently on Project
2/23	Upper Limb Project Presentations
3/1	No class: Work Independently on Project
3/8	Head and Neck Project Presentations
3/15	SPRING BREAK
3/22	Thorax Project Presentations
3/29	Ultrasound Session I (Limbs)
4/5	NO CLASS (Drs. Brown and Jurjus at the AAA meetings in San Diego)
4/12	Ultrasound Session II (Heart/Neck)
4/19	Ultrasound Session IV (Abdomen)
5/2-5/10	FINAL EXAM

**Course Requirements, Deadlines, and Grading Values:****1. Participation on discussion board/ultrasound sessions****Ongoing**

Pairs of class members will post the topic of interest chosen for class learning facilitation within a week of classes starting.

Class members are expected to complete all assigned readings prior to each class session so that all can engage in meaningful discussion and learning. Class members are also expected to bring insightful questions for the discussions. In class attendance is expected at day of presentation and at all ultrasound sessions; missed presentation or submission of material will lead to additional assignments and/or a grade reduction.

## **2. Class Learning Facilitation and PowerPoint Presentation on day of assigned presentation: (Total 50%)**

Class members in teams of 3 students will lead the class discussion regarding the major themes or topics of clinically relevant material. Note that each group will present on TWO topics. These are meant to not only be a presentation of the material, but facilitated discussion. Develop and present to the class, PowerPoint Presentation with a bibliography regarding this learning event you are responsible for. A copy of the PowerPoint should be posted on the discussion board after the in-class session for all class members.

The discussion should include the main points of the related articles and application to practice in medical/health science and care delivery settings. The discussion should be facilitated in a manner consistent with good adult learning practices and small group work. Incorporation of 2 additional resources outside of the assigned readings is required. Facilitations should be about **15-20 minutes** in duration. Therefore, two groups will be presenting each class period. Class members will provide constructive feedback at the end of each facilitated session.

Examples of suggested topics:

- Fractures
- Lung pathologies
- Thyroid tumors
- Echocardiography
- Appendicitis
- Pelvic Floor Disorders

Students also have the option for interviewing an expert in filed for each of these presentations. Note this is not required, but rather an option for strengthening the overall presentation.

## **3. Learning Facilitation Topic Paper due a week after the in-class presentation (25% total)**

Prepare a **5 page** paper of your presented topic of choice for each presentation.

Relevant learning concepts covered in the gross anatomy course materials and discussed in class should be cited and referenced; not summarized. Please email the paper to Drs. Jurjus and Brown.

## **4. Multiple choice Exams Final (25%)**

Information TBD.

**Paper and Presentation Formats:**

Papers and presentations should be prepared in accordance with the main principles of APA formatting.