**Introduction to Pathology of Disease Fall 2023**

**NCA&T Biol 342, NCCU BIOL 2030**

<https://learn.unclcn.org/pod2023>

Organizers: Andrew Gladden, agladden@email.unc.edu; Georgette Dent, georgette\_dent@med.unc.edu; Breanna Jeffcoat, bjeffcoa@email.unc.edu; Checo Rorie, cjrorie@ncat.edu; Antonio Baines, abaines@nccu.edu

**Course Schedule**

| DATE | Topic | Instructor(s) | Confirm |
| --- | --- | --- | --- |
|  | **Module 1: The Basics of Pathology** |  |  |
| Aug 24, Thur | Which Tool in the Toolbox? | Broaddus | √ |
| Aug 29, Tue | Tissue Organization. How do vertebrates make a spine? | Gladden | √ |
| Aug 31, Thur | Basic Cell Histology. What are you looking at? | Gladden | √ |
| Sept 5, Tue | Inflammation and Response to Injury  | Hannah Hall | √ |
| Sept 7, Thur | Paths to Careers in Pathology and Clinical Sciences | Panel 1 | √ |
| Sept 12, Tue | Cell Injury and Death, Cellular Destruction | Dent | √ |
| Sept 14, Thur | Topic and Slide Review Session | Jeffcoat | √ |
| Sept 19, Tue | **Exam 1**   |  |  |
|  | **Module 2: Cardiovascular System & Blood** |  |  |
| Sept 21, Thur | General Cardiovascular Physiology/Blood Pressure/Hypertension | Homeister | √ |
| **\*\*Sept 23, Sat\*\*** | **UNC Pathology Experience** | **At UNC Campus** |  |
| Sept 26, Tue | Hemostasis and Thrombosis | Homeister | √ |
| Sept 28, Thur | Heart Disease and Regeneration | Shea Ricketts | √ |
| Oct 3, Tue | Kidney Disease | Keisha Gibson | √ |
| Oct 5, Thur | Transfusion/Blood Type/Donation | Mariama Evans | √ |
| Oct 10, Tue | **No Class Fall Break** |  |  |
| Oct 12, Thur | Anemia and Sickle Cell | Staci Keene | √ |
| Oct 17, Tue | Topic and Slide Review Session | Jeffcoat | √ |
| Oct 19, Thur | **Exam 2** |  |  |
|  | Module 3: Cancer, Hijacking Development |  |  |
| Oct 24, Tue | Introduction to Cancer Genetics & Biology | Gladden | √ |
| Oct 26, Thur | Disparities in Disease | Baines | √ |
| Oct 31, Tue | Malignant Hematopathology | Georgette Dent | √ |
| Nov 2, Thur | **No Class Homecoming** |  |  |
| Nov 7, Tue | Panel Discussion | Panel 2 |  |
| Nov 9, Thur | **No Class A&T Wellness Day** |  |  |
| Nov 14, Tue | Head and Neck Cancers | Steven Johnson | √ |
| Nov 16, Thur | Breast Cancer | Alina Hamilton | √ |
| Nov 21, Tue | *Thanksgiving Break No Class* |  |  |
| Nov 23, Thur | *Thanksgiving Break No Class* |  |  |
| Nov 30, Thur | Topic and slide Review Session | Jeffcoat | √ |
| Dec 5, Tue | **Exam 3** |  |  |

Panel 1: Breanna Jeffcoat (Moderator, UNC PBTS PhD Student), Mariama Evans, MD (UNC Pathology Faculty), Alisha Ware, MD (UNC Assistant Professor, Hematopathology), Christian Long, MLS (UNC McLendon Core Laboratory).

Panel Discussion 2: Checo Rorie (Moderator), Ashalla Freeman, Donita Robinson, LaKeya Hardy, Brenda Mitchell (UNC SOM Health Sciences).

Fall 2023

Time: Tuesday and Thursday, 12:30p – 1:45p; (NC A&T) or 1:00 – 2:15p (NCCU)

Case study 12:30p-1:00 NC A&T, 1:00 – 1:45 lecture both,

Location: Remotely

3 Credit Hours

Prerequisite: 1 biology course, target audience Sophomore and higher

**Goals/Objectives for students:**

1) Develop knowledge of pathologies in various human tissues.

2) Gain an understanding of how tissue systems are organized and primary diseases in the tissues.

3) Learn how to identify alterations in diseased tissue compared to normal tissue.

4) Acquire knowledge about signaling pathways and mechanisms that are altered in diseases.

**Grading**

Grading will be based on three areas: 1) attendance, 2) contribution to class discussions, 3) three exams, 4) Case study questions (10 total) on Aug. 31, Sept. 7, Sept. 14, Sept. 21, Sept. 28, Oct. 5, Oct. 12, Oct. 26, Nov. 9, Nov. 16.

**Feedback**

Your feedback on the organization and content of this course is critical for us to provide you and future classes with the best possible course. Please do not hesitate to provide your comments or criticisms during class or if you would like feel free to contact the class coordinators if you have comments or criticisms; these comments and/or criticisms will have no impact on your grading for the course.

Class Description:

The Introduction to Pathology class is designed for upper level undergraduate and MS students who are interested in pathology, human tissue function, disease progression and are considering graduate school or a health professions career. The course is designed to incorporate both didactic seminars and group paper-based discussions to understand the current state of specific topics in pathobiology. This course is designed to prepare the student for future independent disease research or a health profession.

Suggested Textbook Reading: Robbins Basic Pathology and/or Robbins and Cotran Pathologic Basis of Disease