

# Introduction to Pathology of Disease

## NCA&T Biol 342, NCCU Special Course

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### Course Schedule

DATE	Topic	Instructor(s)
	<b>Module 1: The Basics of Pathology</b>	
Aug 19, Thur	Which Tool in the Toolbox?	Broaddus
Aug 24, Tue	Paths to Careers in Pathology and Clinical	Panel 1 (see below)
Aug 26, Thur	Basic Cell Histology. What are you looking at?	Gladden
Aug 31, Tue	Tissue Organization. How do vertebrates make a spine?	Gladden
Sept 2, Thur	Cell Injury and Death, Cellular Destruction	Reisner
Sept 7, Tue	Introduction to Mechanisms of Disease	Jennette
Sept 9, Thur	<b>Exam 1</b>	
	<b>Module 2: Cardiovascular System Diseases</b>	
Sept 14, Tue	Peripheral Vascular System	DreVon Dobson
Sept 16, Thur	Thrombosis/Hemostasis	Emma Bouck
Sept 21, Tue	Cardiovascular Disease and Pathology	Steve Hur
Sept 23, Thur	Kidney Organization and Disease	Dominique Munson
Sept 28, Tue	Cardiovascular Project Presentations	Students
Sept 30, Tue	<b>Exam 2</b>	
	<b>Module 3: Emerging Topics, Respiratory System</b>	
Oct 5, Tue	Modeling lung function and disease.	Ian Moore (NIH)
Oct 7, Thur	Vaccine Development	Tori Baxter
Oct 12, Tue	<u>Fall Break No Class</u>	
Oct 14, Thur	Infectious Disease	Craig Fletcher
Oct 19, Tue	Cystic Fibrosis, a genetic disease	Scott Randell
Oct 21, Thur	PATH Day	In Person @ UNC
Oct 26, Tue	<b>Exam 3</b>	
	<b>Module 4: Cancer, Hijacking Development</b>	
Oct 28, Thur	Introduction to Cancer Concepts	Gladden
Nov 2, Tue	Breast Cancer	Alina Hamilton
Nov 4, Thur	Endometrial & Cervical Cancer	Broaddus & Murdock (JH)
Nov 9, Tue	Head and Oral Cancers	Bethany Brown
Nov 11, Thur	Pancreatic Cancer	Tony Baines
Nov 16, Tue	Hematological Cancers	Georgette Dent
Nov 18, Thur	Project: Develop a plan for a new clinical marker?	Students
Nov 23 & 25	<u>Thanksgiving Break No Class</u>	
Nov 30 Tue	Optional Review Day	Gladden
Dec 2, Thur	<b>Final</b>	

Panel 1: Dominique Munson (Moderator, UNC PTS PhD Student), Ryan Stanley, MLS (UNC Medical Technologist), Mariama Evans, MD (UNC Path Resident), Christian Long, MLS (UNC Medical Technologist), Alina Hamilton (UNC PTS PhD Student).

PATH Day: Tour Brinkhous and Microscopy Core (Pablo Ariel). Panel Discussion 2 (PATH Day): Checo Rorie (Moderator), Ashalla Freeman, Georgette Dent  
Lunch with Pathology and Translational Science Graduate Students.

Fall 2021

Time: Tuesday and Thursday, 12:30p – 1:45p

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 and 3) three exams.

## **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