

Biology 612-Special Topic - Genetics of the Immune System

Course Description

Bio 612 is a hybrid course consisting of online didactic, multimedia instruction followed by an in-person interactive laboratory workshop. This year, Bio 612 will cover a focused study of the human immune system including components, models, normal and altered immunity, and specific disorders.



In the last decade, rapid advancements in the fields of biological, genetic, and medical research have enhanced our understanding of biological processes. These have made a large impact on our ability to diagnose and treat diseases, our livelihood and survival, and on the quality of our surrounding environment. Many of these advancements have gained public attention and have stimulated enormous controversy.

Prevailing issues such as genetic engineering, stem cells, drug and vaccine development, AIDS, Bird Flu, Swine Flu, the Ebola and Zika viruses, and most recently the COVID-19 virus, are issues that require all of us to have at least a minimal level of understanding of the underlying mechanisms in order to be well informed. These are some of the issues that confront us and decisions regarding these and other similar topics will have a major impact on our lives in the decades ahead.

Course Objectives

Bio 612: Genetics of the Immune System will introduce participants to:

- The make-up of the human immune system
- The importance of cell surfaces
- Abnormal immunity
- The natural biology of the COVID-19 virus including transmission, responses, differing expressions of infection, testing approaches, vaccine development and mechanisms of action
- Social issues regarding infections, disease and health disparities

Course Requirements

Bio 612 is a graded, graduate-level course requiring:

- Completion of online assignments by June 24, 2021
- Participation in group discussions
- Completion of the hands-on laboratory workshop

Course Materials

Course materials (articles, videos, and didactic lectures) will be available via Lander University's Blackboard system beginning May 18. Access to Blackboard and registration for workshop dates will be available after completing course registration.

Workshops

Participation in a two-day laboratory workshop is required. Participants can choose between two dates and locations. COVID protocols will be followed.

June 21-22

Greenwood Genetic Center - Greenwood, SC

June 24-25

Trident Technical College - North Charleston, SC*

**If the N. Charleston location becomes unavailable, the second workshop will also be held in Greenwood.*

Cost

The course fee of \$250 covers graduate credit hours, course and lab materials, and lunch during the workshop. A non-refundable \$50 deposit is required with registration.

Registration

Registrations are invited from instructors at the high school and undergraduate levels. The level of instruction assumes the applicants have some biology and human genetics training.

Three graduate credit hours will be offered to SC teachers through the Lander University Department of Biological Sciences. Teachers who have completed BIO 612 courses covering other topics can also receive credit for this year's course.

Register online at www.GGC.org/BIO612 or by mailing the attached form to GGC. The registration deadline is May 3, 2021.

Contact Information

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www.GGC.org/BIO612



Biology 612 Registration

Register online at www.GGC.org/BIO612,
through the QR code below, or mail this form to:
GGC - Division of Education
106 Gregor Mendel Circle
Greenwood, SC 29646

Name:

Mailing Address:

School:

Preferred Phone Number:

Email:

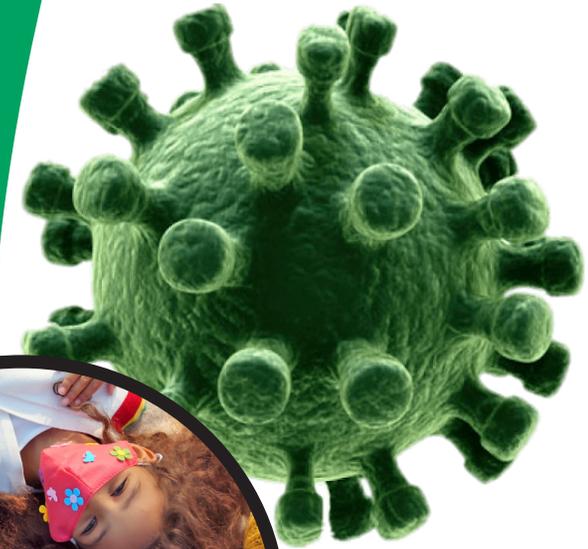
Please enclose a non-refundable
\$50 deposit payable to GGC.
The balance is due by May 10, 2021.

Registration deadline is May 3, 2021.
No late registrations can be accepted.



106 Gregor Mendel Circle
Greenwood, South Carolina 29646
www.GGC.org

The Greenwood Genetic Center is a nonprofit institute
organized to provide clinical genetic services, diagnostic
laboratory testing, educational programs and materials
and research in the field of medical genetics.



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Summer 2021

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