

COURSE SYLLABUS

COURSE: BTC 286 IMMUNOLOGICAL TECHNIQUES

HOURS: Lecture: 3 Lab: 3 Shop/Clinical: 0 Credits: 4

COURSE DESCRIPTION:

This course covers the principles and practices of modern immunology, including the interactions between the various cellular and chemical components of the immune response. Topics include antigens, humoral immunity, cellular immunity, complement, immunological assays, and hybridoma use and production. Upon completion, students should be able to discuss the immune response, perform immunological assays, and make monoclonal antibody-producing hybridomas.

PREREQUISITE(S): BTC 285

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

Abul K. Abbas and Andrew H Lichtman. *Basic Immunology: Functions and Disorders of the Immune System, 5th Edition*. Saunders/Elsevier, 2015.
Print. ISBN: 9780323390828

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

1. Describe in overview, the functional immune system
2. Demonstrate detailed understanding of innate vs. specific immunity, antigen recognition by the immune system, cell mediated immunity, humoral immunity, and the effects of autoimmunity
3. Performs SDS-PAGE and Western Blot Analysis
4. Perform ELISA
5. Perform IgG purification and Isotyping
6. Culture cells and show understanding of the concept of the production of monoclonal antibodies and hybridoma technology.

SYLLABUS INFORMATION:

The Student Learning Outcomes listed in this syllabus are those required actions that a student who successfully completes the course must be able to perform. The educational experience, however, is a two-way, interactive process involving both the student and the instructor. The student must play an active role in the learning process in order to be successful. Instructors will

provide an Instructor's Syllabus at the first class meeting explaining how they measure each of the Student Learning Outcomes. A student who is unable to accomplish the outcomes will not receive a passing grade in the course.

The information in this BCC Syllabus may not be accurate beyond the current semester. Textbooks and other course materials are subject to change. Students should verify the textbooks at the first class meeting with their instructor prior to purchasing.

GRADING SYSTEM:

Brunswick Community College employs a system of letter grades and corresponding quality points per grade to evaluate a student's performance in meeting the stated goals and objectives for each course. The grading system is published in the BCC Catalog and Student Handbook.

ATTENDANCE POLICY:

Each student has individual responsibility for attending class regularly and for meeting course objectives. A student is expected to attend all class meetings in a course. Rules on tardiness and leaving class early are addressed in each instructor's syllabus. Instructors are required to record absences and report excessive absentees to the Registrar.

If a student is absent for any reason in excess of 20 percent of the class hours, he or she is in violation of the Brunswick Community College attendance policy. Unless the student officially withdraws from the course prior to the 65 percent point of the 16 week semester (or equivalent days for the courses of other duration), he or she may receive a grade of F.

Students who receive an "EXCESSIVE ABSENTEEISM NOTICE" are advised to contact their instructor's immediately to review the conditions for withdrawing from the course or for continuing the course.

STUDENTS WITH DISABILITIES:

Brunswick Community College complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, which require that no qualified student with a disability be excluded from participation in or be denied the benefits of any services, programs or activities on the basis of his or her disability. If a student has a disability that is covered by the Americans with Disabilities Act and requires accommodations in the classroom and/or in extracurricular activities, the student must request the accommodations in writing and submit the request to the Disability Services Coordinator. Instructors will not provide accommodations without notification from the Disability Services Coordinator. Brunswick Community College will make every effort to provide reasonable accommodations.