COURSE OUTLINE: BIO132 - INTRO IMMUNOLOGY

Prepared: Leslie Dafoe
Approved: Bob Chapman, Chair, Health

Course Code: Title	BIO132: INTRODUCTORY IMMUNOLOGY
Program Number: Name	
Department:	BSCN - NURSING
Academic Year:	2022-2023
Course Description:	This course is designed to provide students with an introduction to the molecules, cells and organs of the immune system. Students will learn how these components of the immune system function together to protect the human body from infectious diseases and cancer. There will also be discussion of the consequences of immune system dysfunction.
Total Credits:	3
Hours/Week:	3
Total Hours:	36
Prerequisites:	BIOL2036, BIOL2105
Corequisites:	There are no co-requisites for this course.
General Education Themes:	Science and Technology
Course Evaluation:	Passing Grade: 50%, A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Books and Required Resources:	Case Studies in Immunology, A Clinical Companion by Geha, Raif. and Luigi. Notarangelo Publisher: W.W. Norton & Company Edition: 7th ISBN: 9780815345121

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Students will become familiar with the cells of the immune system. 2. Students will demonstrate knowledge and understanding of the role of the various chemicals used by the immune system. 3. Students will demonstrate knowledge and understanding of the role of innate immunity in prevention of infection.	1. Describe the origin and function of the various types of lymphocytes. 2. Describe the production and function of various chemokines. 3. Describe the physical, chemical and physiological barriers and mechanisms used by innate immunity. Define and discuss the functions of the First Line of Defense and the Second Line of Defense. Demonstrate the ability to predict the consequences of failure of this aspect of immunity. Use this knowledge to improve client care. 4. Discuss the role of B lymphocytes and T lymphocytes. Demonstrate knowledge of the structure and function of

	4. Students will demonstrate knowledge and understanding of the role of adaptive immunity in prevention of disease. 5. Students will demonstrate knowledge and understanding of the roles of tolerance, autoimmunity and hypersensitivity in disease and disorder processes. 6. students will demonstrate knowledge and understanding of the role of immunity in cancer. 7. Students will demonstrate knowledge and understanding of immunodeficiency diseases.	antibodies, antigens, and their interactions. Demonstrate knowledge of the structure of T-cells and their role in cell-mediated immune responses. Predict the consequences of failure of this aspect of immunity and use this knowedge to improve client care. 5. Describe how the immune system differentiates between self and non-self. Discuss the consequences of errors in self/non-self discrimination and how this produces various autoimmune diseases. Discuss the production of hypersensitivity states and the consequences of such conditions. Use this knowledge to improve client care. 6. Describe how the immune system is capable of eradicating early stage cancerous cells, and what happens when this system fails. Use this knowledge to improve client care. 7. Describe the generation and outcome of congenital and acquired immunodeficiency diseases. use this knowledge to improve client care.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Final Exam	40%
Term Test 1	30%
Term Test 2	30%

Date: December 9, 2022

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.