Loyola University Chicago - John Felice Rome Center

Course Number and Title	**GNUR 203: Microbiology for Health Professions**
Number of Credits:	**3** semester hours
Meeting Schedule:	Tuesday, 9:30-12:30pm
Faculty	Giovanni Delogu, PhD Associate Professor of Microbiology Email: gdelogu@luc.edu
Prerequisites:	**None**
Co-requisites:	None
Course Overview:	This course examines basic concepts of microbial metabolism, genetics, and classification in order to understand their effects on human health. Clinically relevant microbial diseases will be explored, with a focus on microbe-human interactions, epidemiology, and methods to control microbes.
Course Outcomes:	Upon completion of this course the student will be able to 1. Identify the association between the major groups of microorganisms, the portals of entry and exit of microorganisms that cause disease, and disease processes. 2. Describe the components and functions of the human immune system, the role it plays in protecting the host, and methods that microorganisms use to evade or defeat the immune system. 3. Understand the importance of normal microbiota to human health, and the circumstances that permit normal microbiota to cause diseases. 4. Elucidate the magnitude of the global impact of microbes on human illness, and the factors that hamper effective global public health efforts.
Teaching Methods:	Lectures, projects, case studies, discussion
Evaluation:	3 unit exams, 20% each 1 clinical case, 10% 1 cumulative final exam, 40%
Required course materials:	Bauman R.W. (2018) Microbiology with Diseases by Body System (5th Ed.) Pearson.
Course Evaluation Expectation:	It is a professional expectation that all students participate in course evaluations to guide ongoing program improvement.

Academic integrity statement:

Academic honesty is an expression of an ethic of interpersonal justice, responsibility and care applicable to Loyola University faculty, students, and staff, which demands that the pursuit of knowledge in the university community be carried out with sincerity and integrity. Please make sure you familiarize yourself with the university academic integrity statement: http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml

You are also responsible for all content, policies, rules, and guidelines published in your program handbook. The program handbook is posted on Sakai in the BSN Program Student Info forum.

Grading Scale:

A	94-100
A-	92-93
B+	89-91
B	86-88
B-	84-85
C+	80-83
C	77-79
C-	75-76
D+	72-74
D	69-71
F	68 and below

Course Schedule and Topical Outline

	hours	Topics	Readings
04-set	3	Microbial world, chemical principles, bacterial cell structure and functions.	
11-set	3	Microbial growth and metabolism. Microbiology techniques. Staining procedures. Controlling microbial growth.	
18-set	3	Microbial genetics, biotechnology and DNA technology	
25-set	3	Classification of microorganisms: prokaryotes, eukaryotes, viruses, viroids, prions **Exam 1**	
02-ott	3	Innate and adaptive immunity. Microbial mechanisms of pathogenicity	
09-ott	3	Principles of disease and epidemiology Antimicrobial drugs Immunizations	
16-ott			
23-ott	3	Microbial diseases of skin and eyes	
30-ott	3	Microbial diseases of the nervous system **Exam 2**	
06-nov	3	Microbial diseases of the cardiovascular and lymphatic systems	
13-nov	3	Microbial diseases of the respiratory system	
20-nov	3	Microbial diseases of the digestive system	
27-nov	3	Microbial diseases of the urinary and reproductive systems **Exam 3**	
05-dic	3	Microbial ecology - Microbiomes	
12-dic	3	Clinical case exam Final cumulative Exam	