LECTURE AND EXAM SCHEDULE*

Jan 6  Introduction (History, Overview of Microbes)
Jan 11 Introduction, Methods of Study
Jan 13 Methods of Study, Microorganisms: Algae, Protozoans
Jan 18 NO CLASS – MARTIN LUTHER KING HOLIDAY
Jan 20 QUIZ #1 (on Intro - Methods); Parasites, Fungi
Jan 25 Microorganisms: Bacteria, Viruses
Jan 27 Viruses, Bacterial Growth
Feb 1 QUIZ #2 (on Microorganisms); Bacterial Growth, Metabolism
Feb 3 Bacterial Metabolism, Bacterial Genetics
Feb 8 Bacterial Genetics, Recombinant DNA Technology
Feb 10 Epidemiology, Pathogenesis of Disease
Feb 15 Pathogenesis of Disease, Microbial Control Methods
Feb 17 QUIZ #3 (Metabolism - Pathogenesis); Antimicrobial Drugs
Feb 22 Antimicrobial Drugs, Immunology: Introduction & Overview
Feb 24 Immunology: Nonspecific Mechanisms, Specific Mechanisms
Mar 1 Specific Immunology, Immune Disorders
Mar 3 MIDTERM EXAM (Introduction – Nonspecific Immunity)
Mar 8 NO CLASS – SPRING BREAK
Mar 10 NO CLASS – SPRING BREAK
Mar 15 Immune Disorders
Mar 17 Applied & Diagnostic Immunology
Mar 22 Applied & Diagnostic Immunology, Bacterial Diseases
Mar 24 Bacterial Diseases & Mechanisms
Mar 29 QUIZ #4 (on Immunology); Bacterial Diseases
Mar 31 Bacterial Diseases, Fungal Diseases
Apr 5 Viral Diseases
Apr 7 QUIZ #5 (Bacterial & Fungal Diseases); Viral Diseases
Apr 12 Viral Diseases
Apr 14 Viral Diseases
Apr 19 Parasitic Diseases,
Apr 21 QUIZ #6 (on Viral Diseases); Parasitic Diseases,
Apr 26 Environmental Microbiology;
Apr 28 Applied & Industrial Microbiology
May 5 at 12:30 FINAL EXAM (Specific Immunity – Applied Microbiology)

*Subject to minor changes

COURSE OUTCOMES

- The students should be able to describe the historical origins of microbiology, describe techniques for studying microorganisms, and classify microorganisms into their appropriate taxonomic categories.
- The students should be able to discuss bacterial characteristics, factors influencing microbial growth, energy production, variability, and mechanisms of inheritance.
- The students should be able to explain principles and basic techniques of controlling microorganisms by chemical, physical, and chemotherapeutic means.
- The students should be able to discuss the immune system, its principles, and the interaction of its components.
- The students should be able to detail the morphology, physiology, and epidemiology of viruses, fungi, protozoans, and helminths.
- The student should be able to discuss the modes of transmission of infectious diseases, factors that influence development of infection, and methods that are used to impede the spread of disease.

TEXT MATERIAL FOR LECTURE CONTENT

Quiz 1
INTRODUCTION ................. Ch 1 p2 - 11,
Ch 4 p77, table 4.2,
Ch10 p278 - 280

METHODS OF STUDY ............ Ch 3; Ch 6 p164-170

Quiz 2
PROTOZOANS .................. Chapter 12
FUNGI ......................... Chapter 12
ALGAE ........................ Chapter 12
MULTICELLULAR PARASITES ..... Chapter 12
BACTERIA ...................... Chapter 4, Ch 11
VIRUSES ........................ Chapter 13

Quiz 3
BACTERIAL METABOLISM .... Chapter 5
BACTERIAL GROWTH ........... Chapter 6
BACTERIAL GENETICS ......... Chapters 8 & 9
EPIDEMIOLOGY ................ Chapter 14
PATHOGENESIS ................ Chapter 15
Also on Midterm

CONTROL OF GROWTH ........ Chapter 7
ANTIMICROBIAL DRUGS ...... Chapter 20
BASIC IMMUNOLOGY .......... Chapter 16

Quiz 4
SPECIFIC IMMUNITY .......... Ch 16 p463-468, Ch 17
APPLIED IMMUNOLOGY ....... Chapter 18
IMMUNE DISORDERS .......... Chapter 19

Quiz 5
BACTERIAL DISEASES ......... Chapters 21 - 26
FUNGAL DISEASES ............ Chapters 21 - 26

Quiz 6
VIRAL DISEASES .............. Chapters 19, 21 - 26
Also on Final

PARASITIC DISEASES .......... Chapters 21 - 26
MICROBES IN NATURE ......... Chapter 27
MICROBES & MAN ............ Chapter 28