

Biological Basis of Disease (BBOD)
Course Objectives

The overriding objective of BBOD is for students in the medical education program to begin understanding the basic biology of disease in the context of pathology, immunology and microbiology. At the end of the course, students should be able to:

1. Recognize and describe the attributes of acute and chronic inflammation, cell death, and tissue repair.
2. Understand inflammation's role in the defense against infectious disease and its role in the many diseases associated with inflammation.
3. Understand some basic cancer biology and terminology.
4. Describe the key cellular and molecular components in the body's defense against infections, with an appreciation of how they co-ordinate to eradicate invading pathogens, and describe the use of vaccines to stimulate protective immunity.
5. Describe how the immune system is involved in causing disease, both through immune deficiency and through pathological inappropriate immune activity, and describe molecular targets of therapies to modulate these disease processes.
6. Describe the clinically relevant infectious organisms and what makes them virulent.
7. Distinguish between infectious and non-infectious causes of disease and recognize the signs and symptoms of the most common viral, bacterial, parasitic and fungal infections and their therapy.
8. Explain principles of diagnosis, therapy and prevention for selected infectious diseases and syndromes. Describe the major classes of antibiotics, including mechanisms of action and acquired resistance.