SECTION-2 CHAPTER-1

2.1. GENERAL PATHOLOGY & MICROBIOLOGY

2.1.1.a Aim: The aim of this course is to provide graduate-level instruction in Pathobiology and microbiology. The study of biochemical, structural and functional changes in cells, tissues and organs, which cause or are caused by diseases and the micro-organisms that cause infections.

2.1.1. b Objectives:

i-Knowledge and understanding:

To become familiar with pathology nomenclature. By the end of the course, the students are expected to be able to communicate an understanding of tissue injury and diseases processes, using appropriate vocabulary.

To recognize morphological and functional differences between normal and injured or diseased tissue.

To acquire a working knowledge of basic bacterial laboratory techniques, as well as to the foundations of Microbiology – the concepts of classification, evolution and growth of microorganisms, as well as a factual and laboratory knowledge of specific microorganism types.

ii-Skills:To learn to distinguish pathological lesions from normal tissue. The second goal is to understand, from a structural, functional and biochemical perspective, the different types of pathological lesions, and provide scenarios for how they each arise.

To develop an understanding of microbial ecology and of medical and practical uses for microorganisms, and how they relate to basic biological concepts.

iii-Attitudes:

To integrate pathological findings with clinical manifestations of disease

To integrate the principles and information presented in this course with that from related disciplines

2.1.1.c Outcomes:

Students are expected to work towards meeting the following objectives:

To become familiar with pathology nomenclature. By the end of the course, the students are expected to be able to communicate an understanding of tissue injury and diseases processes, using appropriate vocabulary.

To recognize morphological and functional differences between normal and injured or diseased tissue. The first goal of the course is to learn to distinguish pathological lesions from normal tissue. The second goal is to understand, from a structural, functional and biochemical perspective, the different types of pathological lesions, and provide scenarios for how they each arise.

To integrate pathological findings with clinical manifestations of disease.

In working towards a current understanding of the pathologic basis of disease, the student should develop a sense of which questions in pathology remain to be resolved.

Students should acquire a good understanding of the concepts above. They should be able to show their mastery of them in oral and written form, in lecture, in the laboratory and in exams.

They should be able to design experiments to identify microorganisms, interpret the data and communicate it.