Course Objective

1. Describe the general field of pathology and discuss its relation to other medical disciplines and regulatory bodies.
2. Define at least six distinct pathogenetic processes by which human disease can occur.
3. Give at least two examples of diseases that fit into each pathogenetic category.
4. Discuss developmental diseases in the context of normal and abnormal embryogenesis.
5. Discuss the features of lethal and sublethal cell injury.
6. Identify and discuss cellular atrophy, hyperplasia, dysplasia and neoplasia.
7. Discuss disorders of the blood and circulatory system including edema, arteriosclerosis and the evolution of ischemic injury and infarction.
8. Diagram the coagulation cascade and discuss clotting and bleeding disorders.
9. Describe the processes in the evolution of acute and chronic inflammation as well as the significance and consequences.
10. Name four complications of chronic inflammation.
11. Detail in a step-by-step manner the process of normal wound healing.
12. Describe the pathogenesis, pathology and resistance factors associated with various diseases caused by bacteria.
13. Define the pathogenic mechanisms and give examples of chronic and opportunistic pathogens.
14. Discuss the pathological events in viral infections.
15. Define, distinguish and explain hypersensitivity diseases types I through IV.
16. Explain tolerance in the immune system and how autoimmune diseases could develop, giving examples of three.
17. Discuss the pathophysiology of immunodeficiency and the four primary immunodeficiency disorders and detail what they involve.
18. Discuss the pathogenesis of HIV infection in terms of the HIV genome.
19. List the most common neoplastic conditions and the four features shared by all.
20. Describe the pathologic features of neoplasms and distinguish “benign” from “malignant” neoplasms.
21. Explain the process of grading a tumor and the TMN staging system for tumors.
22. Describe malignant transformation and three genetic abnormalities that give rise to cancer syndromes.
23. Discuss epigenetic influences in the maintenance of normal cellular homeostasis.
24. Describe mechanisms by which neoplasms evade immunological elimination.
25. Explain the role of the medical examiner in medicine and jurisprudence and when a death or illness must be investigated by the medical examiner...
26. Explain the importance of autopsies and the processes of obtaining and conducting them.
27. Explain the mechanism and give examples of environmental exposures, toxin, poisons and medications causing illness.
28. Discuss the pathogenesis of diseases caused by alcohol and cigarette smoking.
29. Correlate signs, symptoms, clinical presentations and treatments with underlying pathological, pathophysiological and epidemiological characteristics.
30. Discuss clinical laboratory studies and clinical pathology principles, including sources of error, in medical practice.
31. To communicate effectively and collegially with colleagues and faculty in small group exercises and labs.
32. To behave respectfully and responsibly towards colleagues and faculty in small group exercises and labs.
33. To meet professional responsibilities fully.
34. To adhere to high ethical and moral standards, accept responsibility for personal actions and accept constructive criticism in small group exercises and labs.
35. Take responsibility for his- or her-own medical education by preparation for small group exercises and labs.
36. To set up, use and troubleshoot a microscope.