OBJECTIVES

THE CELL AND MOLECULAR BIOLOGY COURSE

Upon completion of the Cell and Molecular Biology course, students will be able to:

ALTRUISM

- Demonstrate the compassionate and dignified treatment of patients as required for student questioning of patients in Clinical Correlate sessions.

- Demonstrate honesty and integrity in all professional interactions with patients’ families, colleague evidenced by: (1) student to student and student to faculty interactions in small groups and clinical conferences, (2) student questioning of faculty in lecture format, (3) student questioning of patients in Clinical Correlate sessions, and (4), taking examinations and being a responsible, active participant in the school's Honor Code (i.e. including turning in a peer for cheating if necessary)

- Demonstrate a commitment to continuously improve upon their knowledge and abilities

KNOWLEDGE

- Demonstrate an understanding of the pertinent molecular, biochemical and cellular mechanisms that are important in maintaining body homeostasis

- Demonstrate an introductory understanding of the etiology of selected disease states which are presented in some lecture material, and in some Clinical Correlate and small group clinical cases

- Demonstrate an introductory understanding of the pathophysiology of selected disease states which is presented in some lecture, Clinical Correlate and small group clinical

- Demonstrate an introductory understanding of the power of the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies which is presented in lecture, Clinical Correlate and Clinical Conference small group sessions

- Demonstrate an appreciation of the need to engage in lifelong learning to stay abreast of relevant scientific advances, especially in the disciplines of genetics and molecular biology

- Recognize the importance of genomics, proteomics and bioinformatics applications in research and clinical medicine
➢ Demonstrate an understanding of the scientific principles of enzymology especially relevant to applications in research and diagnostic methodologies

➢ Demonstrate an introductory understanding of the pertinent aspects of a focused medical history, which are recognized in some Clinical Correlation case presentations

➢ Demonstrate an introductory understanding of some organ-specific clinical signs and symptoms, which are presented in most Clinical Correlation presentations and several lectures

➢ Demonstrate an introductory understanding of some diagnostic procedures, which are presented in some lectures, and in some Clinical Correlation presentations

➢ Demonstrate an introductory understanding of the kinds of clinical information useful in differential diagnosis, which are presented for selected disease states in lectures and Clinical Correlation cases

**SKILLS**

➢ Demonstrate the ability to apply deductive reasoning regarding problems in basic science which is inherent in lecture material and small group discussions, and similarly, deductive reasoning regarding clinical problems which is inherent in the Clinical Correlation and small group clinical case presentations.

➢ Demonstrate an understanding of clinical management strategies, which are introduced at an elementary level in Clinical Correlation presentations

➢ Demonstrate the ability to communicate effectively in small group interactions with peers and faculty

**DUTIFUL**

➢ Demonstrate an introductory understanding of the epidemiologic distributions of selected diseases, which are introduced in lecture and Clinical Conference presentations

➢ Demonstrate an introductory understanding of some disease risk factors, which are introduced in lecture, Clinical Correlate and Clinical Conference small group presentations

✓ Demonstrate the ability to access and utilize bioinformatic material through the utilization of: (1) the school's internet website, MedScope, and (2) internet links to useful databases and websites in the preparation of Clinical Conference presentation