

# **BIOMEDICAL SCIENCE (BMSC)**

---

## **BMSC D604 - Molecular Foundations of Medicine (8 Credits)**

An eight-hour, spring semester course designed for first-year medical students incorporating biochemistry, molecular biology and genetics. With a focus on connecting fundamental biological processes to human pathologies, the course explores properties and functions of nucleic acids, mechanisms of inheritance, structure and function of proteins and enzymes, and cellular metabolism and bioenergetics. Examples of pathological changes at the molecular level will be used to illustrate how normal processes can be altered to induce a disease state. While the primary mode of instruction is lecture-based, incorporation of clinical correlation presentations and pathology perspectives will solidify the connections between basic processes and human diseases. Student mastery of course content will be assessed using department developed multiple choice exams and the National Board of Medical Examiners (NBME) biochemistry exam.