



## EXPECTED LEARNING OUTCOMES

The undergraduate Biology programs at the University of Utah provide students the knowledge base, skills, and resources needed to prepare them for careers in the Biological Sciences, or for enrollment and success in post-graduate education opportunities in numerous graduate or professional schools such as, biology, medicine, dental, veterinary, pharmacy, nursing, physical therapy, occupational therapy, and physician assistant programs. Within the department of biology, the advanced human anatomy course is specifically designed to take a **serious** student, one who has taken the Human Biology course, Biology 2325, and prepare them to become an outstanding problem solver in a clinical setting using anatomy as their toolbox. The course will expand their anatomy horizons, with a strong emphasis on the nervous system and clinical problem solving.

### Learning Outcomes

- **Structure and Function**

Students will expand their knowledge of structure-function relationships as they continue to add to the strong foundation knowledge of the structure of the human body that they established in the human anatomy course.

- **Developmental and Evolutionary Patterns**

Students will expand and deepen their knowledge of elegant developmental and evolutionary patterns that clarify anatomical structure and better learn to use these patterns to critically analyze the structure-function relationships of the human body.

- **Complete the Gross Anatomy Picture and Dive into the Nervous System**

Students will complete skeletal, muscular, and vasucular details that were not covered in the human anatomy course, and cover the peripheral nervous system in great detail and establish a strong foundation in the important connections and pathways established between the peripheral and central nervous systems.

- **Learn to Problem Solve in a Clinical Setting with Anatomy as the Toolbox**

Students will learn how to you excellent scientific problem solving and reasoning skills to solve clinical problems. Excellent medical diagnosis involves the application of good scientific reasoning skills with anatomy as the main toolbox. Weekly problem sets, or case studies, will be assigned to help students development skills in the science of medicine, or diagnosis.

- **Real World Application**

Students will not only be prepared to enter the medical, dental, allied healthcare, exercise science, and athletic training professions with the critical knowledge base of one of the most important tools they can have in their toolbox — human anatomy, but they will be prepared to better communicate with healthcare professionals about their own body and health and better understand their body as they deal with it on a daily basis for the remainder of their life.