A.  Identification:
   1.  Subject Area:  Biology
   2.  Course Number:  BIO 201 or BIO 2202
   3.  Course Title:  HUMAN ANATOMY AND PHYSIOLOGY II
   4.  Credit Hrs:  4
   5.  Catalog Description:
       Design and function of the human body.  Topics include body fluids, immune, cardiovascular, respiratory, digestive, urinary, and reproductive systems. General Education:  Lab Sciences. Prerequisite: *BIO 201 or consent of instructor. Three lecture; three lab.

B.  Course Goals:
   This course is the second semester of a two-semester sequence designed primarily to provide students preparing for careers in health-related professions with a basic knowledge of the structure of the human body and a fundamental understanding of the physiological processes that constitute life.

C.  Course Outcomes:
   Students will:
   1.  Perform various types of clinical laboratory evaluations of body fluids.
   2.  Demonstrate an understanding of the homeostatic regulation of blood chemistry by citing examples from endocrine, cardiovascular, respiratory and renal physiology
   3.  Recognize in histological section selected tissues from the reproductive, digestive, respiratory and cardiovascular systems
   4.  Identify in anatomical models, diagrams, photographs or other media, the major anatomical features of the cardiovascular, respiratory, endocrine, lymphatic, digestive, excretory and reproductive systems of the human body
   5.  State in written form the processes involved in development of the human body from fertilization to second trimester and in the production of gametes necessary for this process to occur
   6.  Construct written and graphic explanations of the physiological responses of the body to stress including examples from cardiovascular, endocrine, urinary and respiratory physiology
   7.  Explain the processes by which nutrient materials enter the body, are
digested or otherwise manipulated and ultimately are converted into either body components or energy-rich molecules for body use.

D. **Course Outcomes Assessment:**
   Will include:
   1. Laboratory practical exams
   2. Comprehensive final exam

E. **Course Content:**
   Will include:
   Content will include but not necessarily be limited to:
   1. **The cardiovascular system**
      a. the blood
      b. the heart and cardiac regulation
      c. the vascular system and cardiovascular dynamics
   2. **The respiratory system**
      a. anatomy of the upper and lower respiratory systems
      b. respiratory physiology
   3. **The endocrine system and the stress response**
   4. **The lymphatic system and immunity**
   5. **The digestive system and metabolism**
      a. anatomy of the alimentary canal and accessory organs
      b. physiology of digestion and assimilation
      c. chemical processes of catabolism
   6. **The urinary system and fluid/electrolytes**
      a. anatomy of the kidney and associated structures
      b. physiological processes of urine formation
      c. water balance
      d. electrolyte balance and blood buffering
   7. **The reproductive system and pregnancy**
      a. anatomy of the male and female reproductive structures
      b. physiological regulation of gamete production
      c. fertilization, implantation and embryological development

*Course has additional pre or co requisite(s)*