PROCESS BIOLOGY (CELL/MOLECULAR/ECOLOGY/GENETICS/ PHYSIOLOGY) (PCB)

PCB3023 MOLECULAR AND CELLULAR BIOLOGY (3.00 Credits)
A study of cell structure and function with emphasis on the properties of intracellular organelles and their molecular constituents. Includes photosynthesis.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Option 1 - Prerequisite: BSC2010 (minimum grade: C) and BSC2010L (minimum grade: C)

PCB3063 GENETICS (3.00 Credits)
Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in man. Basic concepts are developed for the nature, organization, transmission, expression, recombination, and function of genetic materials, and principles are derived for genetically characterizing populations.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Option 1 - Prerequisite: BSC2010 (minimum grade: C) and BSC2010L (minimum grade: C)

PCB3063L GENETICS LAB (1.00 Credits)
Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in man. Basic concepts are developed for the nature, organization, transmission, expression, recombination, and function of genetic materials, and principles are derived for genetically characterizing populations.
Total Contact Hrs: 48.00
Lab Hrs: 48.00
Fees: LABORATORY FEE $142.00
Complete all the courses in the following option:
- Corequisite: PCB3063

PCB4043 INTRODUCTION TO ECOLOGY (3.00 Credits)
This course is an introduction to ecological principles covering physiological, behavioral, population, community, ecosystem, landscape and global ecology. This course examines the integrated working of nature at all levels, from atoms and molecules to global cycles that sustain life on earth. The ecology of individuals is examined, in the realm of physiological ecology and in the adaptations of organisms to the abiotic factors of the environment.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in one of the following options:
- Option 1 - Prerequisite: BSC2011 (minimum grade: C)
- Option 2 - Prerequisite: BOT2010 (minimum grade: C)
- Option 3 - Prerequisite: ORH2522 (minimum grade: C)
- Option 4 - Prerequisite: ZOO2010 (minimum grade: C)
- Option 5 - Prerequisite: MCB2010 (minimum grade: C)

PCB4301 FRESHWATER ECOSYSTEMS (3.00 Credits)
An interdisciplinary approach to examination of inland waters including lakes, streams, marshes and swamps. Emphasis on the biotic, chemical and geological components of these aquatic ecosystems.
Total Contact Hrs: 48.00
Lecture Hrs: 48.00
Complete all the courses in the following option:
- Prerequisite: PCB4043 (minimum grade: C)

PCB4341C ADVANCED BIOLOGICAL FIELD TECHNIQUES (3.00 Credits)
Emphasis on techniques used in Biological field work. Units 1-3 will be covered with 1 or more of remaining units covered based on faculty expertise.
Total Contact Hrs: 48.00
Lecture Hrs: 24.00
Lab Hrs: 24.00
Fees: EDU/ACCIDENT INSURANCE $4.75
Complete all the courses in the following option:
- Prerequisite: PCB4043 (minimum grade: C)

PCB4454C BIOSTATISTICS WITH LAB (4.00 Credits)
Biostatistics instructs students in statistical procedures for analysis of biological data. Students will organize and summarize biological data, develop, and test appropriate hypotheses, explain and apply common statistical tests, and use statistical software to analyze data.
Total Contact Hrs: 64.00
Lecture Hrs: 48.00
Lab Hrs: 16.00
Complete all the courses in one of the following options:

- Option 1 - Prerequisite: MAC1105 (minimum grade: C)
- Option 2 - Prerequisite: STA2023 (minimum grade: C)
- Option 3 - Prerequisite: MAC1105C (minimum grade: C)