O Graduation requires at least 120 total hours
O Graduation requires 51 upper level hours (courses that start with a 3 or 4)

General Education Requirements: (43 hrs.) (Honors courses are in italics)

Communications:
O ENG 1301/1387 Composition "C" or better required.
O ENG 1302/1388 Rhetoric "C" or better required.
O Second Language Proficiency:
   Equivalent of 6 semester hours credit in a language other than English. Equal to 2 years of high school second language credit, examination (AP, CLEP or IB) or 6 hours college credit.

Humanities:
O 3 hrs. of Sophomore Lit.: ENG 2300, ENG 2303, ENG 2305, ENG 2307
   ENG 2308, ENG 2313, ENG 2387, ENG 2388
O 3 hrs. from the Visual or Performing Arts:
   ART 1301, COMM 1301, COMM 2312/2387, DANC 2323, LAMS 2301
   MUS 1307, MUS 1308, MUS 2301
O 3 hrs. from Philosophy or Modern/Classical Language Literature:
   Philosophy: PHIL 1305, PHIL 1310/1387, PHIL 2330, PHIL 2350,
   PHIL 2370, PHIL 2390 (2391)
   Modern/Classical Language Literature: MCLL 2301
   Honors Humanities: HONR 2387, HONR 2388
   Anthropology: ANTH 1354

Science and Mathematics:
O 8 hrs. Natural Science
   CHEM 1101, CHEM 1301, CHEM 1102, CHEM 1302 (required)
O 3 hrs. Of Mathematics: (“C” or better required in MATH 1340 or higher)
   MATH 1340, MATH 1341, MATH 1348/1389, MATH 1450/1388,
   MATH 1460/1487, MATH 2330, PHIL 1321

Social Sciences:
O 2 hrs. from the Introductory Computer courses:
   CIS 1201, CSCI 1201, MECE 1221.
O HIST 2313/2387 American Heritage I
O HIST 2314/2388 American Heritage II
O POLS 2313/2387 U.S. and Texas Government I
O POLS 2314/2388 U.S. and Texas Government II
O 3 hrs. from one of the following five areas:
   Anthropology: ANTH 1323, ANTH 1324, ANTH 1342,
   ANTH 1353,
   Economics: ECO 1301/1387, ECO 2301, ECO 2302
   Psychology: PSY 1310
   Sociology: SOC 1313/1387, SOC 1323, SOC 2333
   Criminal Justice: CRJ 1301, CRJ 1307

Additional course required IF: ACT below 19 and class rank below the top 25% in high school:
O UNIV 1301 Learning Framework (course will be required in second semester if a GPA of less than 2.500 in your first full semester at UT-PA.)
BASIC BIOLOGY DEGREE

Biology Major:
O Minimum of 32 credit hours and 2.50 GPA
O At least 22 upper division hours in Biology
O BIOL 1401/1487 General Biology I
O BIOL 1402/1488 General Biology II
O BIOL 3302 Biological Writing
O BIOL 4100 Seminar
O Group 1 - Molecular and Cellular Biology
  BIOL 3401 General Microbiology  BIOL 3403 Medical Micro. & Immunology
  BIOL 3412 Cell Biology  BIOL 3415 Introduction to Molecular Biology
  BIOL 4404 General Virology  BIOL 4418 Electron Microscopy
  BIOL 4420 Biotechnology
O Group 2 - Genetics and Biological Evolution
  BIOL 3301 Biological Evolution  BIOL 3413 Genetics
  BIOL 4417 Bacterial Genetics  BIOL 4317 Disease Epidemiology
  BIOL 4330 Molecular Evolution
O Group 3 - Developmental and Morphological Biology
  BIOL 2401 Vertebrate Zoology  BIOL 2402 Comparative Vertebrate Anatomy
  BIOL 3405 Histology  BIOL 3406 Developmental Mechanisms
  BIOL 3407 Comparative Embryology  BIOL 3408 Plant Morphology
O Group 4 - Organismal and Environmental Biology
  BIOL 2406 Environmental Biology  BIOL 3404 Conservation Biology
  BIOL 3409 Ecology  BIOL 3414 Invertebrate Zoology
  BIOL 4303 Mammalogy  BIOL 4304 Ichthyology
  BIOL 4318 Ethnobotany  BIOL 4319 Medical Entomology
  BIOL 4388 Global Change Ecology  BIOL 4402 Marine Zoology
  BIOL 4403 Introduction to Remote Sensing Technology
  BIOL 4406 Mycology  BIOL 4407 Animal Parasitology
  BIOL 4408 Plant Pathology  BIOL 4409 Herpetology
  BIOL 4410 Marine Botany  BIOL 4412 Ornithology
  BIOL 4414 Plant Taxonomy  BIOL 4415 Entomology
  BIOL 4416 Environmental Toxicology  BIOL 4419 Aquatic Entomology
  BIOL 4424 Microbial Ecology  BIOL 4426 Marine Ecology
  BIOL 4427 Marine Animal Field Studies
O Group 5 - Physiology
  BIOL 2403 Anatomy and Physiology I  BIOL 2404 Anatomy and Physiology II
  BIOL 3310 Neurobiology  BIOL 3411 Mammalian Physiology
  BIOL 4405 Plant Physiology  BIOL 4411 Ecological Physiology
  BIOL 4313 Endocrinology  BIOL 4422 Neurobiology Methods

Other Requirements:
O CHEM 2302/2102 Organic Chemistry I with Lab
O 3 hrs of Statistics:
  MATH 2330/2387 Elementary Statistics or STAT 2330 Elementary Statistics

MINOR:

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<td>Statistics (22/9)*</td>
<td>Women’s Studies (18/12)*</td>
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(Total hours required/Advanced hours required) 2.5 GPA required. * indicates specific course requirements; see catalog.