

Name: KSU ID # Catalog Term:

Minor/Area of Interest 2nd degree? KSU AGPA: Hours: Advisor:

Kennesaw State University | Department of Biology and Physics | B.S. in Biology

BIO CHECKLIST | Effective Fall 2013

GENERAL EDUCATION (44 hrs)	HRS	GR
AREA A: Essential Skills		
ENGL 1101 Composition I (3 hrs)		
ENGL 1102 Composition II (3 hrs)		
MATH 1112 College Trig or MATH 1113 PreCalculus (3 hrs) or MATH 1190 ^a Calculus I (4 hrs)		
AREA B: Institutional Options		
Select 1 two hour course: ANTH,CRJU,GEOG,PSYC,or SOCI 2105(1101/2201 version will suffice)		
Select 1 three hour course: AMST 1102,AADS 1102,COM 1109 ,*FL 1002, GWST 1102, LALS 1102, PAX 1102, PHIL 2200,or RELS 1102 (*FL denotes any Foreign Language)		
AREA C: Humanities/Fine Arts		
ENGL 2110 World Literature (3 hrs)		
Select 1 three hour course: ART 1107 or MUSI 1107 or TPS 1107 or DANC 1107		
AREA D: Science, Math, and Technology		
MATH 1190 ^a Calculus I (4 hours) or MATH 2202 Calculus II (4 hours)		
CHEM 1211/L General Chemistry I (4 hours)		
CHEM 1212/L General Chemistry II (4 hours)		
AREA E: Social Sciences		
POLS 1101 American Government (3 hrs)		
HIST 1110 Intro to World History (3 hrs)		
HIST 2112 America Since 1890 (3 hrs)		
ECON 1100 Global Econ or ECON 2100 MicroEcon (3 hrs)		
INSTITUTIONAL REQUIREMENT		
HPS 1000 Fitness for Living (3 hrs)		
FREE ELECTIVES (12 hrs)		
KSU First Year Seminar (3 hrs) or Learning Community		

TOTAL DEGREE HOURS: 123

AREA F: LOWER DIVISION REQUIREMENTS (16 hrs)	HRS	GR
BIOL 2107 Biological Principles I (4 hours)		
BIOL 2108 Biological Principles II (4 hours)		
PHYS 1111 or 2211 (4 hours)		
PHYS 1112 or 2212 (4 hours)		
UPPER DIVISION MAJOR REQUIREMENTS (45 hrs)		
REQUIRED COURSES		
STAT 3125 Biostatistics (3 hours)		
CHEM 3361/L Organic Chemistry I and Lab (4 hours)		
CHEM 3362/L Organic Chemistry II and Lab (4 hours)		
BIOL 3300 Genetics (4 hours)		
BIOL 3370 Ecology (4 hours)		
BIOL 3380 Evolutionary Biology (3 hours)		
ANATOMY AND PHYSIOLOGY (CHOOSE ONE COURSE) (4 hours)		
BIOL 3320 Plant Morphology (4 hours)		
BIOL 4350 Comparative Vertebrate Anatomy (4 hours)		
BIOL 4420 Plant Physiology (4 hours)		
BIOL 4431 Human Physiology (4 hours)		
CELL AND MOLECULAR BIOLOGY (CHOOSE ONE COURSE)****		
BIOL 3338 Histology (4 hours)		
BIOL 3340 Microbiology (4 hours)		
BIOL 4410 Cell and Molecular (3 hours)		
BIOL 4465 Immunology (3 hours)		
BIOLOGY ELECTIVES (15-16 hours)****		
Select 3000-4000 level courses in BIOL and BTEC (See Back for Options)		
RELATED STUDIES (3 hours)		

****If you take a course in the Cell and Molecular Biology Block that is 4 hours (Microbiology or Histology), you need 15 hours of Upper-level Biology Electives. If you take 3 hours (Cell and Molecular or Immunology), you need 16 hours of Biology Electives. Biology majors must have a lab course for either the Cell and Molecular Biology block or in the Biology Elective section.

Student's Signature & Date

Updated Updated Updated Updated Updated Updated Updated

Modified: 9/25/2013

Kennesaw State University | Department of Biology and Physics | Bachelor of Science in Biology

[] Pre-requisite courses, as well as all courses required in the BIO major, all require a grade of C or higher.

GEN ED & LOWER DIVISION REQUIREMENTS-PREREQS

_____ MATH 1190 ^a and MATH 2202	[MATH 1112,1113, or Math Placement Test ^a]
_____ CHEM 1211/1211L	[pre-req or co-req: MATH 1112,MATH 1113, or MATH 1190]
_____ CHEM 1212/1212L	[CHEM 1211/1211L]
_____ BIOL 2107	[CHEM 1211/1211L]
_____ BIOL 2108	[BIOL 2107]
_____ PHYS 1111 or 2211	Phys 1111=[MATH 1112 or 1113] Phys 2211=[MATH 1190]
_____ PHYS 1112 or 2212	Phys 1112=[Phys 1111] Phys 2212=[Phys 2211]

UPPER DIVISION MAJOR REQUIREMENTS-PREREQS

_____ CHEM 3361/3361L	[CHEM 1212/1212L]
_____ CHEM 3362/3362L	[CHEM 3361/3361L]
_____ STAT 3125	[BIOL 2107 or CHEM 1212 or instructor permission]
_____ BIOL 3300 Genetics	[CHEM 1212/1212L and BIOL 2108]
_____ BIOL 3370 Ecology	[BIOL 2108, STAT 3125, or instructor permission]
_____ BIOL 3380 Evolutionary Biology	[BIOL 3300]

ANATOMY AND PHYSIOLOGY PREREQS (CHOOSE ONE COURSE)

_____ BIOL 3320 Plant Morphology	[BIOL 2107 and 2108]
_____ BIOL 4350 Comparative Vertebrate Anatomy	[BIOL 2107 and PHYS 1111 or 2211]
_____ BIOL 4420 Plant Physiology	[BIOL 2107, 2108, and CHEM 3361]
_____ BIOL 4431 Human Physiology	[BIOL 2108,PHYS 1111 or 2211,and 12hr upper level courses]

CELL AND MOLECULAR BIOLOGY PREREQS (CHOOSE ONE COURSE)

_____ BIOL 3338 Histology (4 hrs)	[BIOL 2107 and 2108]
_____ BIOL 3340 Microbiology (4 hrs)	[BIOL 2107 and 2108]
_____ BIOL 4410 Cell and Molecular Biology (3 hrs)	[BIOL 3300 and CHEM 3361]
_____ BIOL 4465 Immunology	[BIOL 3300 (and BIOL 3340 recommended)]

BIOLOGY ELECTIVE OPTIONS: 3000 or 4000 level biology and biotechnology courses (Not all listed)

Note: Additional BIOL electives can be chosen from those not used in other upper-level blocks

_____ BIOL 3110 Directed Methods (1-3 hrs)	[BIOL 2108 and instructor permission]
_____ BIOL 3310 Invertebrate Zoology (4 hrs)	[BIOL 2108 and CHEM 1212/1212L]
_____ BIOL 3315 Vertebrate Zoology (4 hrs)	[BIOL 2107 and 2108]
_____ BIOL 3317 Pathophysiology (4 hrs)	[BIOL 2222/2222L or 4431]
_____ BIOL 3327 Medical Genetics** (4 hrs)	[BIOL 3300 or instructor permission]
_____ BIOL 3371 Limnology (4 hrs)	[BIOL 2107 and 2108]
_____ BIOL 3372 Aquatic Biodiversity (4 hrs)	[BIOL 3370 or instructor permission]
_____ BIOL 3373 Methods in Aquatic (4 hrs)	[BIOL 2107 and 2108]
_____ BIOL 3375 Behavioral Biology (4 hrs)	[BIOL 2107 and 2108 or comparable research methods]
_____ BIOL 3390 Developmental Biology (4 hrs)	[BIOL 3300]
_____ BIOL 3398 Internship	[Approval of major area committee and Dept Chair]
_____ BIOL 4400 Directed Study (1-4 hrs)	[Instructor, major area committee, and Dept Chair approval]
_____ BIOL 4460 Medical Microbiology (4 hrs)	[BIOL 3340]
_____ BIOL 4475 Virology (3 hrs)	[BIOL 3300 (and BIOL 3340 recommended)]
_____ BIOL 4486 Bioethics (3 hrs)	[BIOL 3300 and 9 hours of upper level Bio/Btech/or Biochem]
_____ BIOL 4490 Special Topics (1-4 hrs)	[Varies, See Schedule or Advisor]

BIOLOGY ELECTIVE OPTIONS CONT.

ANY BTEC courses you have prereqs for:

_____BTEC 3301 Intro to Btech	[BIOL 3300]
_____BTEC 4100 Molecular Genetics	[BIOL 3300]
_____BTEC 4300 Chrom. Prep. **	[BIOL 3300, co-req BIOL 3327]
_____BTEC 4310 Cytogenetics Practicum**	[BIOL 3300]

**Courses required for the Cytogenetics Track that allow for you to be able to sit for the National Certification Exam. See Coordinator

SUGGESTIONS FOR RELATED STUDIES (3 hrs)

_____ PHYS 3300, 3305, 3312, or 3340
_____ ASTR 3320 or 3321
_____ CHEM 3500 Biochemistry I
_____ SCI 3360 Earth Science
_____ WRIT 3140 Technical Writing or WRIT 3170 Env. Sci Writing
_____ HIST 3377 History of Science
_____ POLS 4456 International Env. Policy
_____ PSYC 4410 Physiological Psychology

Or any upper-level biology, biotechnology, chemistry, or math or GIS required courses

^a New students are required to take the online Math Advisement Placement Test (MAPT) available at <http://placement.kennesaw.edu>. If MATH 1190 is first MATH class at KSU, it will be used in Area A only and the Area D MATH must be MATH 2202. Otherwise, MATH 1190 must be the Area D MATH.

See catalog.kennesaw.edu for graduation requirements, general education details, additional pre-requisite options, course descriptions, and degree comments. If you have questions about the Biology major, please contact your advisor. Also note that students are initially advised in the College of Science & Mathematics Advising Center, located in Science 204.

"DegreeWorks" on OwlExpress is a wonderful tool to track where you are in your degree. Please check it constantly. However, it isn't always accurate for every situation, so please see your advisor regularly.