BIOLOGY / SECONDARY EDUCATION

COURSE REQUIREMENTS **FALL 2011 / SPRING 2012**

- **Required courses for a major in Biology.**

	CORE Requirements	Credits
	CORE 090	1
	CORE 100	3
	CORE 110	3
	CORE 115 or 116	3
	CORE 131 or 133	3
	CORE 140 or 141 – 146	3
	CORE 150[1] – 158	3
	CORE 161 – 164	3
	CORE 171 – 179	3
	CORE 180[1] – 188	3
	CORE 190[1] – 198	3
	CORE 250 – 259	3
	CORE 260 – 269	3
	CORE 280	3
	CORE 281 – 289	3
	Total Credits for CORE	43

	Major Requirements	Credits		Major Requirements	Credits
	BIOL 111	3		BIOL 112	3
	BIOL 111L	1		BIOL 112L	1
	BIOL 223	3		BIOL 224	3
	BIOL 223L	1		BIOL 224L	1
	BIOL 370[3]	2		BIOL 490[4]	4
	CHEM 113	3		CHEM 114	3
	CHEM 113L	1		CHEM 114L	1
	CHEM 241	3		CHEM 242	3
	CHEM 241L	1		CHEM 242L	1
	MATH 125	4		MATH 128	4
	PHYS 111	3		PHYS 112	3
	PHYS 111L	1		PHYS 112L	1
	BIOL Emphasis I, II or III*	4			
	BIOL Emphasis I, II or III*	4			
	BIOL Emphasis I, II or III*	3			
	BIOL Emphasis I, II or III*	3			
	Total Credits for Major	68			

	Secondary Education	Credits
	EDUC 202	3
	EDUC 231	1
	EDUC 235[2]	3
	EDUC 240[2]	3
	EDUC 270	3
	EDUC 302[2]	3
	EDUC 305[2]	3
	EDUC 331	1
	EDUC 350[2,5]	3
	EDUC 366[2]	3
	EDUC 440	3
	EDUC 467[2]	7
	EDUC 468[2]	2
	Total Credits for Secondary Education	38

Total Credits Required for Graduation = 149

*In addition to the Major Sequence requirements, a Biology Major must also complete a minimum or four (4) upper-level courses. Biology majors can choose to take courses within one of three emphases, as outlined below. **Certain emphases require the completion of required upper level courses (**)**. A student who does not complete the requirements of any emphasis, but does complete four (4) upper-level courses will earn a General Biology degree. At least two of these courses must include a laboratory component. (Some courses will require the laboratory component, as determined by the instructor).

Emphasis I: Pre-Health		Emphasis II: Molecular Biology		Emphasis III: Ecology	
**BIOL 355	BIOL 350	**BIOL 450	BIOL 336	**BIOL 430	BIOL 401
**BIOL 447	BIOL 360	BIOL 314	BIOL 451	BIOL 310	BIOL 416
BIOL 314	BIOL 416	BIOL 326	BIOL 453	BIOL 314	BIOL 420
BIOL 326	BIOL 456	BIOL 330	BIOL 456	BIOL 349	BIOL 447
BIOL 336				BIOL 355	ENST 410

[1]Students are required to take CORE 150, CORE 180 **OR** CORE 190 to fulfill the Interdisciplinary CORE requirement.

- If a student takes CORE 150, then he/she should choose from 181 – 188 to fulfill the 18x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 180, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 190, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 181 – 188 to fulfill the 18x requirement.

[2]Updated Child Abuse & Criminal Record & FBI Clearances **REQUIRED** for EDUC 235, EDUC 240, EDUC 302, EDUC 305, EDUC 350, EDUC 366, EDUC 467 and EDUC 468.
[3]Sophomore/Junior Diagnostic Project (Fall or Spring Semester of Junior Year)
[4]Senior Integrated Assessment (Fall or Spring Semester of Senior Year)
[5]PRAXIS I must be passed before taking EDUC 350.

General Information:
A student must earn a minimum of 120 credit hours to be awarded the baccalaureate degree. The number of credit hours required for graduation may be higher in certain major programs **or** if the student elects to pursue a second major.
Beyond the requirements of the Core Curriculum and of a student's chosen major program, the balances of the credit hours required for graduation are "free electives." **Because of the CORE, Major, and Secondary Education requirements, there are no "Free Electives" for students majoring in Biology/Secondary Education.**

See reverse side for a suggested sequence

BIOLOGY / SECONDARY EDUCATION

SUGGESTED SEQUENCE

- Use the information below as a guide when selecting courses.
- Refer to the reverse side when selecting major courses, major electives, core courses, and free electives when applicable.
- Consult your Academic Advisor prior to course registration.
- Refer to the King's College Catalog and/or website for course titles and descriptions.
- Choose one course from each CORE category as listed on the reverse side.
  - CORE courses may be taken in any order approved by the academic advisor with the following conditions:
    - CORE 100 and CORE 110 should be taken in the first year.
    - CORE 115 (or 116) should be taken within the first two years.
    - If CORE 098, CORE 099, and/or CORE 110L is required, then the student will need to take summer courses to graduate within 4 years.
    - For students selecting a Foreign Language (CORE 14x), every effort should be made to register for that language in the first semester at King's.

	1st Year - Fall	cr.		**1st Year - Spring**	cr.
_____	BIOL 111	3	_____	BIOL 112	3
_____	BIOL 111L	1	_____	BIOL 112L	1
_____	CHEM 113	3	_____	CHEM 114	3
_____	CHEM 113L	1	_____	CHEM 114L	1
_____	MATH 128	4	_____	MATH 125	4
_____	CORE	3	_____	CORE	3
_____	CORE 090	1	_____	CORE	3
		16			**18**
	2nd Year - Fall				
_____	BIOL 223	3	_____	BIOL 224	3
_____	BIOL 223L	1	_____	BIOL 224L	1
_____	CHEM 241	3	_____	CHEM 242	3
_____	CHEM 241L	1	_____	CHEM 242L	1
_____	CORE	3	_____	CORE	3
_____	EDUC 202	3	_____	EDUC 240[2]	3
_____	EDUC 235[2]	3	_____	EDUC 305[2]	3
		17	_____	EDUC 231	1
_____	**PRAXIS I**[5] (PPST's taken and passed)				**18**
_____	**Admission to Candidacy** (Complete and return "Application for Teacher Education Program Candidacy" to Education Administrative Assistant no sooner than the completion of 48 credits and no later than 65 credits)				
	3rd Year – Fall			**3rd Year – Spring**	
_____	PHYS 111	3	_____	PHYS 112	3
_____	PHYS 111L	1	_____	PHYS 112L	1
_____	BIOL Emphasis I, II or III*	3	_____	BIOL Emphasis I, II or III*	3
_____	BIOL 370[4]	2	_____	BIOL Emphasis I, II or III Lab*	1
_____	CORE	3	_____	CORE	3
_____	CORE	3	_____	CORE	3
_____	EDUC 366[2]	3	_____	EDUC 270	3
			_____	EDUC 331	1
		18			**18**
	4th Year - Fall			**4th Year - Spring**	
_____	BIOL Emphasis I, II or III*	3	_____	BIOL Emphasis I, II or III*	3
_____	BIOL 490[5]	4	_____	BIOL Emphasis I, II or III Lab*	1
_____	CORE	3	_____	CORE	3
_____	CORE	3	_____	CORE	3
_____	EDUC 302[2]	3	_____	CORE	3
			_____	EDUC 350[2,5]	3
		16			**16**
_____	**5th Year - Fall**				
_____	EDUC 467[2]	7		**Students who wish to finish in four (4) years (including Student Teaching) <u>MUST</u> take summer courses.**	
_____	EDUC 468[2]	2			
_____	EDUC 440	3			
_____	**Take Praxis II**				
		12			

Total Credits Required for Graduation = 149

<u>NOTE:</u> All Secondary Teacher Certification candidates must complete six credits of college level mathematics and six credits of college level English:

Math Courses	MATH 125	MATH 128
English Courses	CORE 110	CORE 16__

The Pennsylvania Department of Education requires secondary teachers to have a degree in the content area for certification. Students seeking secondary certification must meet with his/her specific content area department for content area courses required for the degree. The Education Division is not responsible for content area or CORE courses for secondary certification candidates.