**General Science / Secondary Education**

**Course Requirements Fall 2011 / Spring 2012**

* **Required courses for a major in General Science/Secondary Education.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **CORE Requirements** | **Credits** |  |  | **Major Requirements** | **Credits** |  | **Minor Concentration** | **Credits** |  |  | **Secondary Education** | **Credits** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | CORE 090 | 1 |  |  | BIOL 111 | 3 |  | Track Course\* | 3 - 4 |  |  | EDUC 202 | 3 |
|  | CORE 100 | 3 |  |  | BIOL 111L | 1 |  | Track Course\* | 3 - 4 |  |  | EDUC 231 | 1 |
|  | CORE 110 | 3 |  |  | BIOL 112 | 3 |  | Track Course\* | 3 - 4 |  |  | EDUC 2352 | 3 |
|  | CORE 115 or 116 | 3 |  |  | BIOL 112L | 1 |  | Track Course\* | 3 - 4 |  |  | EDUC 2402 | 3 |
|  | CORE 131 or 133 | 3 |  |  | CHEM 113 | 3 |  | Track Course\* | 3 - 4 |  |  | EDUC 270 | 3 |
|  | CORE 140 or 141 – 146 | 3 |  |  | CHEM 113L | 1 |  | Track Course\* | 3 - 4 |  |  | EDUC 3022 | 3 |
|  | CORE 1501 – 158 | 3 |  |  | CHEM 114 | 3 |  | Track Course\*\* | 3 - 4 |  |  | EDUC 3052 | 3 |
|  | CORE 161 – 164 | 3 |  |  | CHEM 114L | 1 |  | Track Course\*\* | 3 - 4 |  |  | EDUC 331 | 1 |
|  | CORE 171 – 179 | 3 |  |  | PHYS 111 | 3 |  | Track Course\*\* | 3 - 4 |  |  | EDUC 3502,3 | 3 |
|  | CORE 1801 – 188 | 3 |  |  | PHYS 111L | 1 |  |  |  |  |  | EDUC 3662 | 3 |
|  | CORE 1901 – 198 | 3 |  |  | PHYS 112 | 3 |  |  |  |  |  | EDUC 440 | 3 |
|  | CORE 250 – 259 | 3 |  |  | PHYS 112L | 1 |  |  |  |  |  | EDUC 4672 | 7 |
|  | CORE 260 – 269 | 3 |  |  | MATH 125 & 128 |  |  |  |  |  |  | EDUC 4682 | 2 |
|  | CORE 280 | 3 |  |  | **OR** | 8 |  |  |  |  |  |  |  |
|  | CORE 281 – 289 | 3 |  |  | MATH 129 & 130 |  |  |  |  |  |  |  |  |
|  |  |  |  |  | CARP 211 | 1 |  |  |  |  |  |  |  |
|  |  |  |  |  | CARP 412 | 1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | Total Credits for Secondary Education |  |
|  | Total Credits for CORE | 43 |  |  | Total **Minimum** Credits for Major | 60\*\* |  | 38 |

**Total Credits Required for Graduation = 139 - 149**

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| **\*A student majoring in General Science must choose one of the following Tracks (minor concentrations) below:** |
| **\*\*Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math.****NOTE:** Some courses required for certain minor programs will have prerequisites that must be fulfilled. |
| **Biology** | **Chemistry** | **Mathematics** | **Neuroscience** | **Environmental Studies** | **Molecular Biology** | **Physics** |
| BIOL 370 | CHEM 241 | MATH 127 | CORE 154 | ENST 201 | BIOL 450 | PHYS 231 |
| BIOL 490 | CHEM 242 | MATH 128 | NEUR 211 | ENST 202 | BIOL 451 | PHYS Elective\* |
| BIOL Elective\* | CHEM 243 | MATH 129 | NEUR 212 | ***One of the following:*** | BIOL 452 | PHYS Elective\* |
| BIOL Elective\* | CHEM 293 | MATH 130 | NEUR 310 | ***Two of the following:*** | PHYS Elective\* |
| BIOL Elective\* | CHEM 494 | MATH 250 | NEUR 480 | ENST 490 | ***One of the following math sequences:*** |
| BIOL Elective\* | CHEM Elective\* | MATH 490 | ***Plus two (2) of the following:*** | ENST 499 | BIOL 326 |
|  |  |  | ***Plus three (3) of the following:*** | BIOL 330 | MATH 129, 130, & 231 |
|  |  |  | NEUR 342 | BIOL 336 | **OR** |
| ***\*Minimum of Four (4) BIOL electives approved by the departmental advisor.*** |  |  | NEUR 346 | CORE 265 | BIOL 448 | MATH 125, 237, & 238 |
| ***\*One chemistry elective, excluding CHEM 197 & CHEM 351.*** |  | NEUR 348 | ENST 200 |  | ***\*Three PHYS elective courses numbered 233 or higher*** |
|  | NEUR 349 | ENST 491 |  |
|  | NEUR 390 | HCA 211 |  |
|  |  | ENST 452 |  |  |
|  |  | ENST 401 |  |  |

1Students 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.

2Updated 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.

3PRAXIS 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 General Science/Secondary Education.**

**General Science / 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.
		- CORE 098, CORE 099, and/or CORE 110L, if required, will fulfill elective credits.
		- 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.

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|  | **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 |  |  | CARP 211 | 1 |
|  |  | **16** |  |  |  | **16** |
|  | **Summer Session\*\*\*** |  |  |  |  |  |
|  | CORE | 3 |  |  |  |  |
|  | **2nd Year - Fall** |  |  |  |  |  |
|  | Track Course\* | 3-4 |  |  | Track Course\* | 3-4 |
|  | Track Course\* | 3-4 |  |  | Track Course\* | 3-4 |
|  | CORE  | 3 |  |  | CORE | 3 |
|  | EDUC 202 | 3 |  |  | EDUC 2402 | 3 |
|  | EDUC 2352 | 3 |  |  | EDUC 3052 | 3 |
|  | EDUC 231 | **1** |  |  |  | **15-17** |
|  | **PRAXIS I6** (PPST’s taken and passed) | **16-18** |  |  |  |  |
|  | **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 |
|  | Track Course\* | 3-4 |  |  | Track Course\* | 3-4 |
|  | CORE | 3 |  |  | CARP 412\*\*\*\* | 1 |
|  | CORE | 3 |  |  | CORE | 3 |
|  | EDUC 3662 | 3 |  |  | CORE | 3 |
|  | EDUC 331 | 1 |  |  | EDUC 270 | 3 |
|  |  | **17-18** |  |  |  | **17-18** |
|  | **4th Year - Fall** |  |  |  | **4th Year - Spring** |  |
|  | Track Course\*\* | 3 - 4 |  |  | Track Course\*\* | 3 - 4 |
|  | Track Course\*\* | 3 - 4 |  |  | CORE | 3 |
|  | CORE | 3 |  |  | CORE | 3 |
|  | CORE | 3 |  |  | CORE | 3 |
|  | EDUC 3022 | 3 |  |  | EDUC 3502,3 | 3 |
|  |  | **15-17** |  |  |  | **15-16** |
|  | **5th Year - Fall** |  |  |  |  |  |
|  | EDUC 4672 | 7 |  | **Students who wish to finish in four (4) years (including Student Teaching)****MUST take summer courses.** |
|  | EDUC 4682 | 2 |  |
|  | EDUC 440 | 3 |  |
|  | **Take Praxis II** |  |  |
|  |  | **12** |  |  |  |  |
| **Total Credits Required for Graduation = 142 - 152** |

\*\*\*Summer Session is suggested.

**NOTE:** 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.