

# B.S. Biology - Genetics

If needed, you can complete MATH 101 or 104 the summer before starting this schedule or complete CHEM 135 the summer after (see footnote #1.)

| First Year Fall   | Requirement Fulfilled       | # Hours               |
|---|-----------------------------|-----------------------|
| CHEM 130 <sup>1</sup> Chemistry I   | General Science & KU Core 5 |                       |
| BIOL 150/151 <sup>2</sup> Molecular & Cell. Biol.   | Major Req & KU Core         | 4                     |
| KU Core (ENGL 101)  | KU Core                     | 3                     |
| KU Core   | KU Core                     | 3                     |
| The AAAC offers affordable tutoring for many intro courses; attend PLUS sections for BIOL & CHEM. |                             | Hours this semester   |
|   |                             | 15                    |
|   |                             | JR/SR hours this sem. |
|   |                             | 0                     |

| First Year Spring  | Requirement Fulfilled | # Hours               |
|--|-----------------------|-----------------------|
| CHEM 135 <sup>3</sup> Chemistry II   | General Science       | 5                     |
| BIOL 152/153 Organismal Biology  | Major Requirement     | 4                     |
| MATH 115 <sup>1</sup> Calculus I   | General Sci & KU Core | 3                     |
| KU Core (ENGL 102/105)   | KU Core               | 3                     |
| Interested in Study Abroad? This would be a good time to visit the Office of Study Abroad. |                       | Hours this semester   |
|  |                       | 15                    |
|  |                       | JR/SR hours this sem. |
|  |                       | 0                     |

To be eligible to declare the Biology Major, you need to complete BIOL 150, 152, 350, and CHEM 135 with a GPA of at least 2.20.

| Second Year Fall   | Requirement Fulfilled | # Hours               |
|--|-----------------------|-----------------------|
| CHEM 330 <sup>4</sup> Organic I  | General Science       | 3                     |
| CHEM 331 Organic I Lab   | General Science       | 2                     |
| BIOL 350/360 *Principles of Genetics   | Major Requirement     | 3-4                   |
| MATH 116 <sup>1</sup> Calculus II  | General Science       | 3                     |
| KU Core  | KU Core               | 3                     |
| Apply for admission to the biology major! Watch for an Academic Notice in your myKU Advising Portal. |                       | Hours this semester   |
|  |                       | 14-15                 |
|  |                       | JR/SR hours this sem. |
|  |                       | 8-9                   |

\* BIOL 350/360 increases to 4 cred hrs beginning Fall 2014.

| Second Year Spring  | Requirement Fulfilled | # Hours               |
|---|-----------------------|-----------------------|
| BIOL 412 <sup>3</sup> *Evolutionary Biology   | Major Requirement     | 3-4                   |
| BIOL 405 Laboratory in Genetics   | Major Requirement     | 2                     |
| KU Core   | KU Core               | 3                     |
| KU Core   | KU Core               | 3                     |
| Elective  | Total Hours           | 3                     |
| Interested in helping with research? See <a href="http://kuub.ku.edu/undergraduate-research">kuub.ku.edu/undergraduate-research</a> . |                       | Hours this semester   |
|   |                       | 14-15                 |
|   |                       | JR/SR hours this sem. |
|   |                       | 5                     |

\* BIOL 412 increases to 4 cred hrs beginning Spring 2015.

| Third Year Fall  | Requirement Fulfilled | # Hours               |
|--|-----------------------|-----------------------|
| BIOL 416 <sup>5</sup> Cell Structure & Function                          | Major Requirement     | 3                     |
| BIOL 600 <sup>5</sup> Introd. Biochemistry, Lect.                        | Major Requirement     | 4                     |
| PHSX 114 or 211+216 Physics I  | General Science       | 4-5                   |
| KU Core  | KU Core               | 3                     |
| Elective   | Total Hours           | 3                     |
| Interested in an internship? This is an ideal time to make arrangements. |                       | Hours this semester   |
|  |                       | 17-18                 |
|  |                       | JR/SR hours this sem. |
|  |                       | 7                     |

| Third Year Spring   | Requirement Fulfilled | # Hours               |
|---|-----------------------|-----------------------|
| BIOL Selective <sup>6</sup> 400+  | Major Requirement     | 3                     |
| PHSX 115 or 212+236 Physics II  | General Science       | 4                     |
| KU Core   | KU Core               | 3                     |
| KU Core   | KU Core               | 3                     |
| Elective  | Total Hours           | 2                     |
| Have you considered departmental honors? See <a href="http://kuub.ku.edu/biology-honors-program">kuub.ku.edu/biology-honors-program</a> . |                       | Hours this semester   |
|   |                       | 15                    |
|   |                       | JR/SR hours this sem. |
|   |                       | 6                     |

Considering going on to a graduate academic or professional program? This would be a good time to start the application process.

| Fourth Year Fall   | Requirement Fulfilled | # Hours               |
|--|-----------------------|-----------------------|
| BIOL Selective <sup>6</sup> 400+   | Major Requirement     | 3                     |
| BIOL 400+ Level Elective <sup>7</sup>                                      | Major Requirement     | 3                     |
| BIOL 400+ Level Elective Lab <sup>7</sup>                                  | Major Lab             | 2                     |
| BIOL 570 <sup>5</sup> Intro. Biostatistics                                 | Major Requirement     | 3                     |
| KU Core  | KU Core               | 3                     |
| Elective   | Total Hours           | 2                     |
| Apply for Spring graduation this semester & meet with your Faculty Mentor. |                       | Hours this semester   |
|  |                       | 16                    |
|  |                       | JR/SR hours this sem. |
|  |                       | 11                    |

| Fourth Year Spring  | Requirement Fulfilled | # Hours               |
|---|-----------------------|-----------------------|
| BIOL 599 Senior Biology Seminar   | Major Requirement     | 1                     |
| BIOL 400+ Level Elective Seminar <sup>7</sup>                               | Major Requirement     | ≥ 2                   |
| BIOL 400+ Level Elective Lab <sup>7</sup>                                   | Major Lab             | ≥ 1                   |
| BIOL 672 <sup>3</sup> Gene Expression                                       | Major Requirement     | 3                     |
| BIOL Selective <sup>6</sup> 400+  | Major Requirement     | 3                     |
| Elective  | Total Hours           | 3                     |
| 300+ Level Elective   | Jr/Sr Hours           | 1                     |
| Celebrate your accomplishment at May Graduation with your fellow Jayhawks!! |                       | Hours this semester   |
|   |                       | 14                    |
|   |                       | JR/SR hours this sem. |
|   |                       | 11                    |

Be sure to check course timetables when they are published to check for time conflicts.

**Note: Students entering KU in Fall 2013 or opting into KU Core should ask a biology advisor about BS General Education requirements.**

- Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or 104 equivalent course. MATH 121 can be taken instead of MATH 115 + 116 to fulfill the BS Biology math requirement.
- Concurrent or prior enrollment in CHEM 130 is required.
- BIOL 412 and 672 and CHEM 135 are offered only in the spring.
- Most medical schools require the full CHEM 330, 331, 335, and 336 sequence.
- BIOL 416, 570, and 600 are offered only in the fall.
- Biology major selectives: choose one from BIOL 400, 408, and 417 AND choose two from BIOL 512, 518, 595, 655, 688, 743, 747, 753, 755, ANTH 340, 442, 652.
- Eight credit hours of biology 400+ level courses, including at least 3 hours of lab credit and 2 hrs of seminar/topics course (BIOL 419, 420, 499, 701). See major description for limits on using BIOL 423 and/or 424 for this requirement.

**A minimum of 120 hours is required for degree completion.**

**A minimum of 45 Jr./Sr. hours (300+ level) is required for degree completion.**

This sample 4-yr plan is current as of 1/14.

Please keep in mind that this sample plan provides just one example of how courses could be taken, and it is not meant to substitute for meeting with an academic advisor. It should be used with an up-to-date Degree Progress Report (DPR) and the appropriate degree requirement checklist ([kuub.ku.edu/degrees/](http://kuub.ku.edu/degrees/)).