

# Biology Undergraduate General Requirements

## General Education Requirements

Students must satisfy the university and college general education requirements. Some Biology courses may be used to meet the science and mathematics requirement of the university.

Candidates for the B.A. degree must fulfill the foreign language requirement of the College of Arts and Sciences. There is no foreign language requirement for the B.S. degree.

## Satisfactory/Unsatisfactory Option

Up to 18 credit hours may be taken on a satisfactory/ unsatisfactory (s/u) basis. Excluded from this option are required courses in biology, chemistry, physics, and mathematics.

## Non-major biology courses

The following 1000 level biology courses do not count toward the biology credit hours required for a major in biology. Moreover, if biology majors take these courses, they are treated as biology courses when computing the 70 credit hours outside of biology needed to be included in the 120 total credit hours required for graduation.

|           |                                 |   |
|-----------|---------------------------------|---|
| BIOL 1012 | General Biology                 | 3 |
| BIOL 1013 | General Biology Laboratory      | 2 |
| BIOL 1102 | Human Biology                   | 3 |
| BIOL 1131 | Human Physiology And Anatomy I  | 4 |
| BIOL 1141 | Human Physiology And Anatomy II | 4 |
| BIOL 1162 | General Microbiology            | 3 |
| BIOL 1202 | Environmental Biology           | 3 |

## Declaring the Biology Major

Students seeking to major in biology are first designated as pre-biology majors until they have successfully completed Genetics, BIOL 2012, in residence with a grade of C or better. Students who have completed a Genetics course elsewhere will have to either pass a proficiency examination in Genetics or complete BIOL 2012 in residence with a grade of C or better. Students may then declare biology as their major. BIOL 2012 must be completed successfully within two attempts, including excused withdrawals.

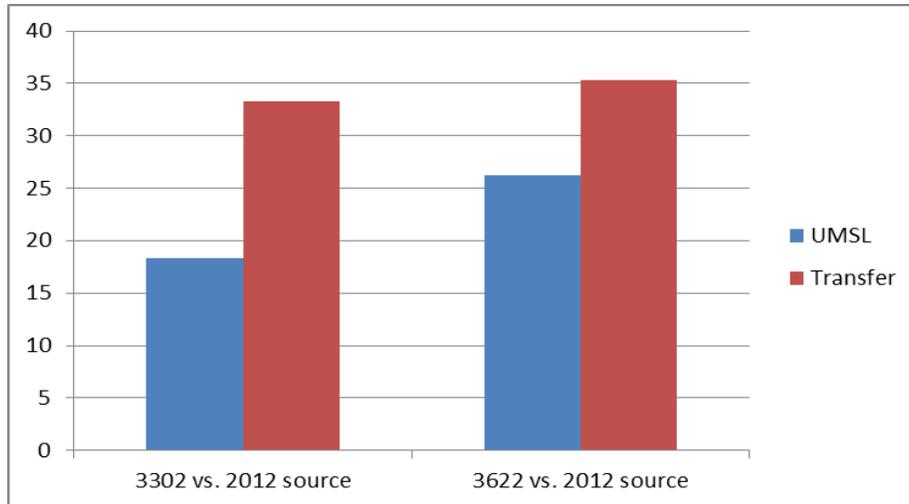
Sign-offs from other departments affected by this proposal

None

Rationale

The Department of Biology wishes to establish a minimum proficiency that a student must demonstrate before being designated as a biology major. Genetics, BIOL 2012, is a required core class that is a pre-requisite for most upper level courses. Successful completion of Genetics is a strong indicator of future success. Completing BIOL 2012 within two attempts with a grade of C is the minimum proficiency that students must achieve before declaring biology as a major. Students designated as 'prebiology' will receive advising from Biology Advisors, but those who do not pass the Genetics (BIOL 2012) requirement with a C or better by the second attempt will be referred for assistance to identify a suitable major. The Department of Biology has collected data on student performance in many biology classes and has found that the D/F rates for students who transfer credits for Genetics taken elsewhere are significantly higher than for students who take BIOL 2012 in residence. For example, the D/F rate for Evolution, BIOL 3302, is about 17% for students who took Genetics in residence but is 33% for students who transferred Genetics to UMSL. The mean grade point in BIOL 3302 is 2.54 for students who took Genetics in residence but is 1.92 for students who transferred Genetics. In Cell Biology, BIOL 3622, the D/F rate is ~25% for students who took Genetics in residence but is 35% for those that transferred Genetics. The mean grade point in BIOL 3622 is 2.23 for students who took Genetics in residence and 1.71 for students who transferred Genetics. Thus, to provide students the best chance for success in the biology major, and to maintain competitive academic standards, every UMSL pre-biology major must take Genetics (BIOL 2012) in residence.

## D/F Rate in Evolution and Cell Bio versus source of 2012



Mean GPA in 3302 for students who took 2012 here: 2.54

Mean GPA in 3302 for students who transferred 2012 from 2-year inst: 1.92

Mean GPA in 3622 for students who took 2012 here: 2.23

Mean GPA in 3622 for students who transferred 2012 from 2-year inst: 1.71