Amherst College – Biology Department
Comprehensive Examination

The senior comprehensive exam in the Department of Biology consists of a 30-minute verbal exam. This takes the form of a conversation between you and two professors in the department focused around one central theme in biology. The themes for this year include: Energy, Information transfer, Regulation, Sex, and Water. Your coursework (reviewed by your examiners) forms the basis of the exam, but topics may venture outside the specifics of courses and you may be asked to draw together ideas across courses or apply what you have learned in novel contexts.

All senior majors are required to take the exam during the fall semester. In addition, you must confirm your chosen theme with the departmental office, at least one week prior to the exam date. Students who do not pass the exam in the fall will have a second opportunity to complete this requirement for the Biology major in the spring semester.

In preparation for your exam, we recommend that you prepare a list of how your chosen theme entered into each of the courses you have taken. All of the themes involve inquiry at various levels of organization from the molecular and biochemical to the ecological and evolutionary. We expect that students demonstrate a solid understanding of the ways in which the theme is relevant to specific courses or fields of study, but note that the strongest exams are those in which students successfully integrate across levels.