

**2017 SPRING Molecular Biology Courses**

<b>Class No.</b>	<b>Course No.</b>	<b>Title</b>	<b>Day, Time, Room</b>	<b>Cr. Hrs.</b>	<b>Semester</b>
<b>16442</b>	<b>MBIOL 6200</b>	<b>Literature Review and Problem Solving</b>	<b>T &amp; TH, 3:00PM-5:00PM, HSEB 3515B</b>	<b>2.0</b>	<b>First Half</b>

In order to teach the skills required to be a successful independent scientist this course will teach students how to digest and analyze papers and problem solve, both of which will review and apply material from core courses. The instructors will develop specific course content. Topics may include: How to read a paper (read at home, discuss in class); Survey of the core services; Problem solving with open-ended problems posed on real-life or made-up situations. A focused effort will be made to help students identify topics that they can develop into grants in the Spring term. Grading will be based on participation and individual work.

Cross-listed with BLCHM 6200

<b>16443</b>	<b>MBIOL 6300</b>	<b>Guided Grant Preparation</b>	<b>T &amp; TH 3:00PM-5:00PM, HSEB 3515B</b>	<b>2.0</b>	<b>Second Half</b>
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To prepare students for their thesis research, prelims, and qualifying exams, we will offer a guided grant preparation course in the second half of the Spring semester that builds on their experience earlier in the semester (critical reading of primary literature and problem solving). The guided grant writing course will provide an opportunity for students to create an original research proposal by critical review of other grants, training in hypothesis generation, scientific writing, and experimental design. The written original grant proposal will be used as a basis for an oral qualifying examination by a faculty committee.

Cross-listed with BLCHM 6300

Oral Capstone: The written original grant proposal prepared in the Guided Grant Preparation course will be used as a basis for an oral capstone examination by a faculty committee. This exam will ensure that students meet our standards for thesis work and review material from the core courses before they join a department and lab. Students will prepare an R21-style grant proposal (~6 single-spaced pages, covering 2 years of work) to be submitted 5 days before the exam. They will present and defend the proposal in front of a 3-member capstone exam committee.

<b>10253</b>	<b>MBIOL 7960</b>	<b>Research Lab Rotation</b>	<b>3rd Rotation: 1/17 - 3/3/2017</b>	<b>2.0</b>	
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A signed Rotation Verification Form and an e-mailed copy of the rotation report must be submitted to the Program Office in order to receive a credit.

**Choose 2 electives (see elective list)**

Students must be registered full time for between 9-12 graduate credit hours. Electives vary by year and semester and many are taught every other year.
