

Department/Unit Chemistry and Biochemistry College/School CNSM

Biochemistry and Molecular Biology M.S. program

NOTE: This is a new document for the Academic year 20010-11. Please contact Bill Simpson or the Provost's office for prior years.

	2010-11
Assessment information	<p>1)25% of students are below expected level in terms of ability to critically analyze literature</p> <p>2)Meeting of faculty to discuss learning outcomes assessment identified</p> <ol style="list-style-type: none"> 1. Weakness in advanced undergraduate biochemistry knowledge 2. Weakness in writing skills related to manuscripts, abstracts, posters and grants 3. Weakness in knowledge of principles of receptor mediated signaling 4. Weakness in knowledge of principles of intracellular signaling 5. Knowledge of professional networking 6. Lack of sufficient breadth in core BMB graduate courses to prepare students for research.
Conclusions drawn from the information collected above and how are faculty collectively involved in drawing conclusions	<p><i>Conclusions are that the program is not preparing students to</i></p> <ol style="list-style-type: none"> 1. to critically analyze literature 2. demonstrate knowledge in advanced undergraduate biochemistry 3. write manuscripts, abstracts, posters and grants 4. demonstrate knowledge of principles of receptor mediated signaling 5. demonstrate knowledge of principles of intracellular signaling 6. Network on a professional level 7. Conduct research and design research based on breadth of knowledge of the fundamentals of BMB.

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<p>Curricular changes resulting from conclusions drawn above</p>	<ol style="list-style-type: none"> 1. Create more opportunity to read and discuss peer-reviewed literature in 600 level courses by refocusing chemistry 450 (General Biochemistry - Macromolecules) on modules designed to prepare students for 600 level core courses. 2. Give comprehensive exam from the previous year to entering students prior to their first semester to assess improvement in advanced biochemistry knowledge and to aid advisor in placing student in chem. 450. 3. Design comprehensive exam questions to assess knowledge of principles of advanced undergraduate biochemistry. Recommendations regarding placement in chem 450 would be made by admissions committee and ultimately determined by the student's major adviser. Students may choose to audit or attend chem. 450 lectures as a means to prepare for the comprehensive exam. 4. Consider making 4 semesters of the colloquium (1 credit per semester) a requirement for a BMB graduate degree. The colloquium focuses on writing skills and professional development. 5. Special topics receptor pharmacology course will be offered spring 2013 and submitted for consideration as a graduate level course in BMB. 6. Tom Kuhn has developed a course in cellular signaling. Student feedback has indicated significant demand for this course. 7. Expand breadth of core requirements MS and PhD: choose 3 courses from the following courses CHEM F654—Protein Structure and Function—3 credits CHEM F657—Molecular Foundations of Gene Expression—3 credits CHEM F674—Membrane Biochemistry and Biophysics—3 credits CHEM (TBA) —Receptor Pharmacology CHEM F670 —Cellular & Molecular Neuroscience CHEM F675 —Cellular Signaling (New Course)
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