

## PROGRAM REVIEW STATUS REPORT

**PROGRAM:** Laboratory Science

Date last updated: \_\_\_\_\_

Update provided by: \_\_\_\_\_

<b>AREAS FOR IMPROVEMENT, IMPROVEMENT ACTIVITIES, AND RESOURCE REQUESTS</b>		<b>STATUS OF ACTIVITIES AND REQUESTS</b>	
<b>DATE RECORDED</b>	<b>AREAS, ACTIVITIES, AND REQUESTS</b>	<b>DATE OF STATUS REPORT</b>	<b>STATUS</b>
May 2014	<p>In preparation for our second endorsement application with the MLSEC, the Laboratory Science Program has requested approval to make BIO230, Cell Biology, a program requirement. Previously, this course was a program elective option. By making it a required course, it ensures that all graduates of the Lab Science program will receive training in all the MLSEC core competencies.</p>		
May 2014	<p>The Lab Science program does need to move forward in evaluating a proposed articulation agreement between our program and the biotechnology program at Greater Lawrence Technical High School. In addition, the faculty need to keep an eye on enrollment levels and continue efforts to recruit more students into the program. To improve advising of our current students, faculty also need to input academic plans into DegreeWorks and provide opportunities to connect with students in developmental courses who have not yet entered the core program courses. Finally, faculty need to take advantage of the resources offered by the developing programs at Career Services to</p>		

	help prepare and support our students in their job searches after graduation.		
May 2014	Students who are still in developmental courses do not get class time contact with program faculty and often don't come in for advising time with faculty. Academic plans for these students in DegreeWorks can't be effectively tailored to these students' goals and schedules without this contact. Furthermore, the academic plans don't really help these students understand what the program is about or what they can do with a degree in Laboratory Sciences. This is a major gap in the faculty-student advising loop.		
May 2014	While most program specific learning outcomes are covered in multiple courses, there are two outcomes that are only covered in one course (outcomes 12 and 16). These are specific outcomes required for gold level endorsement by MLSEC and the program would be strengthened if these were reinforced in more courses.		
May 2014	Helping students find and secure externships is a major task taken on by faculty on top of their teaching responsibilities. At current enrollment levels, it is barely manageable. Should enrollment levels increase, it will be too large of a task for faculty to manage on top of their teaching responsibilities.		
May 2014	The current program laboratory space is small and crowded especially for our larger classes of Integrated Science I and II. Space issues in this room have also required that some major instrumentation be located upstairs in the microbiology lab. This means that the Instrumental		

	<p>Analysis and Research Experience classes must split their time between two lab rooms. There is a need for more PCR equipment for use in molecular biology experiments and an autosampler upgrade for one of our current instruments. There is also a need for a working laminar flow hood for cell biology experiments and a reliable autoclave.</p>		
May 2014	<p>The increase in total student enrollment from 2010-2013 probably reflects students who have stayed at college to finish completing elective and transfer requirements rather than an increase in new student enrollment.</p>		
May 2014	<p>Not every member of the advisory board is active. We are trying to expand our advisory board membership as a result. We are also constantly on the lookout for more externship sites and supervisors.</p>		
May 2014	<p>Only select Program Learning Outcomes will be assessed formally in the future. Faculty must still be aware of student performance for the other outcomes so they can address potential issues and problems. Faculty must also take the time to enter in the data and perform data analysis on the externship survey results in a timely fashion including the backlog of data from the 2012 and 2013 externships. Initial analyses have begun with this data but more thorough and efficient analyses would be possible if the data were available in spreadsheet format.</p>		
May 2014	<p>The Lab Science faculty need to move forward with the curriculum review for the biotechnology program at</p>		

	Greater Lawrence Technical School so we can make a decisions on whether to continue with the articulation agreement process. Furthermore, we cannot expect all of the laboratories who have hosted externs in the past to continue to do so in the future. As a result, we must continue to expand our list of potential externship hosts.		
May 2014	There is still a need for better support and training for the job search process for those graduates still looking for employment in the STEM field. Faculty need to work more closely in the future with the new Career Connections coordinator at the college and have students take advantage of the workshops offered on interviews and cover letters.		
May 2014	Renovation of E262 to become combined Lab Science/General Use Lab		
May 2014	Supplies for general outfitting of E262 and instrumentation upgrade and moves to E251		
May 2014	One PCR system and thermal cycler		
May 2014	A new autoclave for the Haverhill campus		