

MMBIO 494R Guidelines (2013-14)

Introduction: MMBIO 494R allows students to make original research-based discoveries under the supervision of a faculty mentor. This hands-on experience requires independent thought, effective time management, and hard work. Outcomes of a successful 494R research experience include the mastery of new techniques, the generation of original discoveries, the generation of formal scientific papers and presentations, and a new network of scientifically inclined faculty and student colleagues. The following four components are designed to help you and your mentor to navigate this 494R experience. These steps are required as part of your MMBIO 494R course grade:

1) Safety training: Before you can work in a lab at BYU you must complete laboratory safety training. Proper training on safety will help prevent potential injuries or accidents. The training is completed at [Y Train](http://training.byu.edu/ytrain) (<http://training.byu.edu/ytrain>) and involves online instruction with short quizzes. It is required that you complete **Lab Safety training** and **any lab specific online training modules**. You will receive confirmation that you have completed the training and must email this to your faculty mentor.

I completed the online safety training:

Trainee's signature _____ Mentor's signature _____ Date _____

2) Safety training renewal: The safety training described in (1) is valid for 1 year. Thereafter, you will need to renew your safety training each fall. This is done at the same online site and you should email proof of completion to your faculty mentor.

Date your safety training was last completed _____

3) Weekly progress report: It is expected that for every credit hour of 494R you will be actively working in the lab for at least 3 hours per week. Lab work often involves extended incubations. This time should be used to analyze data, read related scientific articles, plan upcoming experiments, etc. Homework and other activities in the lab may be permitted, but do not count toward the 3 hours/1 credit calculation. An important skill in life and in performing lab work is learning to be productive with your time. To help you stay on track and keep your mentor informed of your progress, you need to document the time you actively work each week and what you accomplished in that time. Reporting may be done through weekly emails, a written record in a calendar or notebook, or weekly discussions with your faculty mentor. Your faculty mentor will determine a reasonable weekly reporting mechanism.

Trainee's signature _____ Mentor's signature _____ Date _____

4) Final report or presentation: MMBIO 494R is a graded course and your grade will be dependent upon your sustained effort to move your project forward. Your hard work during a given semester will culminate in the submission of a written report or oral presentation as determined by your faculty mentor. Potential options include a 5-6 page written report, a formal presentation of your work in front of your co-workers, submission of an ORCA grant, or creating an online or printed resource for other researchers. Again, look to your faculty mentor to determine what will be required of you.

Trainee's signature _____ Mentor's signature _____ Date _____