M.A. Program in Biotechnology
Grading Guidelines
Supervised Research and Supervised Internships

BIOT GR5500 & BIOT GR5501 (Fall & Spring Semesters),
BIOL S4502 & BIOL S4503 (Summer Semester)

Some Advisors have asked for advice in determining a student's grade for the course, and the following guidelines are offered by the M. A. Program. There are five goals for students to accomplish in this course, and Advisors are asked to assign grades based on how well the student has achieved these goals.

The grading scale is:

A: Excellent to very good
B: Competent, good
C: Adequate, fair
F: Failed

A (+) or (-) may be used for work that falls between these grades. That is, a grade of B+ could indicate either that a student has done a bit above the B criteria on all goals, or that a student performed B-level work in meeting most goals, but A-level work in others.

These guidelines are not intended to be used as a strict checklist of all the behaviors that a student must exhibit in order to earn a particular grade. Rather, they should provide the mentor with a picture of the general level of accomplishments that might warrant a grade of A, B, C or F for each of these goals.

The expectation of a grade of A+ is that it is to be awarded only very rarely, for work that is far superior to that of the other students. A+ work is expected to be truly outstanding, showing the kind of insight and originality typical of a top graduate student or intern. The student may have worked on a particularly innovative or challenging project, written a paper that was virtually publishable as is, showed superb understanding of the subject, at times even more than the Supervisor, took the initiative to contribute to other ongoing projects, or proposed innovative conclusions that will influence the future direction of work.

Goal 1: To understand the nature of project design and analysis.

A: Student was intellectually involved in the design of the project; made creative contributions to the project design; understood the limitations of the data; was aware of problems with the methodology; had ideas for subsequent analysis that might be performed.

B: Student understood the reasons for the current project design but did not have any input into its planning; collected the expected data but did not know how to interpret it.

C: Student had minimal understanding of the project design of the work, seemed to simply follow instructions by rote.

Goal 2: To learn and apply relevant analytical techniques.

A: Student has excellent analytical skills, learned new research approaches quickly; uses appropriate care in working with data to maintain its integrity. The Advisor has complete confidence in accuracy of student's work.

B: Student learned the necessary analytical skills, and did a competent job of performing the approach, but never really learned to work independently and was sometimes careless about the integrity of the data.

C: Student learned only a minimum of analytical skills, and required extensive help; was disorganized in handling data, thus producing few results due to the student's lack of commitment. The Advisor would not feel comfortable about using this data.

Goal 3: To gain experience in critical reading of the scientific or industry-specific literature.

A: Read and understood the relevant published literature suggested by the Advisor; showed an interest in reading beyond this; understood some of the problems with the published papers.

B: Read the articles suggested by the Advisor, but somewhat superficially; did not take a critical approach towards the literature

C: Tried to read the relevant literature, but did not absorb much beyond the Abstract; did not make a great effort to find more basic reading, or to ask for help with understanding the articles; did not understand the relevance of the literature to the current project.

Goal 4: To develop skills in writing a scientific research paper or industry-specific technical report.

A: Final Report is well-written in a professional style; writing shows a logical progression of ideas; literature sources are cited where appropriate, and references are listed in an appropriate format. Paper has been carefully proofread, has only minor errors.

B: Final Report contains a competent statement of the problem and analytical results, but required considerable help from the Supervisor or Advisor; shows little original input by the student; results are reported, but not analyzed too deeply; not clear that student sees how this project fits in with previous research in this field. Generally neatly done, but includes some errors in spelling, grammar.

C: Final Report is a barely adequate description of the project; poorly written, requiring major revision by the Supervisor or Advisor; carelessly proofread with many typographical errors; is largely duplicated from papers written by others.

Goal 5: To develop a responsible working attitude in the training environment.

A: Student is an enthusiastic member of the training group, committed to doing the best possible job; concerned not only about the progress of the project, but aware of the needs of other group members as well; can be relied on to lend a hand as needed.

B: Student works well on the project, but does not go out of the way to help others.

C: Student repeatedly shows poor work skills; fails to work when expected, does not return email or phone messages; shows a lack of respect for other members of the group; does not clean up the workspace; has a sullen or angry attitude.   Within a lab, safety violations occur by the student even after being warned.

The Course coordinator will usually award the student the grade suggested by the mentor, but this grade may be lowered if the student's work is incomplete (e.g., Final Report not turned in, or turned in late.)

If the Final Report or SR/SI Advisor's grade recommendation is not received by the deadline, the course coordinator will award a default grade of CP, which may be changed when the appropriate material is received.

Example

Goal 1: To understand the nature of project design and analysis. A

Goal 2: To learn and apply relevant analytical techniques. A+

Goal 3: To gain experience in critical reading of the scientific or industry-specific literature. B

Goal 4: To develop skills in writing a scientific or industry-specific technical paper. A-

Goal 5: To develop a responsible working attitude in the training environment. A

Overall SR/SI Grade: A