



2019-2020 COURSE SYLLABUS

Molecular Biology

Ms. Riley

Room: B-30

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I. Course Description

Molecular Biology is an enriched alternative approach to college preparatory biology, which uses inquiry methods to present biology as an experimental science. This course challenges students to construct their understanding of concepts starting from the laboratory experience and to develop their scientific literacy skills. Molecular biology students will design experiments, collect and analyze data, think critically, and communicate scientifically. The breadth of content covered in this course is the same as the traditional approach and based on the Next Generation Science Standards (NGSS), but the focus is on biology at the molecular level. This course satisfies the biological science high school graduation requirement and the University of California laboratory science “A-G” requirement for biology.

The 4 main objectives for all molecular biology students are to:

1. Be prepared with a strong foundation for a higher level of science education by developing the skills to think, act, comprehend, and communicate as scientists.
2. Practice and apply scientific methods through inquiry-based labs and activities.
3. Develop scientific reading, writing, and oral communication/presentation skills.
4. Build a greater understanding of and appreciation for the scientific method, biology, and the natural world.

II. Materials

Students are responsible for bringing the following materials to class on a daily basis:

- Pens (blue or black), pencils, erasers
- College ruled composition book (9 ¾ x 7 ½ in.) to be used as a lab notebook
- 3 ring binder (1”) for keeping handouts, returned work, notes, etc.
- 5 tab dividers for organizing sections in the binder
- College ruled loose leaf binder paper

Please see Ms. Riley if obtaining any of the above materials presents a challenge.

The textbook provided for this course is *BSCS Biology: A Molecular Approach (9th Edition)*, will be used primarily as a reference, and should be kept covered in a safe place at home or in the student’s locker. Students will be notified ahead of time if they need to bring their textbook to class. Students are responsible for returning their textbook in good condition at the end of the school year.

III. Grading Scale

Letter grades will be assigned for the semester according to the following scale:

A = 89.5-100%

B = 79.5-89.4%

C = 69.5-79.4%

D = 59.5-69.4%

F = Below 59.5%

IV. Grading Policies

Each assignment will be given a point value within an assignment category. Assignment categories will be weighted using the following scale to determine the final semester grade:

Summative Assessments (Unit exams, quizzes, lab practicals, reports, presentations)	60%
Formative Assessments (Homeworks, mini-quizzes, binder check quizzes, exit slips)	20%
Final Exam	20%

All work is expected to be turned in on time.

Late work will automatically result in a 30% point reduction *per day late*, unless it was due to an officially EXCUSED absence. Work submitted past the due date/time is considered late, even if it is submitted later that same day. Labs or assignments that were missed due to unexcused absences may *not* be made up for credit.

Students who miss class due to an **officially EXCUSED absence** will be responsible for turning in any work that was due during their absence upon returning to class. *Students are responsible for checking the absent work folders and for checking in with classmates and/or Ms. Riley following any excused absence, to receive any missed instructions for assignments and to make arrangements for making up any missed labs/activities.* The due date for that work will be adjusted as necessary, based on the length of the excused absence and the type of assignment.

V. Class Expectations

Molecular biology students will be held to high expectations, both academically and behaviorally, to ensure the opportunity for every student to meet the 4 main course objectives. All students are expected to be:

- **PREPARED. This means:** In assigned seat beginning the Warm Up when the bell rings. Coming to class prepared each day with all materials and with all assignments completed on time. Maintaining an organized binder and lab notebook. Removing ear buds upon entering class and keeping cell phones turned off and out of sight at all times, unless permission has been given by Ms. Riley for a specific educational use.
- **RESPECTFUL. This means:** Interacting with classmates, instructors, and guest speakers in a respectful, kind manner. Knowing that we are all different and valuing the power of that diversity in our abilities to learn from one another and grow together. Assuming that others have the best intentions and seeking to understand first. Disagreeing respectfully. Respecting the classroom property and materials at all times by keeping desk/lab station/materials clean and orderly, and reporting any issues promptly to Ms. Riley.
- **ENGAGED. This means:** Actively learning by taking notes, doing assigned work, and giving full attention at all times while in class. Participating in class discussions. Asking and answering questions. Staying on task and engaged, and using time efficiently during labs and group work. Using laboratory materials and technology in ways that are safe and appropriate for the assigned task.

VI. Additional Policies

- To maintain a safe and clean laboratory and classroom environment, **no food, gum, or drinks** (besides water) are allowed to be out during class, unless they are being used in a lab/activity for a specific educational purpose.
- **Restroom policy:** Students are expected to plan ahead to use the restroom during passing periods and lunch to avoid missing valuable class time. For emergency situations, you will be granted 2 trips to the restroom per semester. This will be tracked by Ms. Riley and students who do not use their restroom passes will earn 1 extra credit point per pass (max. 2 points) at the end of the semester, added to their final exam grade. Additional trips to the restroom beyond the allowed 2/semester will result in point deductions (1 pt./each, taken from final exam grade), except for cases with documented medical excuse.
- **Academic Dishonesty:** Academic dishonesty is a very serious matter, and will not be tolerated. Please refer to the JFK Academic Integrity Policy in the student handbook for more detailed information about what constitutes academic dishonesty. Students engaging in academic dishonesty will receive an automatic zero on the exam or assignment, and parents and school administrators will be notified.
- **Additional assistance:** Ms. Riley will be available most Mondays and Tuesdays after school from 3:25-4:00pm (weekly) and on specific Mondays at lunch (as announced) to provide additional help to students. If you need extra help outside of normal class hours but have a conflict with that schedule, please contact Ms. Riley.