



2018-2019 COURSE SYLLABUS

Molecular Biology

Ms. Riley

Room: B-30

Email: kelsey-riley@scusd.edu

Telephone: 916-395-5090 ext. 506130

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 requires students to construct their understanding of concepts starting from the laboratory experience. Students in this course develop their abilities to observe, think and communicate scientifically through inquiry-based, open-ended laboratory investigations. 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. Molecular biology students will be challenged to think critically and to develop their scientific literacy skills. 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, projects, and activities.
3. Develop scientific reading, writing, and oral communication skills.
4. Build a greater understanding of and appreciation for the nature of science in general, and biology in particular.

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.
- College ruled loose leaf binder paper for taking notes
- 5 tab dividers for organizing sections in the binder

The textbook provided for this course is *BSCS Biology: A Molecular Approach (9th Edition)*. The textbook will be used primarily as a reference and for some homework assignments, 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 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 59.4%

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, projects) | 60% |
| Formative Assessments (Homework, binder checks, mini-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 in with Ms. Riley upon their return to class 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 with all materials and assignments. Maintaining an organized binder and lab notebook. Completing any assigned pre-reading to be prepared for labs. 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 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 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 or activity that has been designed 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 two per 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, Tuesdays, and Wednesdays after school from 3:20-4:00pm to provide additional assistance to students. If you need extra help outside of normal class hours but have a conflict with that schedule, please contact Ms. Riley to make an appointment.