

Chemistry & Chemistry Honors

Scituate High School 2019-20 Course Syllabus

Dr. Peter A. McCarthy

B.S. Chemistry, Boston College Ph.D. Organic Chemistry, Massachusetts Institute of Technology

Course Description

This course focuses on the fundamental principles of chemistry and how the characteristics and behavior of matter can be understood in terms of these chemical principles. A full list of the topics addressed is shown in the course outline. Laboratory experiments and activities will be conducted regularly to illustrate the principles being taught in the classroom. Students will be pushed to strengthen their skills in the following areas: conducting investigations, designing experiments, solving problems logically, solving quantitative relationships with mathematics, reading informational text, tables and graphs, reaching evidence-based conclusions, communicating thoughts in the written and spoken word in a clear and succinct manner.

Course Topics

- 1) Scientific Method
- 2) Atomic Theory
- 3) Nuclear Chemistry
- 4) The Mole
- 5) Electrons
- 6) Periodic Properties
- 7) Bonding
- 8) Covalent Bonding
- 9) Nomenclature
- 10) Chemical Reactions
- 11) Stoichiometry

Safety

Safety is the top priority in chemistry. Maintaining a safe classroom & laboratory requires special attention in science and chemistry. The SHS science teachers have taken specialized training in science classroom safety, but students need to do their part as well. To this end, students and their parents will need to read and sign a safety contract (see http://www.scituatescience.com/). Please understand that safety rules are strictly enforced to ensure the safety of all students.

Class Rules

The purpose of class rules is to foster and maintain the learning environment for all students. For this reason, students are expected to comply with all aspects of the SHS Student Handbook (see

http://scituateri3.net/shs02/index.php) and SHS Science Student Policies and Expectations Handbook (see http://www.scituatescience.com/). Additional rules, procedures and expectations will be introduced at the beginning of the year. Students, parents and teachers have a shared responsibility to see that these rules are followed and the learning environment is optimum.

Grading Policies

The overall grade will be computed as follows:

1Q Grade	20%
2Q Grade	20%
3Q Grade	20%
4Q Grade	20%
Final Exam	20%

The grade for each quarter will be the weighted average of a student's grades in four categories: tests, lab reports, quizzes/assignments, and participation. The weight on each category is shown below. Within each category, a student's grade is simply the total points earned divided by the total points assigned.

Tests 40%
Lab Reports 30%
Quizzes/Assignments 20%
Participation 10%

Rhode Island College Early Enrollment Program (RIC EEP)

Students taking Chemistry Honors are eligible to enroll in the EEP. In this way, students taking Chemistry Honors can simultaneously earn college credit. In this case, students can earn credit for CHEM 103 General Chemistry 1, a 4-credit, one semester, chemistry course offered by RIC. These credits may be transferred to an extensive number of colleges and universities across the country. There is a fee for enrollment, but it is a significant savings over the cost of a typical one semester college course. In the past few years, the State of Rhode Island has paid this fee, but we do not yet know if this will be the case this year. Either way, the RIC EEP option offers students a chance to get a head start in college at a low cost. Enrollment will be offered during the first quarter of the course. For more information, see http://www.ric.edu/eep/

Note to Parents

Feel free to contact me at any time at peter.mccarthy@scituateschoolsri.net. I am more than happy to address any questions or concerns you may have. Also, please regularly monitor your child's grades on PowerSchool. Parental attention and interest, in my experience, is one of the greatest factors for a child's success at school.



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Acknowledgement Form

Student

Please sign this acknowledgment form and return it to Dr. McCarthy as instructed.

I have read and understood this syllabus.	
Student name (please print):	
Student signature:	_Date:
Parent/Guardian	
As the parent/guardian of the student above, I have reviewed this syllabus.	
Parent/Guardian name (please print):	
Parent/Guardian signature:	_Date:

Parents are encouraged to regularly monitor their child's progress on PowerSchool. If you have any questions or concerns, do not hesitate to contact Dr. McCarthy.