



Dr. E. P. Scarlett High School Chemistry 20AP



Course	
Pre-Requisite	Minimum 80% in Science 10AP and Math 10C is strongly recommended
Textbook	Chemistry - Zumdahl
Supplies	Binder, loose-leaf paper, scientific calculator, pens, pencil, eraser

Teacher	E-mail	Room
Marc Wyton	mawyton@cbe.ab.ca	151

TEACHER COMMUNICATION: Teachers will respond to e-mail within two business days.
E-mail is the best way to contact teachers.

COURSE DESCRIPTION: This highly academic program is designed to incorporate Chemistry 20, in the study matter and chemical change, while also introducing components of the Advanced Placement curriculum.

Fees	Description
\$5.00 (optional)	Lab Goggles – if students would like to own their goggles, they are available to purchase. Personal goggles must meet lab safety requirements.

LEARNER OUTCOMES:

- **Attitudes** - Students will be encouraged to develop attitudes that support the responsible acquisition of application of scientific and technological knowledge to the mutual benefit of self, society and the environment - interest in Biology, mutual respect, scientific inquiry, collaboration, stewardship & safety.
- **Knowledge** - Students will construct knowledge and understandings of concepts in life science, and apply these understandings to interpret, integrate and extend their knowledge.
- **Science, Technology and Society (STS)** - Students will develop an understanding of the nature of science and technology, the relationships between science and technology and the social and environmental contexts of science and technology.
- **Skills** - Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively and for making informed decisions.
- Alberta Learning: <https://www.alberta.ca/programs-of-study.aspx>
- College Board: <https://apcentral.collegeboard.org/courses/ap-chemistry?course=ap-chemistry>

EXTRA SUPPORT:

- Students should make use of class time to ask for help.
- Teachers are available in their classrooms at 8:30 am (Mon – Thurs) for extra help.
- Science help room is available 8:00 am – 8:45 am (Mon – Thurs) in room 151.
- If additional support is still needed, students should make appointments with teachers.

LEARNER ASSESSMENT:

- Learning is a process. Teachers will use a variety of instructional tools and assessment to help students understand the Program of Study outcomes.
- Formative assessment informs instruction and provides guidance to students about how to improve, and **should be regularly accessed and completed by students.**
- Summative assessment (such as quizzes and/or unit exams) will be used to verify that students have learned the intended outcomes. As a result, summative assessments will represent a greater portion of the students' overall grade.

- Teachers will post grades in Powerschool which is available for students and parents to view.

	Unit	Weighting	Chapters	Final Grade
A	Quantitative Relationships in Chemical Change	33.3%	2, 3	70%
	Atomic Structure and Periodicity*	0%	7	
B	The Diversity of Matter and Chemical Bonding	22.2%	8, 9, 10	
C	Matter as Solutions, Acids and Bases	33.3%	4, 11, 14	
D	Forms of Matter: Gases	11.1%	5	30%
	Final Exam			

*This is a pure AP topic and does not contribute to the calculation of the overall grade

CLASS EXPECTATIONS:

- Regular attendance and a readiness to actively engage with the course content
- This is an in-person course. D2L is used for regular course work as well as online support. Students should access D2L **regularly** for practice assignments, instructions and resources.
- Understanding that learning is a process which builds on prior knowledge, as a result **effective study habits are required**.
- When learning complex ideas, sustained motivation and cognitive engagement are required to maintain considerable mental effort. As a result, cell phone use should be minimal and appropriate for the school environment.
- Academic Integrity – a commitment to the regular and honest completion of work (ie. no cheating or copying from peers or the internet). Students and parents are required to be familiar with academic integrity policies found on the school website (<https://school.cbe.ab.ca/school/DrEPScarlett/teaching-learning/program-approach/academic-integrity/Pages/default.aspx>).
- Lab Safety Guidelines must be followed.
- Students are required to complete all assessments, even when absent.
- Reasons for unavoidable absences should be communicated to teachers. It is the student's responsibility to arrange with their teacher, to make up missed assessments.

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SAFETY:

- Students must follow all Laboratory Safety rules each time they are in a science classroom
- Laboratory safety rules are posted in classrooms and in D2L shells
- Students must complete a Laboratory Safety course in D2L prior to conducting any labs.

LABORATORY OPPORTUNITIES:

- Students will have the opportunity to participate in the following labs:
 - Precipitate Lab, Reaction Evidence Lab, Stoichiometry Lab
 - Emission Spectrum Lab
 - Molecular Structures Modelling Lab
 - Sequential & Qualitative Analysis Labs, Serial Dilution Lab, Acid/Base Titration Lab,
 - Ideal Gas Law Lab, Universal Gas Constant Lab
- Additional labs may be included if resources and time allow

POSSIBLE ADDITIONAL RESOURCES:

- Periodic Table of Videos, Veritasium, Crash Course, TED-Ed The Poisoner's Handbook.
- Additional selected videos may be used to improve understanding and highlight key curriculum points.