



Thornton High School
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<http://www.thorntonh.adams12.org>

Adams12
 Five Star Schools

School Year	2017-2018	Teacher Name	Laura Robertson
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Course Name	IB Chemistry II Course # 5090		
Course Description	<p><i>IB Chemistry prepares students for the International Baccalaureate Chemistry exams. In keeping with the general aim of IB Experimental Sciences courses, IB Chemistry promotes understanding of the facts, patterns, and principles underlying the field of chemistry; critical analysis, evaluation, prediction, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of chemistry and scientific advances in chemistry upon both society and issues of ethical, philosophical, and political importance. Course content is determined by the IB Syllabus for Chemistry HL. Laboratory experimentation is an essential part of this course.</i></p> <p>This class is a continuation of IB Chemistry I. The class will complete a strong foundation in general chemistry and provide an introduction to Organic and Biological Chemistry. In addition to coverage of the required content outlined in the <i>IB Chemistry Syllabus</i> the required lab hours and the IB Internal Assessment for this course will be completed.</p> <p>This class uses <u>Higher Level Chemistry Ed. 2</u> (Pearson Baccalaureate) as our main textbook. Additional texts and monographs will be provided for some topics. The class format is primarily lecture, podcast, and textbook use, along with extensive lab work. There will also be student-led and group activities, guest speakers, videos, demonstrations, and research reports.</p> <p>Note - I strongly recommend that each student purchase a personal copy of the <u>IB Study Guide for Chemistry (2014 Edition)</u> by Geoffrey Neuss (ISBN-13: 978-0198393535), which is available from Amazon and other retailers, ~ \$35. It is extremely useful when studying for in-class tests and preparing for the May IB exams. Please be sure to get the newest edition!</p>		
Unit of Study	Content Standards	Approximate Time Spent	Targeted Date of Assessment
Organic Chemistry	IB Chemistry HL Syllabus, topic 10.1 (Naming & Functional Groups)	3 weeks	Sept 7, 2017
Equilibrium	IB Chemistry HL Syllabus, (topics 7 & 17)	3 weeks	Sept 28, 2017
Acids and Bases	IB Chemistry HL Syllabus, (topics 8 & 18)	5 weeks	Nov 2, 2017
Organic Chemistry	(IB Chemistry HL Syllabus, (topics 10 & 20)	3 weeks	Nov 30, 2017
Measurement, Data Processing & Analysis	IB Chemistry HL Syllabus, (topic 11) – (NOTE: this topic is reviewed and assessed throughout the entire program)	2 weeks	Dec 15, 2017
Instrumental Data Analysis	IB Chemistry HL Syllabus, (topics 10 & 21)	2 weeks	Feb 1, 2018
Analysis	IB Chemistry HL Syllabus, (topic 21 –Data analysis and identification of unknowns)	2 weeks	Feb 9, 2018
Internal Assessment	Combination of individual research and preparation and class lab time - schedule provided separately	Nov – Feb	See schedule
Biochemistry	(IB Chemistry HL Syllabus, topic Option D)	7 weeks	April 5, 2018
Review	(IB Chemistry HL Syllabus, topics 1-20)	3 weeks	IB Tests, May 11&12



Grading Scale		Grade Percentages/Weights		
A	90-100	Summative Assessments (Tests, Labs, Projects)	80%	50% Tests and Large Projects
				30% Summative Quizzes and Labs
B	80-89	Formative Assessments (quizzes, learning checks, etc)	20%	
C	70-79			
D	60-69			
F	59-50	*Weekly progress grades are posted at https://ic.adams12.org/campus/portal/adams12.isp		

SCORING AND GRADING OF SUMMATIVE ASSESSMENTS

- If no attempt to take a summative assessment has been made, a “no evidence” (NE) grade will be recorded until the assessment is completed. NE shall be defined as not attempting the assessment or not being present for the assessment.
- In order to receive a passing grade, a student must **attempt ALL summative assessment**.
- The presence of a NE grade for any summative assessment at the end of a grading period will result in a grade of F for the course, regardless of performance on other assessments.

SCORING AND GRADING OF FORMATIVE ASSESSMENTS

- Any work not turned in will be recorded as missing in the gradebook. In order to receive late credit of 50% the missing work **MUST** be turned in on/before the unit assessment.

DISTRICT POLICY CHANGE 2017-2018

*All students enrolled in this course are required to take the corresponding IB exam in May. If you do not take the exam, your score in this course will be **unweighted** and will impact your GPA. IB exams are non-refundable and after they are ordered, you will be billed for the exam for this class regardless of whether or not you sit for the exam.*

General Expectations

- Grades are based upon the demonstration of proficiency associated with detailed content expectations. Formative grades in addition to summative unit assessments will be used to determine your grade.
- **Summative: 80%** Summative measures of achievement are taken when unit mastery is expected. (i.e., unit tests, culmination of a project, embedded assessments, etc.) One retake is available for ten days following posting of scores, after making test corrections and discussion with the teacher about additional learning, such as unit outlines, completion of practice work, etc. The retake score will replace the original score (whether higher or lower). Retakes (and missed tests) must be made up within the 10 day window. At the teacher’s discretion, when a test is missed, an alternative test will be substituted for the original test form. **Retakes must be completed in a single sitting.** IB Lab grades are also summative, with the best two scores of each criteria used to calculate class grades. There are **no** retakes for lab grades.
- **Formative: 20%** Formative assessments measure the development of skills and/or content embedded in the unit. Formative assessments are taken frequently, after a student has practiced a skill or become familiar with content. Examples of formative assessments include but are not limited to exit tickets, problem solving, oral check for understanding, warm-ups, stages in a large project, quizzes, etc. There are no retakes for formative work.
- Assessments will be graded based on teacher/district/state and IB rubrics.
- For group projects, students will receive both a grade for individual work and a group grade.
- Grades are based on achievement of Content Standards and IB Grade Level Expectations.



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Class Expectations

Weekly class schedules, which include assignments, class discussion topics, IB syllabus references, book references, and work that is due, are posted in the classroom and available on the teacher's website. Please reference these regularly. In most cases, the current powerpoints and practice sheets are available on the website as well.

IB Chemistry Internal Assessment (labs): The internal assessment (IA) for this class, must be ENTIRELY original work for each student. Students may occasionally, with permission, work together ONLY for data generation, and all other work must be both individual effort and original work, citing whatever reference sources are used. There is a rubric for each graded attribute in the IB Syllabus, and it is recommended that this be referenced frequently during write-ups. We will complete only a few more (~5) than the required hours, so be vigilant about making up any missed labs and writing up all completed hours.

Tests and Quizzes: There will be frequent assessments, both announced and unannounced, to check student understanding of the class-work and reading assignments, and to gauge review progress. Due to the cumulative nature of this class, most or all quizzes and tests will include material from previous units. In order to provide growing ease with IB format questions, most test and quiz questions are taken from previous IB exams and are graded using the IB markschemes.

Practice work: *Please plan on 30-40 minutes of individual practice time 4-5 days per week*, either on current work or in review. Most practice work should be attempted the first day it is assigned, and then, if necessary, you have an opportunity to ask questions and get help before the work is due on the second day. In general, this work will need to be done primarily on your own time, not in class. Due dates are shown on the weekly schedules, and specifically discussed as each assignment is given out.

Absences: If material was assigned before an absence and due during the absence, it is due the day you return. If you know about an absence in advance, please work ahead to minimize the effect of the absence. If you are in the building for any portion of the school day, but will miss our class (meetings, appointments, athletics, etc.) please arrange a time to take any scheduled tests or quizzes during your time in the building. It is YOUR responsibility to stay current when missing class.

Makeup work can be picked up from the files at the back of the classroom at any time during the day. Missed notes should be gotten from classmates. You can determine what was done in class from the weekly schedules.

Lab work is especially difficult to make up and **must** be made up within 2 days of the original date, before school or during open class periods (if the teacher in the room allows). Some labs cannot be made up later due to chemical deterioration or safety considerations.

Plagiarism is unacceptable. Papers will be examined for copying, and will be run through detection programs. If copying is detected, the paper will receive a failing grade that cannot be made up, and the paper will be turned over to the administration for further action. Plagiarism includes copying from any source without giving credit, including fellow students. This primarily involves labs, tests and quizzes. NOTE - I understand that students often work together on practice work - and actually encourage this - but put the material in your own words and do your own problem setup. If you find useful information anywhere besides our text, give the reference.

Cheating: During tests and quizzes, there is NO talking or personal electronics use for any reason. Talking with others may result in both students' papers being taken away and receiving a failing grade. Talk only to me during tests and quizzes if you have questions or needs - don't risk misunderstandings!

Safety: Safety rules for lab days will be discussed at length separately. There is a required safety contract, to be reviewed and signed by parents and students, which must be returned before students can participate in lab work. In addition, there is a safety quiz which students must pass at 90% before doing labs. There will be frequent demonstrations of techniques, and checks for use of proper techniques, as new or unfamiliar techniques are introduced.



Questions about Classwork: Check with me during open periods or before school if you have any questions or need help. I am always ready to talk chemistry – but I do not read minds or know what help you need unless you come in for individual help. Many other sources of help, including other texts and other teachers, podcasts, and online resources are also available. Please come in while the confusion or problem is small and quickly overcome!

Student Expectations

Take Responsibility

- Students are **prompt** (on time) for their classes and appointments
It is expected that students will be in their seats and ready to work when the bell rings. Students may be assigned lunch detentions after 3 tardies. Being tardy to labs (or arriving unprepared) may mean having to make the lab up another day, along with a partial loss of points.
- Students arrive **prepared** for class.
Bring the necessary materials to class every day. This includes a pen or pencil, paper, notebook with current unit, calculator, and IB syllabus/data book. On lab days, bring your lab book, a black pen, and dress properly.
Phones, music players, cameras, etc. must be out of sight in your backpacks at all times. If they are out for ANY reason, they may be confiscated and then picked up from the attendance office at the end of the day. If this happens repeatedly, they will only be returned to parents
- Students are **safety conscious** in the classroom at all times.
There is NO eating or drinking in the classroom except for screw-top water bottles. This is a safety issue – this room is used by multiple classes, and the tables may have chemicals on them. For the same reason, makeup, lotion, etc. are also to be kept in your backpack.

Honor Each Other

- Students are **polite** to each other and to adults
We will speak positively and respectfully to and about each other and support each other during class and group activities.

Strive for Success

- Students **produce** work that demonstrates their skills and abilities
Make a good attempt on all formative work, ask questions when you need to, pre-read materials before coming to class, get additional help when needed.
- Students actively **participate** in classroom activities
During labs and class discussions, students will support their lab partners and classmates by being attentive, cooperative, reliable, and positive towards the efforts.
During this class period, we are working on chemistry. If materials from other classes are out, they may be confiscated and not returned.
- Students come to class with a **positive mental attitude**
Come prepared to try, and try again. Chemistry is not easy, but it is exciting and do-able!