Lecture / Recitation Instructor Information

Lecturer: Ms. Celestina DCosta
Office: Remsen 206G

Office hours: Thursday, 3:15 pm – 4:15 pm or by appointment via email. Questions may also be asked through the ALEKS or CONNECT Message Center or via email. Responses will occur once a day in late evenings.

Email: celestina.dcosta@qc.cuny.edu

Note: Please make sure emails are written formally with salutations and alternate contact information if necessary. If using personal email for contact please include a subject line informing me that you are a student in my class. Any emails without proper format and missing subject lines will not be read or responded to.

Course Information

Lecture times: Tuesday, 1:00 pm – 2:50 pm in Remsen 105

Recitation times: Recitation A – Thursday, 1:15 – 3:05 pm in Keily Hall 220
Recitation B – Friday, 10:00 – 11:50 am in Powdermaker 206

Recitation Information: Recitations will consist of the following schedule:
- 20 minutes: Quiz of the day
- 20 – 30 minutes: Sample Problem Solving
- 30–60 minutes: Work on the computers in Alek and individual student’s question and answer.

Recitation Quizzes: These are timed quizzes administered during the first 20 minutes of your recitation class and WILL COUNT towards your participation/attendance grades for the recitation section. These will contain 5-10 short answer or MC questions ok ALEKS.

Other requirements:
1. ALEKS COURSE 360: you must purchase the ALEKS course from their website at www.aleks.com. [ALSO SEE LAST PAGE OF THIS SYLLABUS FOR ALEKS CONNECT PURCHASE INFORMATION]
2. This is accompanied with an e-textbook for an entire year of access.
3. You must also purchase the Connect Course.
4. A scientific non-graphing calculator: Graphing calculators will NOT be allowed on any in-class quiz or examination. If you do not have a non-graphing calculator for such assessments, you will be required to work the examination/quiz without a calculator.

Textbook: Your textbook is accompanied by the ALEKS 360 program. However in order to use the CONNECT component of your textbook you MUST register on this following link using the access code purchased on the ALEKS WEBSITE.

Aleks Assessments: There are assessment at the end of every objective completion of the ALEKS pie and are mandatory to move on in the homework.
Aleks Pie: You will have to finish objectives from the ALEKS pie and this will count as homework assignment. This will become part of the 15% ALEKS portion of your grade. If you miss homework you must continue doing them so that you can pull up your percentage complete for the next homework assignment. You will take a comprehensive aleks assessment at the very end of the course and this will count as your aleks pie completion and will go towards your ALEKS complete pie grade of 5% of your overall grade.

The Aleks homework system is NOT a simple homework system. You will not be assigned problems from a specific textbook. Instead, a list of important topics from each chapter has been selected. After the initial assessment, ALEKS will provide access to problems for each of these topics that meet the following criteria:
1. You have not previously demonstrated mastery of the topic, and
2. You have demonstrated mastery of the prerequisite topics for the given topic.

Thus, the assigned topics are tailored to your unique needs as a student. Topics are learned by working three problems correctly in a row without help. Periodically, your total mastery of topics will be determined by assessments. These assessments will then adjust the number of topics that must be learned, depending on the number of topics you have mastered (i.e., retained). The course consists of 272 total topics that must be mastered. It is important to note that – as all students are individuals – all students will learn topics at different rates with the rates varying from 0.5 topics/hour to 6 topics/hours with the average being between 2 – 3 topics/hours. Thus, the average student would need to spend approximately 95 – 100 hours (or 7 hours/week) working on topics. However, depending on your unique abilities, you may spend between 40 to 490 hours (or 3 to 35 hours per week) doing the online portion of this course! On the good news side of this statement, if you DO spend the time, you WILL pass the course and most likely pass with a B or higher.

Aleks Objective: For Aleks objectives, there is only mastery. Thus, if you miss a question, you will be given another question. Completion of a topic means that you have worked three problems correctly in a row. This implies that you either complete the topic (100%) or do not complete the topic (0%). Therefore, the ONLY way that you will not make 100% on the objectives is to not complete all of the topics in an objective by the due date! Please note that if a topic is not completed by the due date – but this topic is a prerequisite topic for subjects in the next objective – then you will have just added to the total number of topics that you have to complete for the next objective. This type of behavior can snowball very, very quickly!! Each objective is worth 20 points.
DO NOT WAIT UNTIL THE LAST DAY OF AN OBJECTIVE TO ATTEMPT TO COMPLETE ALL OF THE TOPICS REQUIRED! YOU WILL NOT SUCCEED AND NO EXTENSIONS WILL BE GRANTED!

To summarize, this software consists of Problems that are located within Topics. The topics are selected by the instructor and organized into Objectives. Assessments are then used to gauge your Knowledge State (i.e., the set of all topics that you have MASTERED). Your knowledge state will change as you learn new topics and forget other topics. The goal is the MASTER (i.e., retain) all topics in the course! Additional resources that will NOT be graded but have been set in the software for your use in exam preparation are homeworks (untimed) and quizzes (timed) for each chapter and each exam. Thus, if you want to review a chapter, you can work through the homework. If you want to practice working problems under time constants, you can work through a quiz. These homeworks and quizzes are set to allow you unlimited access. Thus, you may take them as many times as you chose.
Prerequisite: A grade of $C$ or better in MATH 115 or equivalent. Equivalent is a working knowledge of high school algebra including operations with exponents and scientific notation, the rearrangement of simple equations, the ability to work with simple word problems, and the manipulation and simplification of fractions. Students who feel that they are weak in these topics or (after the initial assessment in Aleks) show that they are weak in these topics will be required to work through special mathematics lessons that will be posted on Blackboard.

Corequisite: CHEM 113.1. For students who have been placed into CHEM 113.4 without CHEM 113.1, a $B+$ or better must be earned in this course for the student to be allowed to take CHEM 114.4 (General Chemistry II) with both CHEM 113.1 and 114.1 (Quantitative and Qualitative Analysis) in the same semester. With a grade of $C$ (not $C-$) or better, the student will be allowed only to take CHEM 114.4 with 113.1. Students must complete CHEM 113.4, 113.1, 114.4 and 114.1 with grades of $C$ (not $C-$) or better before they will be allowed to enroll in CHEM 251.4/251.1.

Course Description: This course is the first course in a two semester sequence required for more advanced study in chemistry, biochemistry, and biology. It is intended for students in the physical and life sciences, science education, medical sciences, and pre-engineering students. It is designed to provide a thorough knowledge of facts and theory in the fundamental areas of chemistry. As appropriate, topics are presented in terms of contemporary scientific issues such as global warming, energy production and hazardous waste. The relationship between chemistry and society is discussed.

Pedagogic Approach: Mastery (i.e., learning) not memorization! You cannot master chemistry by just reading the book (or reading a solution manual). You will only master topics in chemistry by practicing daily. You must try problems, fail to solve them and then try again! Mistakes are not the end of the world, as long as you learn from them. The end of the world is when you give up. Frustration is a good thing. Frustration indicates that you are close to mastery. Thus, review the principles and concepts that the instructor indicates are vital, and then focus all of your remaining time on solving problems. Pick the problems to work by finding the problems that make you nervous. Your emotional response will indicate the topics that you have not mastered. The more you challenge yourself by facing these problems (i.e., the problems that make you sweat), the more you will master!

Important Information: A grade of $C$ (not $C-$) or better must be achieved in this course if it is a prerequisite requirement for another course.

Lecture Attendance: It is your responsibility to attend class and to be punctual. Do not walk into class during a lecture. If you are late, then walk quietly into the room and take the first available seat in the back, DO NOT interrupt by walking all the way in the front of the room.

Recitation Attendance: Recitation attendance is mandatory. Quizzes will always occur during the first 20 minutes of class. No additional time will be given on the quizzes for students who are tardy. Missing three recitations or being excessively late in three recitations – without an excuse approved by the lecture instructor – will result in the student being administratively withdrawn from the course.

Academic dishonesty: Incidents of plagiarism, cheating or other forms of academic dishonesty will be penalized. A detailed list of examples of academic dishonesty can be found in the QC Academic Dishonesty policy statement, which is posted in Blackboard for your review. Penalties will vary and may be reported to the Dean of Students (see below). Students should be aware that the College may impose additional penalties, including requiring special course work on intellectual honesty, or temporary suspension or permanent dismissal from the college.
The types of academic dishonesty that might occur in this course are:

1. Cheating – the use or attempted use of unauthorized material, information, notes, study aids, devices or communication devices during an academic exercise. The attempted use of a graphing calculator, cell phone or computer during an in-class quiz or examination will be considered an instance of academic dishonesty. The first instance will result in the student being required to work the quiz/examination without the calculator or device and will not be report to the Dean of Students. The second instance will result in a 0 being given on the in-class assignment and will be reported. Using any other unauthorized material during an in-class assignment will result in a 0 being given on the in-class assignment and will be reported to the Dean of Students. Submitting another student’s work or copying another student’s work or allowing a student to copy your work on a bonus assignment will result in the loss of all bonus points for the entire semester for all offending parties. Such instances will not be reported to the Dean of Students, since they involve bonus points. 

2. Plagiarism – the act of presenting another person’s ideas, research or writings as your own. Many of the possible bonus problems in this course will involve writing assignments. These assignments should be in your own words! Copying another person’s words or copying from a website is not acceptable. All assignments will be checked using the Blackboard software. Significant instances of plagiarism will result in the loss of all bonus points for the entire semester. Such instances will not be reported to the Dean of Students, since they involve bonus points. Failing to acknowledge collaborators on collaborative bonuses will also result in the loss of all bonus points for the entire semester. Such instances will not be reported to the Dean of Students, since they involve bonus points.

In-class EXAMS: There will be a total of 3 exams and an ACS cumulative final. The exams are administered in two 50 minute sections with a 10 minute break. The first part of all 3 in-class exams will consist of ACS style multiple choice questions and will ALWAYS be cumulative of chapters covered up to date. The second section of the exam will be short answer work out problems pertaining to only chapters covered for that exam. During the 10 minute break you are allowed to use the bathroom, look at notes and eat. You may at no time have both sections together. You may not leave the room during any section. The ACS final is a cumulative comprehensive examination consisting of 70 questions which must be completed in 110 minutes. More details on grading of the final will be provided later on in the class. For your final schedule consult CUNYFirst. You will be informed of any other changes as soon as it is available. If you have any conflicts or cannot sit in an exam you must contact the instructor immediately. If you miss an exam THERE WILL BE NO MAKE UP EXAM given without a written excuse provided. The only acceptable excuses for missed exams are extreme circumstances of illness, death or accidents.

Last Requests: These are common questions that are asked during the last few weeks of the semester or at the end of the semester, when it is far too late!!

Will there be a curve? No. See the grading section above to see both the percentage that each type of assignment is worth as well as the grade scale for the class.

Is there anything that I can do to get additional points? No. If you are asking this during the last few weeks, you have missed all possible bonuses!

Is there anything that you can do to “help” me? No. If you have waited until the last week to be helped, then it is impossible for us to help you! However, if you ask this question during the first few weeks of class, the answer is YES, and we will do what we can to help.
Can you extend the homework due dates so that we can complete the homeworks and get the remaining available points? No. The point of the homework is to help you learn the material before the in-class exams. Homework is not BONUS, it is required for learning. See the homework section above.

Can I drop the course in the last couple of weeks? No. The drop date is earlier in the semester and is clearly indicated on the tentative schedule of topics. The course grades will be up to date at least three days before this date, so that you KNOW where you stand in the class. Thus, it is your responsibility to make an educated (not wishful) choice BEFORE the official drop date. Under extreme circumstances, you may be allowed to withdraw late from a course. This is an evaluated withdrawal (WP or WF) and must be requested from the Undergraduate Scholastic Standards Committee, not from the Instructor (although the Instructor will have to sign documents).

Is there anyway I can pass this course? Usually, if you are asking this question in the last weeks of class, the answer is No. However, since the grade scale is on this syllabus and since all grades will be posted in Blackboard, you will know your grade at every stage. Moreover, since you will be given back all assignments, you will be able to calculate this possibility on your own. I would much rather you drop this course than fail this course. Thus, please do not indulge in magical thinking. If you are not doing the homework and are failing the exams, you will not pass the course!

Is there anyway you can just change my grade? No. Our responsibility is to setup conditions that make it conducive for you to master chemistry. Grades result from these conditions. However, when we keep grades, we are book-keepers. In other words, we do not “give” grades. Instead, your work in the course “earns” a grade based on the rules laid out in this syllabus. You will receive the grade that you earned.

Is there anybody else who can change my grade? If you feel that you have been treated unfairly in any course, you may protest your grade. (Please note that unfairly here implies that you were graded differently from all others in the class or were not given the same opportunities as all others in your class. Unfair does not mean that you deem that an examination is too hard, since all students are given the same exam.) The first stage in this process is to talk to your instructor (i.e., the lecture instructor) about your grade. This should be a discussion of where you think you were graded differently from others in the class or where you were not given the same opportunities as others in your class. After this, if you are still not satisfied with the results, the Instructor will write a signed, official letter stating the facts of your appeal and (in their opinion) how it relates to the overall class. This letter will include your grades and some information about the class grades. You would then take this letter to the Department Chair for a discussion. If you are still not satisfied after this discussion, the Department Chair will write an official, signed letter stating the facts of your appeal. At which point, you go to the Dean with both letters. If you are still not satisfied after speaking with the Dean – you will get a third official letter at this stage – you can then appeal the grade to the Undergraduate Scholastic Standards Committee. Once the USSC has made a ruling, no additional appeal can be performed. Once you have a letter from your instructor, you may not go back and talk to the instructor about changing the grade, since their duty in the appeal process is complete and whether or not your grade is adjusted is no longer in the instructor’s hands.

These questions are placed here in this syllabus to reiterate that learning is a continuous, semester-long process. The lecture instructor, recitation instructor and the science tutors are available all semester long. The bonuses described above are also available all semester long. Thus, do not think that something magical will happen to change your grade! Instead, work and utilize the resources available to you.
ASSIGNMENTS/GRADING

Grading:

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<thead>
<tr>
<th></th>
<th>POINTS</th>
<th>PERCENT</th>
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</thead>
<tbody>
<tr>
<td>ALEKS</td>
<td>200</td>
<td>20%</td>
</tr>
<tr>
<td>PIE COMPLETION (ASSESSMENTS)</td>
<td>50</td>
<td>5%</td>
</tr>
<tr>
<td>CONNECT</td>
<td>150</td>
<td>15%</td>
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<tr>
<td>READING ASSIGNMENT</td>
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<td></td>
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<tr>
<td>QUIZZES</td>
<td>100</td>
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<tr>
<td>RECITATION (best of 5/9 quizzes)</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>EXAMS</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>EXAM 1</td>
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<td>10%</td>
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<td>EXAM 2</td>
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<tr>
<td>EXAM 2</td>
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</tr>
<tr>
<td>ACS FINAL</td>
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<tr>
<td>TOTAL</td>
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</tr>
<tr>
<td>POSSIBLE BONUS</td>
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<td>10%</td>
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</tbody>
</table>

Scale:

For all courses using letter grades, the undergraduate and graduate grade equivalencies follow. An instructor may also assign a WU where appropriate or an INC only upon student request. All other grades are administrative. Additional details on grades can be found in the Undergraduate and Graduate Bulletins.

WU (Unofficial Withdrawal) – This is assigned by the instructor to indicate that the student stopped attending the course before the end of the semester; or as a result of excessive absences there is no basis to give a final letter grade of A+ to F, and the conditions for a grade of INC do not apply.

INC (Incomplete) – This is a temporary grade that may be assigned by the instructor when a student has requested it and meet two conditions: 1) Some of the course requirements have not been satisfied for good and sufficient reason as determined by the instructor, and 2) there is a reasonable expectation that a student can pass the course by submitting the outstanding work by the deadline. For undergraduates, a grade not resolved by the end of the next regular semester will be converted to a grade of FIN. For graduates, the grade must be resolved by the end of the next two regular semesters, or else the grade remains on the transcript without penalty.

Undergraduate Grade Equivalencies (the grade of D is the lowest passing grade in undergraduate division courses)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>A+</td>
<td>97-100</td>
</tr>
<tr>
<td>A</td>
<td>93-96</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>D</td>
<td>60-66</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
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</table>
## Tentative Lecture Schedule

All chapters below are from Silberberg and Amateis, CHEMISTRY The Molecular Nature of Matter and Change, 7e.

<table>
<thead>
<tr>
<th>Week</th>
<th>Tuesday</th>
<th>Topics</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug-30</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>2</td>
<td>Sep-6</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>3</td>
<td>Sep-13</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>4</td>
<td>Sep-20</td>
<td>TEST 1 (Chapter 1&amp;2, Nomenclature)</td>
</tr>
<tr>
<td>5</td>
<td>Sep-27</td>
<td>Chapter 4, 5</td>
</tr>
<tr>
<td>7</td>
<td>Oct-18</td>
<td>Chapter 5,6</td>
</tr>
<tr>
<td>8</td>
<td>Oct-25</td>
<td>Chapter 7,8</td>
</tr>
<tr>
<td>9</td>
<td>Nov-1</td>
<td>TEST 2 (Chapter 3-6)</td>
</tr>
<tr>
<td>10</td>
<td>Nov-8</td>
<td>Chapter 9, 10</td>
</tr>
<tr>
<td>11</td>
<td>Nov-15</td>
<td>Chapter 10, 11</td>
</tr>
<tr>
<td>12</td>
<td>Nov-22</td>
<td>Test 3 (Chapter 7-9)</td>
</tr>
<tr>
<td>13</td>
<td>Nov-29</td>
<td>ACS exam review</td>
</tr>
<tr>
<td>14</td>
<td>Dec-6</td>
<td>ACS exam review (Quiz 8 Chapter10)</td>
</tr>
<tr>
<td>15</td>
<td>Dec-20</td>
<td>ACS Final Exam (comprehensive)</td>
</tr>
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### Quiz Schedule for Recitation:

| Recitation Quiz Schedule | 
|---|---|
| Thursday 1:15pm KY 220 | Topics | Friday 10:00 am PH 206 |
| Sep-1 | Quiz 1 | Chapter 1, Nomenclature | Sep-2 | Quiz 1 |
| Sep-8 | Quiz 2 | Chapter 1,2 | Sep-9 | Quiz 2 |
| Sep-29 | Quiz 3 | Chapter 3,4 | Sep-30 | Quiz 3 |
| Oct-27 | Quiz 4 | Chapter 5,6 | Oct-28 | Quiz 4 |
| Nov-3 | Quiz 5 | Chapter 7 | Nov-4 | Quiz 5 |
| Nov-10 | Quiz 6 | Chapter 8 | Nov-11 | Quiz 6 |
| Dec-1 | Quiz 7 | Chapter 9 | Dec-2 | Quiz 7 |
| Dec-8 | Quiz 9 | ACS Review | Dec-9 | Quiz 9 |

### Possible Bonus Points

<table>
<thead>
<tr>
<th>ALEKS</th>
<th>&gt;90=5pts ; 80-90 =2pts (possible 50 Points)</th>
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</thead>
<tbody>
<tr>
<td>CONNECT</td>
<td>&gt;90=2pts ; 80-90 =1 pts (possible 20 points)</td>
</tr>
<tr>
<td>TXT Problems or Miscellaneous</td>
<td>2 sets = 28pts</td>
</tr>
</tbody>
</table>
For this course you will be required to purchase McGraw-Hill Education Connect® access and ALEKS Access for Chemistry: The Molecular Nature of Matter and Change 7th edition by Martin Silberberg and Patricia Amateis. You are not required to have a print text and please be aware if you purchase a used textbook you will still need to purchase Connect access (which includes access to the eBook).

Connect and ALEKS Access Cards can be purchased together at a discounted rate on two URL’s:

One-Semester Access to ALEKS and Connect ($75.00): http://shop.mheducation.com/mhshop/productDetails?isbn=1259847446

Two- Semester Access to ALEKS and Connect ($125.00):

If you would like a print version of the text to accompany the eBook in Connect you can purchase a loose leaf text for $40.00 by visiting: http://shop.mheducation.com/mhshop/productDetails?isbn=1260024040

**Please note, a print-upgrade option is available via Connect and via ALEKS, but priced at $60.00

To get started, go to the Connect Section URL http://connect.mheducation.com/class/c-dcotta-thurs_fri-chem-1134 and click Register Now. Next you will need to enter your email address and click Submit. Enter your Connect Registration Code (provided on access card shipped to you, after purchasing from one of above sites), enter the code and click Submit. If you haven’t received your Registration Cards yet, you can use the complimentary access for two weeks, but be sure to purchase access as above immediately, as it will take 7-10 business days to ship. Complete the remaining steps to finish registering for Connect. Do NOT Purchase Access from Connect by clicking the ‘Buy Now’ option, you will not have access to ALEKS and will pay double.

Next, visit www.ALEKS.com and log in (if you’ve used ALEKS before) or click the ‘New Student? Sign Up Now’ Button in yellow. Then enter course code: PVPTL-XH6CF and click ‘Continue’. Check that the section is correct, if so, click ‘Continue’ again. Choose ‘I have never used ALEKS before or I do not have an ALEKS login name’ and ‘Continue’. Enter your ALEKS Registration Code (provided on access card shipped to you, after purchasing from one of above sites), enter the code and click ‘Continue’. If you If you haven’t received your Registration Cards yet, you can use the Financial Aid Access Code, provided to you from your instructor, but be sure to purchase access as above immediately, as it will take 7-10 business days to ship. Complete the remaining steps to finish registering for ALEKS.

FINANCIAL AID ACCESS CODE

FAAC: 7FAC5-208B4-7E3AC-E66AE