**Chemistry 102 Course Syllabus**

**Catalog Course Description:**

A one-semester course covering the basic principles of general, organic and biochemistry as needed to understand the biochemistry, physiology and pharmacology of the human body. This course is intended for students planning to transfer to a California State University nursing program. Students with a grade of “C” or higher in Chemistry 115 and 116 are not eligible for this class.

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| **Instructor**: Martin Larter, M.S. | **Section:** 6415 and 6430 |
| **Office Number**: 30-220 | **Phone Number**: 644-7346 |
| **Email:** [Martin.Larter@gcccd.edu](mailto:Martin.Larter@gcccd.edu) | **Website**:  Mastering Chemistry: [www.masteringchemistry.com](http://www.masteringchemistry.com)  Blackboard: [https://gcccd.blackboard.com](https://gcccd.blackboard.com/)  Instructor Web Page: <http://www.grossmont.edu/people/martin-larter/> |
| **Class Time Lecture/** **Lecture Room**:  Tues, Thurs 2:00 PM – 3:15 PM, Bldg. 36, Room 325  Fri , 1:00 PM – 1:50 PM, Bldg. 36, Room 325 | **Class Time lab/** **Lecture Room:**  Mon 2:00 PM - 5:00 PM, Bldg.30, Room 222 (6430)  Wed 2:00 PM – 4:50 PM, Bldg. 30, Room 222 (6415) |
| **Lecture: Text / materials**   1. General, Organic, and Biological Chemistry, 3rd Edition*;* Frost and Deal 2. scientific calculator 3. **Recommended materials:** molecular model kit | **Lab:**   1. Chem. 102 *Laboratory Manual;* Olmstead 2. safety goggles; one box vinyl gloves (for lab) |
| Prerequisite: Grade of "Pass" in Math 090 or equivalent. | |
| **Office Hours:**  Mon-Thurs 1:00 pm – 2:00 pm  Friday : 12:00 pm - 1:00 pm  Other office hours may be scheduled by appointment. | |

**ipods, mp3 players, cell phones…or the like will not be allowed during lecture or lab! Turn these items off and put them away before class begins.**

**Important Information:**

* Students who do not attend the first class meeting (lecture or lab) will be dropped from the roster. Students cannot “save” a seat by having another person attend in their absence. During the first two weeks of the semester, the instructor will drop students who miss two or more classes (lecture or lab).This policy will allow students on the wait list to enroll. Students will not be reinstated under these circumstances unless there are still seats available after the wait list has been exhausted.

1. Regular attendance is expected and necessary to receive a passing grade. Coming to class late or leaving without the instructor’s permission will be considered an absence. A student, who, has been absent due to illness or medical treatment should inform the instructor as to the cause of the absence prior to the absence or within one day after. You may be asked to provide written information regarding your absence. The instructor may drop any student who misses over (4) classes. **(BUT this is not a guarantee!)** If you wish to drop, you should turn in the forms and get a receipt.
2. Those enrolled at the end of the semester must receive a letter grade unless they have chosen the CR/NC option. An “incomplete” may be arranged for completion of a particular item such as the final exam, but will not be given to allow a repeat of the course. Withdrawal or P/NP grading is available through Admissions and records.
3. The use of videotape or other recording devices is only permitted with the express written consent of the instructor.
4. Registration should be completed before checking into lab. If registered late, bring your validated receipt to lab. You will be charged for all breakage or loss of laboratory equipment, in addition you will be assessed a $10 minimum fee if you fail to check out of the laboratory before the end of the semester. To make an appointment to check out call the Stockroom at 619-644-7339.

**General Policies:**

* There will be **no make-up for any quiz or assignment** given during lecture or lab classes.
* There will be **no make-up lab experiments** except for severe extenuating circumstances.
* **Due dates** for all assignments and lab reports will be announced during lecture and lab times. **No credit** will be given for any work turned in past the due date. Students must assume responsibility regarding due dates; if a student is not sure of deadlines, verify dates with the instructor.
* **Students are encouraged to attend all lectures and labs**. The responsibility for obtaining lecture notes, assignments and due dates rest entirely with the student, regardless of attendance habits.
* Extending holidays and breaks do not constitute a valid excuse for missing any work. Consult the semester calendar during the first week of class, before you purchase plane tickets, and scheduled your travel plans accordingly.
* **Students must always show their work** for all calculations in order to receive credit.
* Please be aware of the **academic integrity policy.** In particular, all work (exams, quizzes and assignments) are to be entirely your own. Also, information may not be programmed into a calculator for use on any exams or quizzes. Plagiarism is strictly forbidden. No cell phones as calculators!
* Students are **not allowed to leave the classroom** after a quiz or exam has begun.
* **Students are required to dress appropriately for lab sessions**- no open-toed shoes, backless shirts or tank tops or mini shorts. Comfortable cotton clothes are best. Many synthetic materials may dissolve in the presence of organic vapors or chemical spills. Understand that you need to protect your skin during lab experiments! **Eye protection** is never a negotiable issue- protect your eyes at all times in the lab. **Protective gloves are required** when handling hazardous materials; buy a box of vinyl gloves and keep them in your lab drawer.

**Grading Policy**

The following grading scale will be used:

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| A+ (98-100%) | A (91-97%) | A- (89-90%) |
| B+ (88%) | B (81-87%) | B - (78 – 80%) |
| C+ (78%) | C (68-77%) | D (55-67%) |

Your final grade for the course is based on a combination of lecture and lab performance. Seventy-five percent

(75%) of your grade comes from the lecture and twenty-five percent (25%) comes from the laboratory portion of the course.

The *approximate* break-down of percentage points is as follows:

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| exams (4 exams) 40% |
| Quizzes 10% |
| Final exam 15% |
| homework 10% |
| Lab expt. 25% |

* Students must pass the lab portion (minimum of 55%) of the course independently of the lecture portion;

i.e., you **cannot pass the course if you fail lab**, regardless of your lecture scores.

* Students must complete **all labs to receive an A** for the course regardless of lecture scores.
* **In order to receive full credit for daily learning activities, students must bring their calculator and textbook to each class (lecture and lab) and must bring their lab manual to each lab session.**

**Exams and Quizzes:**

There are four exams and one cumulative final exam that will be given as stated on the schedule. They will cover materials covered in lecture and lab. *Make-up exams will only be given with an acceptable and verifiable excuse within* ***one week*** *of the scheduled exam.* It is the student’s responsibility to arrange a make-up exam within one week of the original test date. Please notify the instructor before the missed exam or within two school days preferably via email, so that accommodations can be made**.** No make-up final will be given, please set your schedule accordingly.

Quizzes will be given once a week, except during an exam week. Quizzes will generally cover material discussed during the previous week; however they may also cover topics from reading for the day’s laboratory experiment and concepts from previous weeks.

**Homework**

Will consist of online homework (Mastering Chemistry) and class worksheets

Computer homework – These are computer graded homework’s that are available via the internet. To register for the on-line computer assignments go to [www.masteringchemistry.com](http://www.masteringchemistry.com) and register using the code you received at the bookstore. You may also purchase a code online. The course ID will be given in class. Once you have registered for the class and placed the correct course ID you will see the homework assignments and their due dates. The homework assignments correlate to the problems in the book and they are also listed on the schedule. The numbers may change from the book on the calculated questions.

**Laboratory Experiments:**

POGIL activities/homework: The term POGIL stands for “The Process Oriented Guided Inquiry Learning Approach”. Your homework will consist of doing worksheets that follows the POGIL method. These sheets will be assigned in the first lab and usually do the following week in lab.

Before coming to lab you are expected to read the experiment. Complete the pre-lab assignment before coming to the lab period. The pre-lab will be collected and checked for completeness at the start of each new lab. If they are not complete you will be asked to leave lab until such time as they have been completed.

You are expected to attend **your regularly scheduled laboratory course**. You are to work independently in lab unless otherwise noted by your instructor. The skills and knowledge gained in the laboratory part of this course are essential. Lab reports are due one week after they are completed. Lab reports must include:

1. Data recorded in permanent blue or black ink **DIRECTLY ON THE LABORATORY DATA SHEETS**.
2. Instructor initialed completed data before you leave class.
3. Calculations and calculation set-up, and all problems and questions given at the end of the report sheets.
4. All of the problems and questions in the lab and at the end of the report sheet are to be completed when the report is turned in.

Please plan to attend the entire laboratory period. Eating is never allowed in the laboratory, this includes chewing gum. If you drop the course or are dropped by the instructor you are still expected to check out of your laboratory locker.

**Academic Integrity Policy**

Cheating and plagiarism (using as one's own ideas writings, materials, or images of someone else without acknowledgement or permission) can result in any one of a variety of sanctions. Such penalties may range from an adjusted grade on the particular exam, paper, project, or assignment (all of which may lead to a failing grade in the course) to, under certain conditions, suspension or expulsion from a class, program or the college. For further clarification and information on these issues, please consult with your instructor or contact the office of the Associate Dean of Student Affairs.

* **This instructor automatically assigns a grade of zero for any assignment, test, quiz or lab report in which the student is found to violate the academic integrity policy.**
* **No cell phone use allowed during any class period- this will be considered as a violation of the academic integrity policy and result in a zero for that day’s activity. Do not use cell phones for calculators.**
* **No photographs during class with smart phones or cameras unless you receive verbal permission from the instructor. Please honor the privacy of others with this policy.**

**Classroom Behavior and Student Code of Conduct:**

Students are expected to respect and obey standards of student conduct while in class and on campus. The Student Code of Conduct, disciplinary procedures, and student due process can be found in the college catalog and at the office of the Dean of Student Affairs. Charges of misconduct and disciplinary sanctions may be imposed upon students who violate these standards of conduct or provisions of college regulations. The following are expectations of your behavior in the class:

1. Please treat other students and the instructor with respect. This included, but is not limited to the use to appropriate language, being on time to class, not being disruptive during lecture or lab, keeping the classrooms clean and organized, and turning cell phones and pagers off during class. If you have to be “on call” please notify the instructor.
2. Recognize everyone’s opportunity to contribute information.

**Accommodations for Students with Disabilities:**

Students with disabilities who may need accommodations in this class are encouraged to notify the instructor and contact Disabled Student Services & Programs (DSP&S) **early in the semester** so that reasonable accommodations may be implemented as soon as possible. Students may contact DSP&S in person in room 60-120 or by phone at (619) 644-7112 (voice) or (619) 644-7119 (TTY for deaf).

**Additional Chemistry Assistance:**

* + Chemistry instructors and/or tutors are available to all students during “open” help times in the chemistry computer room (30-252). The schedule is posted on the door.
  + The Tutoring Center (Room 70-229, 644-7387) offers by appointment tutoring up to two hours per week per subject up to five hours per week.

**Student Learning Outcomes for Chem. 102**

1. Demonstrate a working knowledge of the language of organic chemistry and biological chemistry
2. Employ concepts of organic functional groups to predict both chemical and physical properties of organic molecules
3. Apply the concept of structure and function to predict the properties and behavior of biomolecules
4. Employ laboratory techniques to collect, analyze and evaluate experimental data

**I RESERVE THE RIGHT TO MAKE CHANGES TO THIS SYLLABUS AS THE CLASS OR I SEE FIT.**

**Chemistry 102 Tentative Schedule- Spring 2017**

**(I reserve the right to make changes.)**

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| Week Of | Lecture Chapter/Topic | Lab |
| 1-30-17 | Chap. 1 | Monday: Check-in to Lab Drawers, POGIL Activities 1-4 |
| Wednesday: Check-in to Lab Drawers, POGIL Activities 1-4 |
| 2-6-17 | Chap. 2 | Monday: Quiz 1, Exp. # 1: Eggsperience with Lab Measurements |
| Wednesday: Quiz 1, Exp. # 1: Eggsperience with Lab Measurements |
| 2-13-17 | Chap. 3  **February 17 Holiday** | Monday: Quiz 2, Exp. # 3: Double Displacement Reactions |
| Wednesday: Quiz 2, Exp. # 3: Double Displacement Reactions |
| 2-20-17 | Chap. 3 Reactions | Monday: **February 20 Holiday** |
| Wednesday: Exp. # 4: Organic Structure and Modeling |
| 2-27-17 | Chap. 4  EXAM 1 Chap. 1-3 | Monday: Exp. # 4: Organic Structure and Modeling |
| Wednesday: Exp. # 4: Measuring Food Energy by Calorimetry |
| 3-6-17 | Chap. 4 and 5 | Monday: Quiz 3, Exp. # 8: Measuring Food Energy by Calorimetry |
| Wednesday: Quiz 3,Exp. # 8: Carbohydrates and Qual Org Analysis |
| 3-13-17 | Chap. 5 and 6 | Monday: Quiz 4, Exp. # 5: Carbohydrates and Qual Org Analysis |
| Wednesday: Quiz 4, Exp. # 5: Catch up, Exam 2 Review |
| 3-20-17 | Chap. 6  Exam 2 Chap. 4-6 | Monday: Exp. # 5: Catch up, , Exam 2 Review |
| Wednesday: Exp. # 2 Single Displacement |
| 3-27-17 | **Spring Recess** | |
| 4-3-17 | Chap. 7 | Monday: Quiz 5, Exp. # 2 Single Displacement Reactions |
| Wednesday: Quiz 5, Exp. # 6: Why Does Lipstick Stick to Lips? |
| 4-10-17 | Chap. 8 | Monday: Exp. # 6: Quiz 6, Why Does Lipstick Stick to Lips? |
| Wednesday: Quiz 6, Exp. # 7: Osmosis |
| 4-17-17 | Chap. 9 | Monday: Quiz 7, Exp. # 7: Osmosis |
| Wednesday: Quiz 7, Catch Up, Exam 3 Review |
| 4-24-17 | Chap. 10  EXAM 3 Chap. 7-9 | Monday: Catch Up, Exam 3 Review |
| Wednesday: Exp. # 9: Enzyme Activity |
| 5-1-17 | Chap. 10 | Monday: Quiz 8, Enzyme Activity |
| Wednesday: Quiz 8, Exp. # 10: Nucleic Acids |
| 5-8-17 | Chap. 11 | Monday: Quiz 9, Exp. # 10: Nucleic Acids |
| Wednesday: Quiz 9, Exp. # 11: Digestion |
| 5-15-17 | Chap. 11 and 12 | Monday: Quiz 10, Exp. # 11: Digestion |
| Wednesday: Catch Up |
| 5-22-17 | Chap. 12  Exam 4 Chap. 10-12 | Monday: Clean-up and check-out, Exam 4 Review |
| Wednesday: Clean-up and check-out, Exam 4 Review |
| 6-1-17 | Cumulative Final Exam (1:45 pm – 3:45 pm) | |