

CHE 129: General Chemistry IA

Instructors:

- Professor Mayr conducts the Monday/Friday lectures, prepares exams, and oversees the course.
- Dr. Troy Wolfskill coordinates the weekly Workshop/Recitation sessions, examinations, and grading.
- Dr. Brad Tooker coordinates the help sessions in the Chemistry Learning Center.
- Talented undergraduate and graduate teaching assistants facilitate the Workshops and staff the Chemistry Learning Center.

Office Hours: See Blackboard/CHE 129/Staff Information for current office hours for all instructional staff.

Email: che129@stonybrook.edu. Please **do not use personal email addresses** for questions related to this course.

COURSE DESCRIPTION: This is the initial course of the four-semester General-Chemistry/Organic-Chemistry sequence CHE 129/132/321/322. This sequence provides the necessary foundation for students who wish to pursue further coursework in chemistry. The General Chemistry Courses provide a broad introduction to the fundamental principles of chemistry, including substantial illustrative material drawn from the chemistry of inorganic, organic, and biochemical systems. The emphasis is on basic concepts, problem-solving, and factual material. Students will be placed into CHE 129 based on their performance in the Online Chemistry Placement and Preparation (OCP) process. Specifically, CHE 129 is for students with chemistry knowledge above the required OCP minimum but who do not meet the math corequisite of CHE 131. The level and content of CHE 129 match that of CHE 131, but since the corequisite differs, students must also attend a CHE 130 session each week. CHE 130 builds essential skills in information processing, critical and analytical thinking, quantitative reasoning, and problem solving. The CHE 129 four-semester sequence is inappropriate for students who satisfy the corequisites of CHE 131. It is also inappropriate for students who have completed an AP course in chemistry and received a score of 4 or 5; such students must enroll in CHE 152. Three lecture hours, one 80-minute workshop, and one CHE 130 session per week. CHE 129 may not be taken for credit in addition to CHE 131 or CHE 152. This course has been designated as a High Demand/Controlled Access (HD/CA) course. Students registering for HD/CA courses for the first time will have priority to do so. This course has an associated fee. Please see www.stonybrook.edu/coursefees for more information.

Prerequisite: Online Chemistry Placement and Preparation (OCP) Process

Mandatory Co-requisites: CHE 130; MAT 123

COURSE OBJECTIVES: Expand students' knowledge in the field of chemistry, foster critical and analytical thinking, quantitative reasoning, problem solving, teamwork, oral and written communication, and metacognition. Specific learning objectives for each lecture will be posted in Blackboard.

COURSE REQUIREMENTS:

Required Resources:

- **Text:** A *Connect Two-Year Access Card*, (ISBN 9781260217865), \$70, to *Silberberg, 8th ed.* (McGraw Hill, 2017) can be purchased directly from McGraw-Hill through Blackboard for these prices. Purchases through the Follett bookstore will carry additional charges. Once purchased, you can access the text on your computer or using McGraw-Hill's Connect app from Google Play or Apple. Access is for four semesters only. You may upgrade to a loose-leaf text version for \$60 within Connect. For students requiring only one semester of chemistry, a One-Semester Access Card (ISBN 9781260224412) is also available for \$40. See document "*Registration Instructions*" for more information.
- **Activity book for CHE 130:** *Solving Real Problems in Chemistry, 2nd ed.* (Pacific Crest, 2012)
- **Assessment and Learning in Knowledge Spaces (ALEKS) registration.** See document "*Registration Instructions*".
- **LUCID registration** to access workshop activities and all course grades. See document "*Registration Instructions*".
- **Turning Technologies Clicker** for responding to questions in class. For registration instructions go to <https://it.stonybrook.edu/help/kb/buying-clickers> or see the document "*Registration Instructions*".
- **Nonprogrammable Scientific Calculator** with exponents, powers, and logarithms.
- **Spare batteries** for your calculator and response pad.
- **#2 pencils and erasers** for each exam. Exams will be held as follows.

1 Each student is responsible for knowing all procedures and course expectations detailed in this document, in other handouts or announced during lectures or workshops or in Blackboard. Failure to attend a lecture or workshop is not an excuse for not knowing what was presented or announced. If you miss a lecture or workshop it is your responsibility to find out what transpired from a fellow student, or from your instructor.

- **Ring binder** to organize your work.
- **Blackboard.stonybrook.edu** is where all announcements, policies, and information will be posted. For help accessing Blackboard click Help and Support at the site.
- **Stony Brook Email Account** accessible at stonybrook.edu/mycloud. For help with Google Apps for Education see <http://it.stonybrook.edu/help/kb/logging-in-to-google-apps-for-education>.

Exam Dates ((also read <http://www.stonybrook.edu/commcms/registrar/registration/exams.php>))

Exam 1, Tuesday September 25	8:45 PM-10:15 PM
Exam 2, Wednesday October 24	8:45 PM-10:15 PM
Exam 3, Tuesday November 27	8:45 PM-10:15 PM
Final Exam, Friday December 14	8:15 AM-10:45 AM ***Note that this is EARLY MORNING***

Attendance and Make Up Policy

- You should attend the workshop sections to which you are assigned. All section changes will be handled through Solar. Instructors will not sign change of section forms. If you have difficulty attending workshop section in which you are registered, see Dr. Wolfskill during his office hours in Chemistry Room 104 or stop by his office in Chemistry Room 575.
- **There are no make ups for missed lectures, workshops, ALEKS deadlines, or midterm examinations.** All absences will be scored as a zero; the lowest scores for lecture, workshops, and quizzes are dropped at the end of the semester; exam scores are not dropped. If a written excuse with appropriate documentation is presented within one week of your return to class, and, for workshops, if you provide evidence of having completed the missed work, you may be excused and the final score prorated. Documents should be submitted as follows.

Exams and ALEKS: Prof. Mayr or Dr. Wolfskill Workshops: your workshop instructor

Lecture absences are not excused except in extreme circumstances as several grades are dropped at the end of the semester.

- All students must take the final exam. Unexcused absence will result in a score of 0. A student who is unable to take the final exam because of illness or other extenuating circumstances must contact an instructor before or within 24 hours following the exam. Only then will a grade of incomplete (I) be assigned. The make-up final will be given Wednesday January 30, 2019 from 1:00 – 3:30 PM and appropriate documentation is required at that time. Failure to take the final or make-up exam will result in a course grade of F.

Description and schedule of lectures and assignments.

Reading Assignments: Reading assignments in the online textbook will be accompanied by short quizzes that will be due by noon before the associated lecture. The first two assignments are due Friday August 31st at noon, one for the Monday lecture and a second for the Friday lecture. Your ability to understand the material in the lecture is greatly enhanced if you have already looked at it in the text, even if it was not fully clear to you after your reading.

MF Class Lectures: Javits Lecture Center Room 100, Monday and Friday 1:00–2:20 PM. Lecture notes will be posted on Blackboard before each class. You will need to bring to each class pens or pencils, a calculator, and a clicker for responding to in-class questions. These lectures include interactive learning sessions designed to help you understand key concepts and apply them in exercises and problems. You will work on these activities in the class and report your answers with your clicker. You will benefit most from these sessions if you prepare by completing the reading assignment before the lecture.

Workshop (Recitation) Sessions (Monday or Tuesday): You will need to bring to each workshop pens or pencils, a calculator, and a ring binder containing your work for the class. Each team will also need a Team Report form (available in Blackboard). Individuals or teams who fail to bring these may have points deducted from their workshop grade. The chemistry workshops are intended to help you maximize your performance in introductory chemistry courses. During workshops you will work with a team of students on activities designed to increase your understanding of course topics, your ability to apply these in simple contexts, and your ability to solve problems. If you follow the guidelines, this approach will help everyone in your team learn as much as possible during workshops. If you find chemistry challenging, your teammates and the instructor will help you gain the insights you need to understand concepts and solve problems. If you find chemistry easy, you will find your performance improving as you explain things to others. Team roles are used to distribute the responsibilities.

ALEKS: Regular online homework assignments will be made using the ALEKS system. Solutions to these problems should be kept in your three-ring binder. There will usually be one ALEKS assignment **due each week Friday at 1:00 AM** covering material from the previous week's readings, lectures and workshop. The first will be due Friday August 31st at 1:00 AM. It is not sufficient

to read solutions that are posted or shown to you and memorize the steps in a problem solution. You need to work on your own to figure out and interconnect the concepts and procedures that are relevant. You need to understand why the concepts and procedures are being used. If you complete all of the assigned problems and understand them in this way, you will be able to do new problems that appear on exams, and you should do very well in this course. Solutions that you are given should only be used to check and validate your work. If you are unable to solve problems on your own, you are not prepared for the exams, and need to work additional similar problems to develop your ability.

CHE 130 Sessions (Wednesday or Thursday): Each student is expected to attend the CHE 130 session to which she or he has been assigned. We are not able to give you credit for your work if you attend other sections. These sessions help you develop quantitative reasoning and problem-solving skills that are essential for success in this course and in CHE 132, and will benefit you throughout college and your career. Regular attendance and participation in these sessions are required. Part of your final grade in CHE 129 will depend upon this participation.

Exams

Multiple-choice exams based on materials covered in the lectures, text, workshops, and ALEKS are scheduled as indicated above. You must take each exam in the room to which you are assigned as will be posted in Blackboard. You **must** bring to each exam two or more #2 pencils with erasers, your University ID, and a nonprogrammable scientific calculator with spare batteries. This is all that is allowed on your desk. All other belongings must be placed out of sight beneath your seat or at the front of the room, and electronic devices must be powered off. Violations may result in a report to Academic Judiciary and a course grade of F.

Success on these exams will require that you understand important concepts, as well as their use in solving problems relevant to the course material. If you understand assigned problems in this way and test your understanding on problems that are not assigned, you are more likely to do well in this course. Use the practice tests to check your preparation, but do not study from them since the problems change each term.

GRADING: Course grades will be based on the percentage of points earned out of 700 with the following contributions.

200 pts, Final Exam

100 pts for each Midterm Exam (300 pts total for the Midterms)

50 pts, all reading assignments and lecture sessions

50 pts, all workshop and CHE 130 sessions

100 pts, ALEKS, including both the average weekly score and the cumulative percentage of topics mastered

The lowest reading, lecture, workshop, and ALEKS scores will be dropped at the end of the semester. Final percent grades will be rounded to one decimal place. Letter grades will be based on the percentage of points received with the following advisory cutoffs.

A: $\geq 90\%$ B: $\geq 75\%$ C: $\geq 60\%$ D: $\geq 45\%$ F: $< 45\%$

Grades will be posted in LUCID after each exam. All issues with grades must be raised promptly after posting.

CLASS PROTOCOLS:

- All cell phones must have the sound turned off during class sessions.
- Talking while the instructor is talking or texting at any time will not be tolerated. Violators may be asked to leave and forfeit any points associated with that meeting.
- Questions regarding class topics are always welcome. During workshops, questions should be directed to the instructor through the team manager. Questions that are not directly related to class topics should be directed to the instructor immediately before or after class, and instructors will do their best to be available at these times. If the instructor is not available immediately before or after class, questions can be taken to staff office hours or sent to che129@stonybrook.edu.
- *Do not bring food to any class meetings.*
- Stony Brook University expects students to: maintain standards of personal integrity that are in harmony with the educational goals of the institution; to observe national, state, and local laws and University regulations; and to respect the rights, privileges, and property of other people. Any behavior that interrupts the ability of instructors to teach, the safety of the learning environment, and/or students' ability to learn will be reported to University Community Standards. Students who display such behavior may be asked to consult with one of the course instructors or asked to leave a class session, whereupon University Police will be notified. Information on campus policy regarding student disruptions can be found at <http://www.stonybrook.edu/sb/behavior.shtml>.

COURSE RESOURCES:

Library resources: A few copies of the textbook will be placed on reserve in the Science and Engineering Library, Library N-1001, also called the North Reading Room.

Blackboard: should be checked regularly for announcements, reading and homework assignments, lecture notes, help room schedules, solutions to end-of-chapter problems, sample exams from previous semesters, and other important matters. Support for Blackboard is available through the information at blackboard.stonybrook.edu.

Getting Help:

- Help with concepts or assignments are available in the Chemistry Learning Center, Chemistry Building. Hours are posted in Blackboard under Information. Such help should not be addressed to the course email. NOTE: While you can seek help with ALEKS while in Learning Mode, you should not receive ANY help from any person, text, or other resource while in Assessment Mode. Doing so will increase the amount and difficulty of your work.
- Technical problems with Connect, clickers, or ALEKS must be addressed to their Technical Support as described in the registration instructions for each. Please report any difficulties with technical support to Dr. Wolfskill.
- Grading issues with ALEKS should be addressed by email to che129@stonybrook.edu, or to Dr. Wolfskill or Prof. Mayr during their office hours.
- Issues with the Workshops should be addressed to your Workshop Instructor. Issues that cannot be resolved by your instructor should be taken to Dr. Wolfskill during his office hours as posted on Blackboard under Staff Information.
- Questions about course content, organization, grades, exams, or personal problems should be addressed to Prof. Mayr immediately after lectures or during office hours.
- Office hours for Prof. Mayr are posted under Staff Information in Blackboard.
- Additional academic help may be available through the Academic Success & Tutoring Center (stonybrook.edu/commcms/academic_success/).

DISABILITY SUPPORT SERVICES (DSS) STATEMENT:

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, Room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to www.stonybrook.edu/ehs/fire/disabilities.

ACADEMIC INTEGRITY STATEMENT:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. The faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at www.stonybrook.edu/commcms/academic_integrity.

In this course you are strongly encouraged to work with others to master the material in the text, lecture notes, workshops, and ALEKS Objectives. However, in working with others to arrive at your response to a question, you must understand and be able to explain the rationale behind your response and not just report someone else's answer. It is intellectually dishonest to report someone else's work and understanding as your own. Therefore, violations of the following will result in a course grade of F and a report to the Academic Judiciary.

- You must submit responses to in-class questions and problems only with your own clicker. Students using more than one clicker will be considered in violation along with the student whose clicker they are using.
- You must record and submit your own answers to Connect and ALEKS questions based on your understanding not on how someone else told you to respond.
- You must work independently when asked to do so.
- You must take the examinations independently with no assistance from any other person, without the aid of any unauthorized materials, and without access to any electronic communication devices.

CRITICAL INCIDENT MANAGEMENT:

4

Each student is responsible for knowing all procedures and course expectations detailed in this document, in other handouts or announced during lectures or workshops or in Blackboard. Failure to attend a lecture or workshop is not an excuse for not knowing what was presented or announced. If you miss a lecture or workshop it is your responsibility to find out what transpired from a fellow student, or from your instructor.

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

ELECTRONIC COMMUNICATION STATEMENT:

Email and especially email sent via Blackboard (<http://blackboard.stonybrook.edu>) is one of the ways the faculty officially communicates with you for this course. It is your responsibility to make sure that you read your email in your official University email account. For most students that is Google Apps for Education (<http://www.stonybrook.edu/mycloud>), but you may verify your official Electronic Post Office (EPO) address at <http://it.stonybrook.edu/help/kb/checking-or-changing-your-mail-forwarding-address-in-the-epo>.

If you choose to forward your official University email to another off-campus account, faculty are not responsible for any undeliverable messages to your alternative personal accounts. You can set up Google Mail forwarding using these DoIT-provided instructions found at <http://it.stonybrook.edu/help/kb/setting-up-mail-forwarding-in-google-mail>.

If you need technical assistance, please contact Client Support at (631) 632-9800 or supportteam@stonybrook.edu.