

Master Course Syllabus

CHEM 1306

**Introductory Chemistry I (Lecture, Allied Health Emphasis)
(4005015103)**

*******NOTE TO STUDENT*******

Student success is our number one priority at Coastal Bend College and we realize that prompt, effective communication plays a significant role in achieving that goal. It is vitally important that you have the proper contact information for your instructor. This should include their phone number, email address, and if applicable, their office number, and office hours. If you ever have any problems contacting your instructor, or do not receive a prompt response to your inquiries, please contact the Assistant Dean of Academics or the Dean of Academics as soon as possible. Their contact information is provided below:

<p>Mark L. Secord, Dean of Academics (361) 354-2529 secordm@coastalbend.edu</p>	<p>Kayla D. Jones, Assistant Dean of Academics (361) 354-2532 kdjones@coastalbend.edu</p>
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We wish you all the best in your education and encourage you to contact us if you have any questions or concerns.

Keeping student success in sight, faculty in each of the courses will review with students, course information with specific reading schedules, assignments, and testing information during the first week of class. Additionally, the course information will be posted to Blackboard (THECB 60x30TX compliance).

Course Description: Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for allied health students and for students who are not science majors.

Semester Hours Credit: 3

Lecture/Lab Hours: 3-0

Pre-Requisite: None

Co-Requisite: CHEM 1106

Textbook(s): *Principles of General, Organic, and Biological Chemistry*, 2nd edition

ISBN: 9780073511191

Sapling Learning Online Homework - Access Card

ISBN: 9781319080242

Student Learning Outcomes:

Upon successful completion of this course, students will:

1. The student will be able to make conversions using metric and English units.
2. The student will be able to describe the fundamental particles of the atom and relate to electronic configuration to the periodic table and ionic/covalent bonding.
3. The student will be able to write formulas and names of inorganic compounds and give the products of common chemical reactions.
4. The student will be able to describe the mole and relate the use of it in stoichiometric calculations.
5. The student will be able to explain solute interactions in an aqueous solution and use molarity and percentage to describe their concentration.
6. The student will be able to explain the interactions of acids, bases and salts in aqueous solutions and explain the reactions and purpose of a buffer.
7. The student will be able to name and draw the structures of representative compounds of each class of organic compounds: hydrocarbons, alcohols, amines, ethers, aldehydes, ketones, carboxylic acids and esters and list applications for the more common members of each class.
8. The student will be able to use structure and physical and chemical properties to explain selected characteristics of organic compounds, optical isomerism, melting points, boiling points, and reactions.
9. The student will be able to name and explain the structures, characteristics and applications of selected carbohydrates within monosaccharides, disaccharides, and polysaccharides.

10. The student will be able to list several classes of lipid and explain the structural characteristics of fats and oils, as well as describe the preparation of soaps and detergents and action in the cleaning process.
11. The student will be able to explain the structures of amino acids and how they form proteins. They will be able to distinguish the function and characteristics of primary, secondary, tertiary and quaternary structures in proteins.
12. The student will be able to understand the concept and structure of DNA and RNA and how the genetic code creates proteins from the base units of RNA.

Course Outline:

Chapter 1: Matter and Measurement

Chapter 2: Atoms and the Periodic Table

Chapter 3: Ionic and Covalent Compounds

Chapter 4: Energy and Matter

Chapter 5: Chemical Reactions

Chapter 6: Gases

Chapter 7: Solutions

Chapter 8: Acids and Bases

Chapters 10, 11: Introduction to Organic Molecules; Unsaturated Hydrocarbons

Chapters 12, 13: Organic Compounds that Contain Oxygen, Halogen, or Sulfur; Carboxylic Acids, Esters, Amines, and Amides

Chapter 14: Carbohydrates

Chapter 15: Lipids

Chapter 16: Amino Acids, Proteins, and Enzymes

Chapter 17: Nucleic Acids and Protein Synthesis

Finals

Evaluation Methods: Please see individualized instructor policies for course evaluation methods. Students will be assessed on the same measure, across each discipline, as per CBC guidelines.



Technical Support:

Email Support:	helpdesk@coastalbend.edu cabrigo@coastalbend.edu ycharles@coastalbend.edu
Telephone Support:	866-722-2838 ext. 2508 (Toll Free) 361.354.2508 (Direct Line)
Live Chat:	Fall/Spring Hours: Monday-Thursday 8 a.m. to 8 p.m.; Friday 8 a.m. to 5 p.m. Summer Hours: Monday-Thursday 7 a.m. to 6 p.m.

Tutoring Services: Coastal Bend College offers free tutoring services to all CBC students who need academic assistance. Services include One-on-One, Group, and Online tutoring to all current CBC students. The Tutoring Coordinator’s office is at CBC-Beeville in the Student Success Center (SSC), Room 140 which is in the R.W. Dirks building. The SSC’s hours of operation are Monday -Thursday from 8 am – 8 pm. Tutoring services are also available at all CBC site locations and students can visit each site’s SSC. For questions regarding tutoring services, please contact the CBC Tutoring Coordinator at (361) 354-2838 extension 2578 or visit our website at: <http://coastalbend.edu/tutoring/>.

Beeville	Alice	Kingsville	Pleasanton
3800 Charco Road Beeville, TX 78102 1-866-722-2838	704 Coyote Trail Alice, TX 78332 1-866-891-2981	1814 Brahma Blvd. Kingsville, TX 78363 1-866-262-1615	1411 Bensedale Pleasanton, TX 78064 1-866-361-4222

Grady C. Hogue Learning Resource Center (Library): Located on the Beeville campus, the operation hours are Monday - Thursday 8:00 a.m. - 6:00 p.m.; Friday 8:00 a.m. - 5:00 p.m.

(Summer semesters will observe the CBC campus operation hours.) For locations and hours of CBC library in Alice, Kingsville, and Pleasanton sites please visit the library web page links below.

Grady C. Hogue Learning Resource Center (Library): <http://lrc.coastalbend.edu/about>

Online Catalog : <http://lrc.coastalbend.edu/catalog>



Library Website: <http://lrc.coastalbend.edu/about>

Hours and Locations: <http://lrc.coastalbend.edu/hours>

Pleasanton Public Library: <https://pleasanton.biblionix.com/>

115 N. Main St., Pleasanton, TX 78064

Monday – Friday 9:00 a.m. – 6:00 p.m.

Saturday 9:00 a.m. – 1:00 p.m.

Financial Aid: Resources are available for students for financial aid, work study, and veteran benefits. For additional information, visit our website at www.coastalbend.edu/financialaid or contact us at 361-354-2238. Office hours: Monday-Thursday 7-6 and Friday 8-5

ADA Statement: No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services, programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g).

See at: [GA \(Legal\)](#)

Student with Disabilities: Please notify your instructor of any modification/adaptation you may require to accommodate a disability-related need. You will need to provide documentation to the Director of Student Services so the most appropriate accommodations can be determined. Specialized services are available through the Office of Disability Services (SSB 4.104, 471-6259). For more information contact (361) 354-2300.

Scholastic Dishonesty: Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College's rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies [FLB \(Local\)](#) and [FM \(Local\)](#). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion.



Use of E-mail for Official Correspondence to students: All students should be familiar with the college's official email student notification policy. Students are expected to check their CBC email on a frequent and regular basis to stay current with college-related communications, recognizing that certain communications may be time-critical. CBC email format: last name with last four digits of social security number @study.coastalbend.edu and password is your student ID (ex. cougar1234@study.coastalbend.edu).

Copyright Law and Intellectual Property Rights Policy: Copyright is the right of an author, artist, composer or other creator of a work of authorship to control the use of his or her work by others. Protection extends to literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial and graphic works, sculpture, motion pictures and other audiovisual works, sound recordings and architectural works. Generally speaking, a copyrighted work may not be reproduced by others without the copyright owner's permission. The public display or performance of copyrighted works is similarly restricted. Generally, the unauthorized reproduction, performance or distribution of a copyrighted work is copyright infringement and may subject the infringer to civil and criminal penalties. The Fair Use Doctrine outlines exceptions to this Law and is outlined in Coastal Bend College Policy, [CT \(Legal\)](#).

Coastal Bend College, its faculty, students and employees must comply with Copyright Law. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy [CT \(Legal\)](#) and [CT \(Local\)](#).

Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

Intellectual Property: Student /Third Party Works: Rights to copyrightable or patentable works created by a student or a third party, that is, not a College District employee, shall reside with the author/ creator. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy [CT \(Legal\)](#) and [CT \(Local\)](#).

Questions regarding this information should be directed to Library Services at: library@coastalbend.edu.

NOTE: The College website (www.coastalbend.edu) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.