

Chemistry Department Course Offerings March 30, 2023

For SCC and High School Counselors

Chemical Technology Certificate Program – This is the revised program that offers three certificates (see attachment)

Program Co-coordinators: Marisa Alviar-Agnew <u>alviarm@scc.losrios.edu</u>

& Tonya Atkins atkinst@scc.losrios.edu

Website: https://scc.losrios.edu/academics/chemical-technology-program-details

Videos: 1. https://www.youtube.com/watch?v=OdvWnmt5DpM

2. https://youtu.be/ucn2ZfDv7]s

Course Number/Title, Teaching Modality &	Comments
Contact Person	Comments
CHEMT 201 (Careers in Chemical Technology), 2 units	 Primarily for students who would like to obtain Chemical Technology Certificates 1 and/or 2.
Contact Marisa Alviar-Agnew: alviarm@scc.losrios.edu	• Prerequisite(s): None
Lecture: asynchronous (Fully online)	 Recommended for students (i.e. first year or incoming freshman students) who would like to explore their academic or career paths. Recommended for high school students who are in the Dual Enrollment or Advanced Education Program who would like to explore their academic or career paths.
CHEMT 301 (Chemical Technology Supplemental Lab), 1 unit	 Primarily for students who would like to obtain Chemical Technology Certificate 1.
Contact Binh Dao: daob@scc.losrios.edu Laboratory: in-person	 Prerequisite(s): None Corequisite: CHEM 300 (Beginning Chemistry)
	 Recommended for students who took CHEM 300 labs online and would like to get more lab experience. Students show up once a week for a lab.
WEXP 498 (Internship), Variable units Contact Tonya Atkins: atkinst@scc.losrios.edu	 Primarily for students who would like to obtain Chemical Technology Certificates 1, 2 and 3.

Laboratory:in-person	• Prerequisite(s):
	 Stockroom internships with direct supervision for certificates 1 and 2. Industry internships with direct supervision for certificate 3.
CHEMT 424 (Instrumentation), 2 units	 Primarily For students who would like to obtain Chemical Technology Certificate 3.
Contact Tonya Atkins: atkinst@scc.losrios.edu	 Prerequisite(s): CHEM 410 (Quantitative Analysis) or 420 (Organic Chemistry I)
Lecture:in-person Laboratory:in-person	with a grade of "C" or better



Chemistry Department Course Offerings April 26, 2023

For SCC and High School Counselors

Department Chair : Joel Hwang hwangi@scc.losrios.edu

Website: https://scc.losrios.edu/academics/programs-and-majors/chemistry

Chemistry Courses

Course Number/Title, Teaching Modality & Contact Person	Comments
CHEM 300 (Beginning Chemistry), 5 units Contacts Laura Gillies-Doherty: gilliel@scc.losrios.edu	 This course is recommended for students to get a solid foundation in various chemistry concepts prior to taking CHEM 400 (General Chemistry). Prerequisite(s): Integrated Math 3, college algebra (e.g. MATH 100, MATH 300, MATH 333), or an equivalent or higher level math class with a "C" or higher.
CHEM 300 Lecture: in-person Laboratory: in-person	 Recommended for students who prefer inperson instruction for both lecture and lab. Recommended for students who are pursuing Chemical Technology certificate 1. Students show up for lecture twice a week and once a week for lab
CHEM 300 Lecture: synchronous – online "The lecture portion is live via Zoom during the specified days and time" Published on schedule as follows: LEC Mode: Partially Online - Day/Time: with specified day/time Room number is not provided in the class section details.	 Recommended for students who prefer inperson instruction for the lab and prefer a set weekly schedule for lecture. Recommended for students who are pursuing Chemical Technology certificate 1. Students show up once a week for a lab inperson and attend lectures online.

Laboratory: in-person	
Published on schedule as follows: LAB Mode: Partially Online Day/Time: with specified day/time Building & room number is provided in the class section details.	
CHEM 300 Lecture: asynchronous – online "The lecture portion is fully online it is not live via Zoom" Published on schedule as follows: LEC Mode: Partially Online Day/Time: Partially Sync Laboratory: in-person Published on schedule as follows: LAB Mode: Partially Online Day/Time: with specified day/time Building & room number is provided in the class section details.	 Recommended for students who prefer inperson instruction for the lab and can manage their weekly schedule for completing lecture assignments. Recommended for students who are pursuing Chemical Technology certificate 1. Students show up once a week for a lab.
CHEM 300 Lecture and Laboratory: asynchronous (fully online)	 Recommended for students who can manage their weekly schedule and work independently in completing both lecture and lab assignments. The class requires six (6) hours of "in class" time (i.e. taking notes, watching lecture videos and tutorials) and 8-9 hours of study time per week similar to in-person lecture and laboratory classes. Students are required to purchase lab kits and perform actual experiments on their own
CHEM 305 (Introduction to Chemistry), 5 units Contact Joel Hwang: hwangi@scc.losrios.edu	 This course is primarily designed for majors in the allied health fields (nursing, dental hygiene, physical therapy, etc.), natural resources, environmental technology, and physical education. Prerequisite(s): High school Integrated Math 1, OR college Beginning Algebra (e.g. MATH 100, MATH 300, MATH 333),

	OR an equivalent or higher level math class with a "C" or higher.
CHEM 305	 Recommended for students who prefer in- person instruction for both lecture and lab.
Lecture: in-person Laboratory: in-person	Students show up in person for lecture twice a week and once a week for lab
CHEM 305 Lecture: synchronous – online "The lecture portion is live via Zoom during the specified days and time)"	Online synchronous lectures meet twice a week and in-person lab meets once a week.
Published on schedule as follows: LEC Mode: Partially Online - Day/Time: with specified day/time Room number is <u>not</u> provided in the class section details.	
Laboratory: in-person	
Published on schedule as follows: LAB Mode: Partially Online Day/Time: with specified day/time Building & room number is provided in the class section details.	
CHEM 305	Students watch pre-recorded lectures online.
Lecture: asynchronous – online "The lecture portion is fully online and is <u>not</u> live via Zoom"	In-person lab meets once a week.
Published on schedule as follows: LEC Mode: Partially Online Day/Time: Partially Sync	
Laboratory: in-person	
Published on schedule as follows: LAB Mode: Partially Online Day/Time: with specified day/time Building & room number is provided in the class section details.	
CHEM 306 (Introduction to Organic and Biological Chemistry), 5 units	This course is the continuation of CHEM 305 and is primarily designed for majors in the allied health fields (nursing, dental hygiene,
Contact	physical therapy, etc.), natural resources,

Joel Hwang: hwangj@scc.losrios.edu	environmental technology, and physical education. • Prerequisite(s): CHEM 305 with a grade of "C" or better
CHEM 306 Lecture: in-person Laboratory: in-person	 Recommended for students who prefer inperson instruction for both lecture and lab. Students show up in person for lecture twice a week and once a week for lab
Lecture: synchronous – online "The lecture portion is live via Zoom during the specified days and time)" Published on schedule as follows: LEC Mode: Partially Online - Day/Time: with specified day/time Room number is not provided in the class section details. Laboratory: in-person Published on schedule as follows: LAB Mode: Partially Online Day/Time: with specified day/time Building & room number is provided in the class section details.	Online synchronous lectures meet twice a week and in-person lab meets once a week.
CHEM 309 (Integrated General, Organic, and Biological Chemistry), 5 units Contact Laura Gillies-Doherty: gilliel@scc.losrios.edu Lecture: synchronous – online "The lecture portion is live via Zoom during the specified days and time" Published on schedule as follows: LEC Mode: Partially Online - Day/Time: with specified day/time Room number is not provided in the class section details.	 This course is a one-semester intensive study of general, organic, and biological chemistry designed for nursing majors and other allied health science majors. Prerequisite(s): Integrated Math 3, college algebra (e.g. MATH 100, MATH 300, MATH 333), or an equivalent or higher level math class with a "C" or higher. Recommended for students who would prefer a chemistry course with an emphasis in applications in the health sciences that covers the fundamentals of multiple areas of chemistry (general, organic, biological) in one fast-paced semester.

Laboratory: in-person Online synchronous lectures meet twice a week and in-person lab meets once a week. Published on schedule as follows: LAB Mode: Partially Online **Day/Time:** with specified day/time Building & room number is provided in the class section details. CHEM 330 (Adventures in Chemistry), This course is designed for non-science 4 units majors and meets GE requirements for a natural science course. **Contact** Marisa Alviar-Agnew: Prerequisites: None alviarm@scc.losrios.edu Recommended for students who would like *Lecture: asynchronous – online* to learn about the fundamental concepts "The lecture portion is fully online it is <u>not</u> live and contemporary applications of via Zoom" chemistry. • Recommended for high school students who Published on schedule as follows: are in the Dual Enrollment or Advanced **LEC Mode:** Partially Online Education Program who would like to **Day/Time:** Asynchronous-no scheduled meeting explore their academic or career paths. Students show up once a week for a lab. Published on schedule as follows: **LAB Mode:** In-person **Day/Time:** with specified day/time Building & room number is provided in the class section details. Laboratory: in-person CHEM 333 (The Science of Coffee), 3 units • This course is designed for non-science majors and meets GE requirements for a Contact natural science course. It has no lab - only Bill Miller: millerw@scc.losrios.edu

Lecture: asynchronous – fully online

- lecture.
- Prerequisite(s): None
- Recommended for students who would like to learn about scientific principles while also learning about making coffee.
- Unfortunately, the equipment and supplies for this class cost approx. \$150. We are

working on a system of loaner supplies that would cut this to approx. \$50. Please have students ask the instructor about loaner materials.
 This course is designed for students majoring in biology, chemistry, pre- dentistry, pre-medicine, pre-pharmacy, and engineering.
 Prerequisite(s): CHEM 300 with a grade of "C" or better completed within one year prior to enrollment in CHEM 400 or placement through the assessment process (ACS California Chemistry Diagnostic Exam) completed within one year prior to enrollment in CHEM 400 (students having taken CHEM 310, CHEM 305, or another chemistry course must complete the assessment process within one year prior to enrollment in CHEM 400) AND Intermediate Algebra, High School Integrated Math 3, or equivalent with a "C" or better. Important: students need to be advised to complete introductory chemistry review before enrolling in the course. https://scc.losrios.edu/academics/program s-and-majors/chemistry Scroll down to: General Chemistry I (CHEM 400) Preparatory Review
 Recommended for students who prefer inperson instruction for lecture, discussion, and lab Students attend lecture twice a week,
discussion once a week and lab once a week.
 Recommended for students who prefer in- person instruction for the lab and can manage their weekly schedule for completing lecture and discussion assignments.

Students attend discussion once a week and lab once a week. Published on schedule as follows: LAB Mode*: Partially Online **Day/Time:** with specified day/time Building & room number is provided in the class section details. *Lab includes both a dry lab (discussion) as well as a wet lab. CHEM 401 (General Chemistry II), 5 units This course is a continuation of CHEM 400. **Contact** • Prerequisite(s): Dena Chubbic: chubbid@scc.losrios.edu CHEM 410 (Quantitative Analysis), 5 units This course is designed for science majors who would like to pursue a career in chemistry, Contact biochemistry, chemical engineering and other Gerardo Ochoa: ochoag@scc.losrios.edu hard science-oriented majors. • Designed for students who plan on continuing Lecture: in-person their science education at a 4-year institution. Laboratory: in-person • Prerequisite(s): Chemistry 401 with grade "C" or better or concurrent enrollment with permission from instructor. • Students attend an in-person lab twice a week. CHEM 420 (Organic Chemistry I), 5 units • This course is designed to prepare students Contact majoring in chemistry or chemical **Fall faculty contact:** engineering for transfer into 4-year Ling Huang: Ling.huang@scc.losrios.edu Joel Hwang: Hwangl@scc.losrios.edu institutions. • Prerequisite(s): Prerequisite(s): CHEM **Spring faculty Contact:** 401 with a grade of "C" or better. Binh Dao: <u>Daob@scc.losrios.edu</u> Prepares students for entrance into *Lecture: in-person* professional schools in the fields of Laboratory: in-person medicine, pharmacy, or dentistry. • Students attend in-person lab twice a week. **CHEM 421 (Organic Chemistry II)** • This course is designed to prepare students **Fall Contact:** majoring in chemistry or chemical Binh Dao: daob@scc.losrios.edu engineering for transfer into 4-year **Spring Contact:** institution. Ling Huang: Ling.huang@scc.losrios.edu

Lecture: in-person Laboratory: in-person

- Prepares students for entrance into professional schools in the fields of medicine, pharmacy, or dentistry.
- This is a continuation of CHEM420.
- Prerequisite(s): CHEM 420 with a grade of "C" or better
- Students attend in-person lab twice a week.

CHEM 423 (Organic Chemistry – Short Survey), 5 units

Contact

Wondimagegn Shewa: shewaw@scc.losrios.edu

Lecture: In-Person

Published on schedule as follows:

LEC Mode: Fully In - Person

Day/Time: with specified day/time Room number is provided in the class

section details.

Lab: In-Person

Published on schedule as follows:

Lab Mode: Fully In - Person

Day/Time: with specified day/time Room number is provided in the class

section details.

- This course is designed primarily for students majoring in the life sciences, nutrition and dietetics, and related fields. This course is not recommended for students majoring in chemistry, chemical engineering, medicine, dentistry, pharmacy, or chiropractics.
- Students attend in-person lab once a week.
- Prerequisite(s): CHEM 401 with a grade of "C" or better.