



SAINT LOUIS UNIVERSITY  
MADRID

**CHEM-2415-M36: Organic Chemistry 1 Lab**  
Fall 2017

**Class Days and Time:** T, 19:00-22:00

**Classroom:** PAH-22

**Prerequisite(s):** Prerequisites: CHEM 1120 or 1140 and CHEM 1125 with a minimum grade of C-. Co-requisites: CHEM 2410 or 2430 must be taken concurrently.

**Credit(s):** 1

**Instructor:** Emilio M. Pérez

**Instructor's Email:** emiliomanuel.perez@slu.edu

**Instructor's Campus Phone:** 91 554 58 58

**Office:** PAH-22

**Office Hours:** T, 18:00-19:00

**Course Description:**

This lab course is aimed to complement the Organic Chemistry lecture course by introducing a number of practical experiments. You will be exposed aspects important in preparative organic chemistry, such as isolation- and purification techniques and the set-up of chemical reactions.

**Course Goals and Student Learning Outcomes:** At the end of the course, students will have learned about:

- The use of fundamental isolation- and purification techniques seen in preparative organic chemistry.
- The use of ball- and stick models for stereochemistry purposes.
- The use of thin-layer chromatography to follow chemical reactions.
- Nucleophilic substitution reactions using alkyl halides
- The safe handling of moderately toxic chemicals.

Saint Louis University - Madrid Campus is committed to excellent and innovative educational practices. In order to maintain quality academic offerings and to conform to relevant accreditation requirements, the Campus regularly assesses its teaching, services, and programs for evidence of student learning outcomes achievement. For this purpose anonymized representative examples of student work from all courses and programs is kept on file, such as assignments, papers, exams, portfolios, and results from student surveys, focus groups, and reflective exercises. *Thus, copies of student work for this course, including written assignments, in-class exercises, and exams may be kept on file for institutional research, assessment and accreditation purposes.* If students prefer that Saint Louis University - Madrid Campus does not keep their work on file, they need to communicate their decision in writing to the professor.

**Required Texts and Materials:**

You should all use the CHEM2415 lab manual available from the bookstore. For further reference, your course textbook is a good source. Needless to say, the Internet is an immense source of information if used in a sensible way. Do also make sure to bring your own lab coat as they are not provided by SLU. Safety specs are provided and their use is mandatory.

**Attendance Policy:**

Attendance is mandatory and you are not allowed to miss more than three lab sessions, which will automatically result in the grade F. Also, if you miss lab, make sure to talk to me ASAP and do always be prepared to show the required certificates (doctor's note, cancelled flight certificate...). Late arrival should be avoided as it has a negative overall impact. I always give a briefing of the experiment and a second briefing means not paying any attention to the students already performing the experiment. In general, I do not punish occasional late arrival, but repeated omission in respecting the scheduled starting time may result in the student not being allowed to participate in the lab session.

**Course Requirements and Grading Rationale/System:**

This lab course is aimed to complement the Organic Chemistry lecture course by introducing a number of practical experiments. You will be exposed aspects important in preparative organic chemistry, such as isolation- and purification techniques and the set-up of chemical reactions. You should make sure to read the lab manual and textbook before attending the lab sessions. Do also take time to prepare prelab questions, as this helps you understanding the purpose of the lab.

After each lab you must hand in a lab report with answers to the assignment questions, when applicable. The reports will be graded according to the usual scale (A-F), and I want to emphasize that grading is more subjective than in a written exam. It is difficult to put boundaries (e.g. A: 91-100%), but good advice is to be very critical when you write the report. I will for instance be more willing to give a good grade to a student who has had some problems with the experiment, but explains it and tries to come up with a reasonable explanation as to why something went wrong, and shows understanding of the theory, rather than someone turning in ½ page of great results with no explanation whatsoever....Please read the instructions about lab reports and grading in the lab manual. In general, I am rather understanding with the first few lab reports, and I will give you detailed feedback for further report writing.

In general, several parts of your performance will be the basis for grading:

Lab work: 15%  
Final exam: 30%  
Lab reports: 40%  
Lab notebook: 5%  
Prelab questions: 10%

The grade will be given following the standard grading scale (A-F).

A 93-100%  
A- 90-92.9%  
B+ 87-89.9%  
B 83-86.9%  
B- 80-82.9%  
C+ 77-79.9%  
C 73-76.9%  
C- 70-72.9%  
D 60-69.9%  
F 0-59.9%

**E-mail:** Campus and course announcements will often be handled by e-mail. Students should check their "@slu.edu" e-mail regularly.

**University Statement on Academic Integrity:** Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic

integrity as matters of serious concern.

The governing University-level Academic Integrity Policy can be accessed on the Provost's Office [website](#). Additionally, SLU-Madrid has posted its academic integrity policy online: <http://www.slu.edu/madrid/academics>. As a member of the University community, you are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions and appeals.

The professor will review these matters during the first weeks of the term. Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program or the Academic Dean of the Madrid Campus.

**University Title IX Statement:** Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX deputy coordinator, Marta Maruri, whose office is located on the ground floor of Padre Rubio Hall, Avenida del Valle, 28 ([mmaruri@slu.edu](mailto:mmaruri@slu.edu); 915-54-5858, ext. 213) and share the basic fact of your experience with her. The Title IX deputy coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the SLU-Madrid's Counseling Services on the third floor of San Ignacio Hall ([counselingcenter-madrid@slu.edu](mailto:counselingcenter-madrid@slu.edu); 915-54-5858, ext. 230) or Sinews Multiplettherapy Institute, the off-campus provider of counseling services for SLU-Madrid ([www.sinews.es](http://www.sinews.es); 917-00-1979). To view SLU-Madrid's sexual misconduct policy and for resources, please visit the following web address: <http://www.slu.edu/Documents/Madrid/campus-life/SLUMadridSexualMisconductPolicy.pdf>.

**Students with Special Needs:** In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. Students who think they might benefit from these resources can find out more about:

- Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor.
- University-level support (e.g., tutoring/writing services, Disability Services) by visiting the Academic Dean's Office (San Ignacio Hall) or by going to <https://www.slu.edu/madrid/academics/student-resources>.

Students with a documented disability who wish to request academic accommodations must contact Disability Services to discuss accommodation requests and eligibility requirements. Once successfully registered, the student also must notify the course instructor that they wish to access accommodations in the course. Please contact Disability Services at [disabilityservices-madrid@slu.edu](mailto:disabilityservices-madrid@slu.edu) or +915 54 58 58, ext. 230 for an appointment. Confidentiality will be observed in all inquiries. Once approved, information about the student's eligibility for academic accommodations will be shared with course instructors via email from Disability Services. For more information about academic accommodations, see "Student Resources" on the SLU-Madrid webpage.

Note: Students who do not have a documented disability but who think they may have one are encouraged to contact Disability Services.

**(IF APPLICABLE): Mandatory Trips/Activities:** Students enrolled in this class must participate and make payment for all mandatory trips/activities. The prices posted on the web are approximate; and the final price will be based on the number of students enrolled on the last day of the Add/Drop period. All students, including those who withdraw from the class after this date, are required to pay these fees, which are non-refundable, unless the trip is cancelled due to low enrollment. Please review SLU-Madrid's trip policies, available on-line.

**Fall 2017 Course Schedule:**

Tuesday, September 5	Course presentation
Tuesday, September 12	Re-Crystallization of Acetanilide
Sunday, September 17	<a href="#">Last Day to Drop a Class Without a Grade of W and /or Add a Class, choose</a>

	<a href="#">Audit (AU) or Satisfactory/Unsatisfactory (S/U) Options</a>
Tuesday, September 19	Extraction: A Separation and Isolation Technique
Tuesday, September 26	Conformations of Alkanes: An exercise with Molecular Models
Tuesday, October 3	Conformations of Cycloalkanes: An exercise with Molecular Models
Tuesday, October 10	Chromatography as a Separation Technique: Thin Layer Chromatography
<a href="#">Thursday, October 12</a>	Fall Break
<a href="#">Friday, October 13</a>	
<a href="#">Saturday, October 14</a>	
<a href="#">Sunday, October 15</a>	
Tuesday, October 17	
Thursday, October 19	<a href="#">Midterm Grades Due.</a>
Tuesday, October 24	Separation and Purification of Organic Liquids: Simple Distillation
Monday, October 30	<a href="#">Last Day to Drop a Class and Receive the Grade of W.</a>
Tuesday, October 31	Separation and Purification of Organic Liquids: Fractional Distillation
<a href="#">Wednesday, November 1</a>	<a href="#">University Closed</a>
Thursday, November 2	<a href="#">Spring Registration Opens!</a>
Tuesday, November 7	<i>Cis-Trans</i> Isomerism in Alkenes
<a href="#">Thursday, November 9</a>	<a href="#">University Closed</a>
Tuesday, November 14	Preparation of Cyclohexene
Tuesday, November 21	Stereoisomerism: Principles Illustrated with Models
Tuesday, November 28	Alkyl Halides: Structure and Reactivity in Nucleophilic Substitutions, Part A
Tuesday, December 5	Alkyl Halides: Structure and Reactivity in Nucleophilic Substitutions, Part B
<a href="#">Wednesday, December 6</a>	<a href="#">University Closed</a>
<a href="#">Friday, December 8</a>	<a href="#">University Closed</a>
Tuesday, December 12	Final Exam
Monday, December 18	<a href="#">Midyear Commencement!</a>
<a href="#">Saturday, December 23</a>	<a href="#">Grades Due to Registrar</a>

#### FALL 2017 FINAL EXAM SCHEDULE

	<b>14 Dec (Th)</b>	<b>15 Dec (Fr)</b>	<b>18 Dec (Mn)</b>	<b>19 Dec (Tu)</b>	<b>20 Dec (Wd)</b>
<b>08:30-11:30</b>	Mn classes that meet at 9:00 & 9:30	Mn classes that meet at 10:00	Mn classes that meet at 11:00 & 11:30	Tu classes that meet at 9:30 & 10:00	Tu classes that meet at 8:00
<b>12:00-15:00</b>	Tu classes that meet at 11:00	Mn classes that meet at 13:00	Tu classes that meet at 14:30	Mn classes that meet at 12:00	Tu classes that meet at 12:30
<b>15:30-18:30</b>	Mn classes that meet at 14:30	Tu classes that meet at 17:00 & 17:30	Mn classes that meet at 16:00	Tu classes that meet at 15:30 & 16:00	Mn classes that meet at 17:30
<b>19:00-22:00</b>	---	---	Mn classes that meet at 19:00	Tu classes that meet at 19:00	---