Chemistry 161B.01, Physical Chemistry, Spring 2023

San José State University Department of Chemistry

Course and Contact Information

Instructor:	Abraham Wolcott, Ph.D., Assistant Professor of Chemistry
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Office Hours:	Tuesday and Thursday, 3 – 4pm or by appointment with Prof. Wolcott
Class Days/Time:	Duncan Hall 010 Tuesdays and Thursdays, 12 – 1:15pm
Classroom:	Duncan Hall 010 (Needs to be changed)
Prerequisites:	Chem 55, Phys 50, Math 32, Chem 161A (with grades of "C" or better, "C-" not accepted)
Credit:	3 units

Textbooks

Required: "Physical Chemistry, Thermodynamics, Structure and Change", 10th Edition, Peter Atkins and Julio De Paula, W.H. Freeman and Company (2011). ISBN-10: 1-4292-9019-6.
This is a low-cost class and book purchases/rentals are ~\$30. By keeping this text the cost of the course was reduced from \$200 to \$30. This is in compliance with California bill SB-1359; Low-cost course material bill (The Donahoe Higher Education Act). You are required to have the text and Prof. Wolcott will verify that the text is in your possession. Please provide a receipt.

Not required: "Solutions manual to accompany Physical Chemistry", 2nd Edition, Charles Trapp and Marshall Cady, W.H. Freeman and Company (2011)

Virtual Reality Headsets and Tablets (SJSU Property)

Virtual reality (VR) headsets that allow VR content to be displayed will be provided free of charge. They will be signed out and you are responsible for their care and safe return. A replacement cost is \$30 for a VR headset. They are provided with a remote control and case. The replacement fee for the remote is \$12 and the case is \$22. The complete set of VR equipment will be returned at the end of the semester. **NOTE: VR content should be viewed while sitting down comfortably in your residence. VR content should be viewed in 10 minute increments.**

Tablets may also be distributed for video production work and will be distributed prior to the assignment being posted on CANVAS. The tablets will also be returned at the end of the semester and a replacement fee is \$85.

Course Web Page (CANVAS)

Copies of the course materials such as this syllabus, assignments, handouts, extra materials and Kahn Academy style lecturers, etc. may be found on the course website hosted by Canvas. We will also be using virtual reality in the class and Canvas will be used to link to instructions and VR assignments. You are responsible for the material on the course website, so you should either check it daily or set up your profile to notify you when there are changes. Camtasia will be used to communicate complex topics and complete mathematical derivations for topics in Thermodynamics, Kinetics, Quantum Mechanics and Spectroscopy. The Kahn-academy style videos are posted to Youtube and as video files on Canvas.

Catalog Course Description

Introduction to the fundamental principles of physical chemistry which includes topics in Quantum mechanics and spectroscopy.

Course Learning Outcomes

The main learning outcomes for CHEM 161B students are as follows:

- 1. Students will explain and apply the concepts of quantum mechanics and spectroscopy to chemical, physical, and biochemical systems.
- 2. Students will be able to derive essential mathematical relationships in quantum mechanics, and spectroscopy.
- 3. Students will apply essential mathematical relationships to chemical, physical, and biochemical problems especially focusing on the electronic structure of atoms, molecules and solids.
- 4. Wide ranging topics will allow students to apply and extrapolate deep information through the use of the rigid rotor approximation, harmonic oscillator and particle-in-abox models.

Program Learning Objectives

This course addresses the following BS/BA Chemistry Program Learning Objectives

- 1. Demonstrate understanding of core concepts, methods and limits of scientific investigation to effectively solve problems in quantum mechanics.
- 2. Demonstrate understanding of core concepts, methods and limits of scientific investigation to effectively solve problems in spectroscopy.

Attendance

Attendance will not be taken in lecture, but you are responsible for all announcements and material presented during class. Lecture material will not necessarily reiterate text material. It is a serious mistake either to depend on a classmate's notes or exclusively on the textbook. To succeed in this course it is essential to attend class, perform the readings prior to class and complete the assigned homework. The instructor is not responsible for covering material you missed due to unexcused absences. There will be no make-up exams and exams are ~80% of your grade!

Reading

The course schedule indicates the lecture topics and the chapters in Atkins and De Paula that are relevant to these topics for each week. You are expected to read these chapters *before* each lecture. It is very important to read the material in the text! It may require multiple readings of the text to absorb the concepts and mathematical descriptions. Not everything in the text will be covered in the lecture. Likewise, some material covered in lecture may not be found in the text. The text is intended to be a primary reference for the material covered in the course.

Homework

Homework problems will be posted to Canvas with problems relevant to the lectures that are important, interesting and challenging. Homework problems will reflect similar questions on the exams. You are encouraged to work with others on homework assignments, but be sure that you are able to solve the problems on your own for exams! Homework keys will be posted on the CHEM 161B Canvas page in a pdf format. Homework problems include both text book problems and the supplemental problems assigned for oral presentations. You will be responsible for any problems in Atkins and De Paula with respect to exams.

It is difficult to learn physical chemistry by simply attending lectures and reading the book (although I highly encourage you do both of these activities!). Lectures are, by their nature a supplement to the text and will help introduce you to the concepts that are necessary for **problem solving**, which is **the key** to learning physical chemistry. Therefore, this requires that you take on the responsibility of working through problems,

both assigned and "unassigned" (at the end of chapters, in other texts, etc.) on your own. You need to spend <u>at least</u> 4-5 hours weekly practicing problems.

Lecture Exams and Final

Some topics have been covered in General Chemistry courses. Review that course materials and exams! Two midterm exams (100 points each), will be given approximately every fourth week. Dates for the exams are on the course schedule (On this greensheet/syllabus below and on Canvas). There will be no make-ups for lecture exams. Should you miss an exam because of illness or equally compelling reasons, you should inform me of the fact as soon as possible, and hopefully before the exam is given. You can do so via e-mail. You will need to provide me with written evidence (doctor's note, police report, etc.) for your absence. If I accept your excuse, I will use the score on the final as your missing exam score. An unexplained or unsatisfactory excuse for missing an exam will result in a grade of zero.

Grading

Your performance in the course will be evaluated as follows:

Homework Problem sets	75 pts.	
On-line quizzes and VR content	50 pts.	
2 Midterm Exams	200 pts.	100 pts. Each
Final Exam	150 pts.	
Extra credit assignments	25 pts.	
Total	500pts.	

NOTE: Grading points are subject to change and the instructor will explain any changes that are implemented.

Failure to take the final will result in a failing grade (F) for the course. The following scale indicates the letter grade has a function of the percentage of points received per student. I reserve the right to adjust the scale downward if conditions warrant, but will not raise the minimum required for any particular grade. Grade percentages are rounded to nearest whole number based on standard rounding practices.

A+ :	>93%	A :	88-93%	B+ :	84-87%	B :	79-83%	B- :	75-78%
C+:	69-74%	C :	65-68%	C- :	60-64%	D:	51-59%	F:	<50%

For example, Fela received 85.4% of points and rounded to 85% is a B+. Nina received 92.7% of points that rounded to 93% and received an A.

Emergencies and Building Evacuations

If you hear a continuously sounding alarm, or are told to evacuate the building by an Emergency Coordinator, walk quickly to the nearest exit. Take your personal belongings as you may not be allowed to return. Follow the instructions of the Emergency Coordinators. Be quiet so you can hear instructions. Once outside, move away from the building. Do not return to the building unless the Police or the Emergency Coordinator announces that this is permissible.

Library Liaison

Yen Tran, yen.tran@sjsu.edu

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's <u>Catalog Policies</u> section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic year calendars document on the <u>Academic Calendars webpage</u> at http://www.sjsu.edu/provost/services/academic_calendars/. The <u>Late Drop Policy</u> is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes. Information about the latest changes and news is available at the <u>Advising Hub</u> at http://www.sjsu.edu/advising/.

University Policies

Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S15-7 (<u>http://www.sjsu.edu/studentconduct/policies/</u>) requires you to be honest in all your academic course work. Executive order 1098 also outlines student conduct and honesty policies and can be found on the student conduct website. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The <u>Student Conduct and Ethical</u> <u>Development website</u> is available at http://www.sjsu.edu/studentconduct/.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. Any text, diagram, chart or data that is not the product of the student author must cite a reference for the source as appropriate. This includes (but is not limited to) material taken from reference books, tables, primary research literature, laboratory manuals and computer programs. Failure to adhere to the principles that protect the academic integrity of this course will be dealt with according to the policies and procedures of the Department of Chemistry, the College of Science and San Jose State University.

Workload

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in <u>University Policy S12-3</u> at <u>http://www.sjsu.edu/senate/docs/S12-3.pdf</u>.

Class Attendance

NOTE that <u>University policy F69-24</u> at http://www.sjsu.edu/senate/docs/F69-24.pdf states that "Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading."

Consent for Recording of Class and Public Sharing of Instructor Material

<u>University Policy S12-7</u>, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor's permission to record the course and the following items to be included in the syllabus:

- "Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material."
 - It is suggested that the greensheet include the instructor's process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
 - In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.
- "Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent."

General Expectations, Rights and Responsibilities of the Student

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU's policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. See <u>University Policy S90–5</u> at http://www.sjsu.edu/senate/docs/S90-5.pdf. More detailed information on a variety of related topics is available in the <u>SJSU catalog</u>, at http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html. In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. <u>Presidential</u> <u>Directive 97-03</u> at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the <u>Accessible</u> <u>Education Center</u> (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

Note from Dr. Wolcott: This ensures protection of privacy as well as allows for adequate accommodations to be provided in cases where they are necessary. Assignments missed due to disabilities or other special concerns will not be accepted except as requested by the AEC.

SJSU Peer Connections

Peer Connections, a campus-wide resource for mentoring and tutoring, strives to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. You are encouraged to take advantage of their services which include course-content based tutoring, enhanced study and time management skills, enhanced critical thinking strategies, decision making and problem-solving abilities, and campus resource referrals.

In addition to offering small group, individual, and drop-in tutoring for a number of undergraduate courses, consultation with mentors is available on a drop-in or by appointment basis. Workshops are offered on a wide variety of topics including preparing for the Writing Skills Test (WST), improving your learning and memory, alleviating procrastination, surviving your first semester at SJSU, and other related topics. A computer lab and study space are also available for student use in Room 600 of Student Services Center (SSC).

Peer Connections is located in three locations: SSC, Room 600 (10th Street Garage on the corner of 10th and San Fernando Street), at the 1st floor entrance of Clark Hall, and in the Living Learning Center (LLC) in Campus Village Housing Building B. Visit <u>Peer Connections</u> <u>website</u> at http://peerconnections.sjsu.edu for more information.

Course Schedule

The following schedule of lecture topics is tentative and subject to change at the instructor's discretion. (**Exam dates are not tentative and should be noted in your calendar immediately.**) Readings should be completed **before** the lecture.

Week	Date	Readings from Atkins and De Paula, Topics for Lectures, Exams
1	Thu. 1/26	Classical Mechanics and Introduction to Quantum
I		
2	Tue. 1/31	Chapter 74/78 Introduction to quantum theory
2	Thu. 2/2	Chapter TATE. Introduction to quantum theory

Week	Date	Readings from Atkins and De Paula, Topics for Lectures, Exams								
	Tue. 2/7	Chanter 70. The mineiples of muchture theory								
3	Thu. 2/9	Chapter 7C. The principles of quantum theory Chapter 8A. Translation (Particle-In-A-Box)								
	Tue. 2/14	Chapter 8A Translation (Derticle In A Pay)								
4	Thu. 2/16	Chapter 8B. Vibrational Motion (Harmonic Oscillator)								
	Tue. 2/21	Chapter 8C. Rotational Motion (Rigid Rotor)								
5	Thu. 2/23	Chapter 9A Hydrogenic Atoms								
	Tue.2/28	Chapter 9A. Hydrogenic Atoms								
6	Thu. 3/2	Chapter 9B. Many-electron atoms								
	Tue. 3/7	Chapter 9C. Atomic Spectra								
7	Thu. 3/9	Midterm Exam #1								
	Tue. 3/14	Chapter 10A. Valence Bond Theory (VB Theory)								
8	Thu. 3/16	Chapter 10B. Principles of molecular orbital Theory (MO								
		Theory)								
	Tue. 3/21	Chapter 10C. Homonuclear diatomic molecules								
9	Thu. 3/23	Chapter 10D. Heteronuclear diatomic molecules								
	Tue, 3/28									
10	Thu 3/30	Spring Break Spring Break (PARTY TIME)								
		Spring Break Spring Break								
		Chapter 10E. Polvatomic molecules								
11	Tue. 4/4									
	Thu. 4/6	Chapter 11A. Symmetry elements								

Week	Date	Readings from Atkins and De Paula, Topics for Lectures, Exams
	Tue. 4/11	Chapter 11B. Group theory
12	Thu. 4/13	Chapter 11C. Applications of symmetry
	T . 4/40	Midterm #2
	Tue. 4/18	Chapter 12A/B. General features of molecular spectroscopy
13	Thu. 4/20	and Molecular Rotation
	Tue. 4/25	Chapter 12C. Rotational Spectroscopy
14	Thu. 4/27	Chapter 12D. Vibrational spectroscopy of diatomic molecules
	Tue. 5/2	
15	Thu. 5/4	Chapter 12E. Vibrational spectroscopy of polyatomic molecules
		Chapter 13A. Electronic transitions
	Tue. 5/9	Chapter 13B. Electronic Transitions
16	Thu. 5/11	Chapter 13C. Lasers
	Mon. 5/15	Last Day of Class for Spring 2023
17	Wednes. 5/17	Final Exam Review
	Thurs. 5/18	Final Exam: 9:45am – 12pm

Important Dates

February 20 th	Last day to add/drop without a "W"
May 15 th	Last day of instruction
May 16 th	Study day
May 18 th	Final Examination

Disclaimer

This document is subject to change with fair notice.

List of Program Learning Outcomes (PLOs)*

I. Core Chemistry Ideas (Fundamentals)

PLO 1.1 - Students will be able to identify, formulate, and solve a range of chemistry problems (fundamental to complex) through application of mathematical, scientific, and chemical principles.

PLO 1.2 - Students will be able to recognize, relate, and/or apply chemistry terms and concepts topropose and solve interdisciplinary and multidisciplinary real world problems.

II. Experimentation/Lab Practice

PLO 2.1. Students will be able to develop an experiment to address a hypothesis using literature and execute the planned experiment using standard chemistry techniques.

PLO 2.2 Students will be able to *a*cquire, record, and critically evaluate data through use of instrumentation and software, appropriate record keeping practices, figure preparation, and scrutiny of experimental results.

PLO 2.3 Students will be able to recognize and assess laboratory hazards, practice risk minimization, and conduct safe laboratory practices.

III. Community, Social, Societal Implications

PLO 3.1 Students will be able to explore, critique, and reflect on how chemistry relates to society, culture, and issues of equity and ethics that shape their scientific beliefs and identities.

PLO 3.2 Students will be able to identify as scientists within the scientific community throughpeer reviews, engaging in collaborations, and participating in mentorship.

IV. Communication Skills

PLO 4.1 Students will be able to design and deliver engaging presentations on diverse chemistry topics in a professional manner and with clear, concise organization that demonstrates mastery of the topic.

PLO 4.2 Students will be able to integrate research findings into a concise original written report that either analyzes collected data and obtained results or reviews and reflects on published scientific work.

PLO 4.3 Students will be able to identify an audience and construct a message tailored to that audience and act as a science ambassador by conveying the importance of the research or topic of study.

PLO 4.4 Students will be able to prepare professional documents, such as résumés and cover letters, that accurately represent the students' skills and knowledge for graduate/professional school or potential future employers.

2. Program Learning Outcomes Map - Map of PLOs to <u>University Learning Goals</u>

1. Social and Global Responsibilities. (PLO 3 & 4) An ability to consider the purpose and function of one's degree program training within various local and/or global social contexts and to act intentionally, conscientiously, and ethically with attention to diversity and inclusion.

2. Specialized Knowledge. Depth of knowledge required for a degree, as appropriate to the discipline.

3. Intellectual Skills (PLO 1 and 2)

- a. Fluency with specific theories, assumptions, foundational knowledge, analytical and interpretive protocols, tools, and technologies appropriate to the discipline or field of study.
- b. Skills necessary for mastery of a discipline at a level appropriate to the degree and leading to lifelong learning, including critical and creative thinking and practice, effective communication, thorough and ethical information gathering and processing, competence with quantitative and/or qualitative methodologies, and productive engagement in collaborative activities.
- c. For undergraduate students in a baccalaureate program: an understanding of critical components of broad academic areas, including the arts, humanities, social sciences, quantitative reasoning, and sciences.

4. Integrative Knowledge and Skills (PLO 4)

- a. Mastery in each step of an investigative, creative, or practical project (e.g., brainstorming, planning, formulating hypotheses or complex questions, designing, creating, completing, and communicating) with integration within and/or across disciplines.
- b. An ability to articulate the potential impacts of results or findings from a particular work or field in a societal context.

5. Applied Knowledge. An ability to apply theory, practice, and problem solving to new materials, settings, and problems.

	Program Learning Outcomes(PLO)											
University Learning Goals(ULGs)	P L 0 1 1	PL O 1.2	PLO 2.1	PLO 2.2	PLO 2.3	PLO 3.1	PLO 3.2	PLO 4.1	PLO 4.2	PLO 4.3	PLO 4.4	
Social and Global Responsibilities		Х				х	х				Х	
Specialized Knowledge	х	х	Х	Х	х							
Intellectual Skills	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

Integrative Knowledge and Skills		х	х	Х			х	Х	Х	Х
Applied Knowledge and Skills	х	х	х	Х	х	х	х	Х	Х	Х

3. Alignment Map– Matrix of PLOs to Courses

		Program Learning Outcome (PLO) 1. Introduced 2. Reinforced 3. Assessed These categories are meant for the courses that align with the PLOs - if the PLO is introduced and assessed it would be marked 1.3. If a PLO is reinforced and assessed it would be 2.3. If a course introduces the PLO, but we don't wish to assess xit, it would be 1. If a course reinforces, but is not assessed just 2. Lastly, we could mark a course as 3 to simply state that it will be a course in which the PLO is assessed.												
	I. Cor Cl Id	e hem eas	II. Experimentation/ LabPractice			III. Comm cial an Societ Implica	nunity/So Id al ations	IV. Co	IV. Communication Skills					
Courses	PLO 1.1	PLO 1.2	PLO 2.1	PLO 2.2	PLO 2.3	PLO 3.1	PLO 3.2	PLO 4.1	PLO 4.2	PLO 4.3	PLO 4.4			
CHEM 1A - General Chemistry A	1,2	1,2	1	1	1,2, 3	1	1							
CHEM 1B - General Chemistry B	1,2	1,2	1	1	1,2, 3	1	1							
CHEM 55 - Quantitativ eAnalysis	1,2	1				2	2							
CHEM 55L - Quantitativ eAnalysis Laboratory	1,2	1	1	1,2	1,2, 3		2,3		1					
CHEM 100W - Writing Workshop: Chemical Communicatio ns	2	2				2,3	2,3	1,2	1,2	1,2	1,2,3			
CHEM 101 - Chemistry andthe Computer	1,2, 3	2,3		2		2	2							
CHEM 112A - Organic Chemistr y	1,2	1,2				2	2							
CHEM 112B - Organic Chemistr V	1,2	1,2				2	2							

CHEM 113A - Organic Chemistry Lab A	1,2	1	1	1	1,2, 3	2	2,3		1		
CHEM 113B - Organic Chemistry Lab B	1,2	1	2	2	1,2, 3	2	2,3		2,3		
CHEM 114 - Advanced Organic Chemistry Lab	3	3	3	3	1,2, 3	2	3	3	3	2,3	
CHEM 120S - Chemical SafetySeminar					1,2, 3						
CHEM 130A - Biochemistry A	2,3	2,3				2,3	2,3		1,2		
CHEM 130B - Biochemistry B	2,3	2,3				2,3	2,3		2		
CHEM 130C - Biochemistry C	2,3	2,3				2,3	2,3		2	2,3	
CHEM 131A - Intro Biochem Lab	1,2		2	2	1,2, 3	2,3	2,3		2		
CHEM 131B - Advanced Biochem Lab	3	3	3	3	1,2, 3	2,3	2,3	3	3	2,3	
CHEM 145 - Inorganic Chemistry	2,3	2,3				2,3	2,3				
CHEM 146 - Physical-Inorgan ic Techniques	3	3	3	3	1,2, 3	3	3	3	3	2,3	
CHEM 155 - Instrumental Analysis	2	2	2	3	1,2, 3	3	3				
CHEM 160 - Physical Chemistry	2,3	2,3				2,3	2,3				
CHEM 161A - Physical Chemistry A	2,3	2,3				2,3	2,3	2,3	2,3		2,3
CHEM 161B - Physical Chemistry B	2,3	2,3				2,3	2,3	2,3	2,3		2,3

CHEM 162L - Physical Chemistry Lab	2	2,3	2	3	1,2, 3	2,3	3	2	2,3		
CHEM 170A - Foundations in Macromolecular	2	2				2,3	2,3		2,3	2,3	
CHEM 180 - Individual Studies	1,2, 3	1,2, 3	1,2, 3	1,2, 3	1,2, 3	1,2	2,3	1,2, 3	1,2, 3	1,2, 3	1,2,3

CHEM 184 - Directed Reading						1,2,3
CHEM 190 - Intro to Research					2,3	

1. Introduced 2. Reinforced 3. Assessed

4. Planning – Assessment Schedule

PLO	2023	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
1.1	А					А	I				
1.2	А					А	I				
2.1		А					А	I			
2.2		А					А	I			
2.3					А					А	I
3.1			А					А	I		
3.2			А					А	I		
4.1				А					А	I	
4.2				А					А	1	
4.3					А					А	1
4.4					А					А	I

A - When PLO will be assessed

I - Estimated year to implement changes as a result

of assessments R – When reassessment is planned

SJSU ACADEMIC YEAR CALENDAR 2022/23*

FALL 2022

Monday	July 4	Independence Day - Campus Closed (I)
Wednesday	August 17	Academic Year Begins – Fall Semester Begins
Wednesday - Thursday.	August 17 and 18	Pre-Instruction Activities: Faculty Orientation, Advisement,
	J.	Faculty Meetings and Conferences (P)
Friday	August 19	First Day of Instruction – Classes Begin
Monday	September 5	Labor Day - Campus Closed (L)
Thursday	September 15	Last Day to Drop Courses without an Entry on Student's
-		Permanent Record (D)
Thursday	September 15	Last Day to Add Courses & Register Late (A)
Friday	September 16	Enrollment Census Date (CD)
Tuesday	September 20	National Voter Registration Day
Monday	October 10	Counties offer early voting sites - to find a location
		CAEarlyVoting.sos.ca.gov
Monday	October 24	Last day to register to vote online or by mail ahead of the
		General Election
Tuesday - Monday	October 25 - 31	Same Day Voter Registration is available voters can
Tuesday - Tuesday	November 1-8	"conditionally" register and vote at a county elections office
		or polling location after the voter registration deadline, up to
		and including Election Day
Tuesday	November 1	Deadline for county elections official to send a registered
		voter a vote-by mail ballot
Tuesday	November 8	General Election
Friday	November 11	Veteran's Day - Campus Closed (V)
Wednesday	November 23	Non-Instructional Day – (NI)
Thursday	November 24	Thanksgiving Holiday - Campus Closed (T)
Friday	November 25	Rescheduled Holiday - Campus Closed (RH)
Tuesday	December 6	Last Day of Instruction - Last Day of Classes
Wednesday	December 7	Study/Conference Day (no classes or exams) (SC)
Thursday - Friday	December 8-9	Final Examinations (exams)
Monday - Wednesday	December 12-14	Final Examinations (exams)
Thursday	December 15	Final Examinations Make-Up Day (MU)
Friday	December 16	Grade Evaluation Day (E)
Thursday - Friday	December 15-16	Commencement (C)
Monday	December 19	Grades Due From Faculty - End of Fall Semester (G)
Monday	December 26	Christmas Holiday - (Observed) - Campus Closed (CH)
-	December 25	WINTER RECESS

SPRING 2023

Monday	. January 2	. New Year's Day- (Observed) - Campus Closed (N)
Monday	. January 16	. Dr. Martin Luther King, Jr. Day - Campus Closed (K)
Monday	. January 23	. Spring Semester Begins
Monday-Tuesday	. January 23-24	. Pre-Instruction Activities: Faculty Orientation, Advisement,
		Faculty Meetings and Conferences (P)
Wednesday	. January 25	. First Day of Instruction – Classes Begin
Monday	. February 20	. Last Day to Drop Courses without an Entry on Student's
		Permanent Record (D)
Monday	. February 20	Last Day to Add Courses & Register Late (A)
Tuesday	. February 21	. Enrollment Census Date (CD)
Monday - Friday	March 27-March 31	. Spring Recess (*SPRING RECESS*)
Friday	. March 31	. Cesar Chavez Day - Campus Closed (CC)
Monday	. May 15	Last Day of Instruction – Last Day of Classes
Tuesday	. May 16	. Study/Conference Day (no classes or exams) (SC)
Wednesday - Friday	. May 17-19	. Final Examinations (exams)
Monday - Tuesday	. May 22-23	. Final Examinations (exams)
Wednesday	. May 24	. Final Examinations Make-Up Day (MU)
Thursday	. May 25	. Grade Evaluation Day (E)
Friday	. May 26	. Grades Due From Faculty (G)
Friday	. May 26	. End of Academic Year - End of Spring Semester
Wednesday-Friday	. May 24-26	. Commencement (C)
Monday	. May 29	. Memorial Day - Campus Closed (M)

*Subject to change based on factors beyond campus control

To obtain an electronic copy of this calendar and other AY Calendars, please visit http://www.sjsu.edu/provost/academic_affairs/resources/academic_calendars/ 2022/23 AY Cal July 27, 2022

SJSU ACADEMIC YEAR CALENDAR 2022/23

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Fall JULY		S	S	I					S	S						S	S						S	S						S	S
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DECEMBER			S	S			sc	е	x	S	S	а	m	s	С MU	C E	S	S	G					S	S	СН					S
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FACULTY DUTY DAY Fall Spring Total - Faculty Dut - Day of Instruc - Non-Instruc - Holiday, Ca	CULTY DUTY DAYS DAYS OF INSTRUCTION Fall 85 Fall 73 Spring 85 Spring 74 Total 170 Total 147 - Faculty Duty Day - Day of Instruction - Non-Instruction Day, Non-Faculty Duty Day - - Holiday, Campus Closed -							 A - End of Official Add Period C - Commencement D - End of Official Drop Period E - Grade Evaluation Day G - Final Grades Due Day I - Independence Day K - Dr. Martin Luther King, Jr. Day 									 L - Labor Day M - Memorial Day N - New Year's Day P - Preinstruction Activity Day S - Weekend T - Thanksgiving Day V - Veteran's Day 							 CC - Cesar Chavez Day CD - Census Date CH - Christmas Holiday MU - Final Exams Makeup Day M - Non-Instructional Day SC - Study/Conference Day RH - Rescheduled Holiday 							