



CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

Supplemental Instruction

Faculty and Staff Information – 2023-24 AY

A brief introduction to the ICSI Accredited
CSUSB Supplemental Instruction Program (SI)— one of ASUA's
Academic Centers for Excellence (ACE), serving undergraduate students
enrolled in traditionally high DFWI-rate courses across campus

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To learn more, please visit the SI website at
<https://www.csusb.edu/supplemental-instruction>
or contact us at SI@csusb.edu.





Faculty & Staff FAQs

What is Supplemental Instruction (SI)?

Supplemental Instruction (SI) is an evidence-based, locally-proven method for helping students succeed in challenging courses by providing additional subject-matter discussion, support, and guidance to strengthen critical college skills. The CSUSB SI Program is fully accredited by the International Center for Supplemental Instruction.

Supplemental Instruction sessions are designed to help students:

- Strengthen their understanding of the material presented in course lectures and texts
- Develop both general and content specific learning strategies and study skills
- Review for exams and develop effective test taking strategies

SI sessions meet twice a week for 50 minutes each (usually just after the content course lecture)

How are courses identified as potentially benefiting from SI support?

SI does not target “high-risk” students, but rather uses Institutional Research and other data to identify historically difficult courses. Qualifying courses may be characterized by...

- High D, F, W, and I rates (especially those 20% or higher)
- Infrequent examinations that focus on higher cognitive levels
- High student to instructor ratio (student has little opportunity for interaction with the professor or the other students)
- Those serving as a gateway or key sequence course
- Large amounts of weekly readings from both difficult textbooks and secondary library reference works
- Faculty or academic department identification as exceptionally challenging within a major course of study

Who can attend SI?

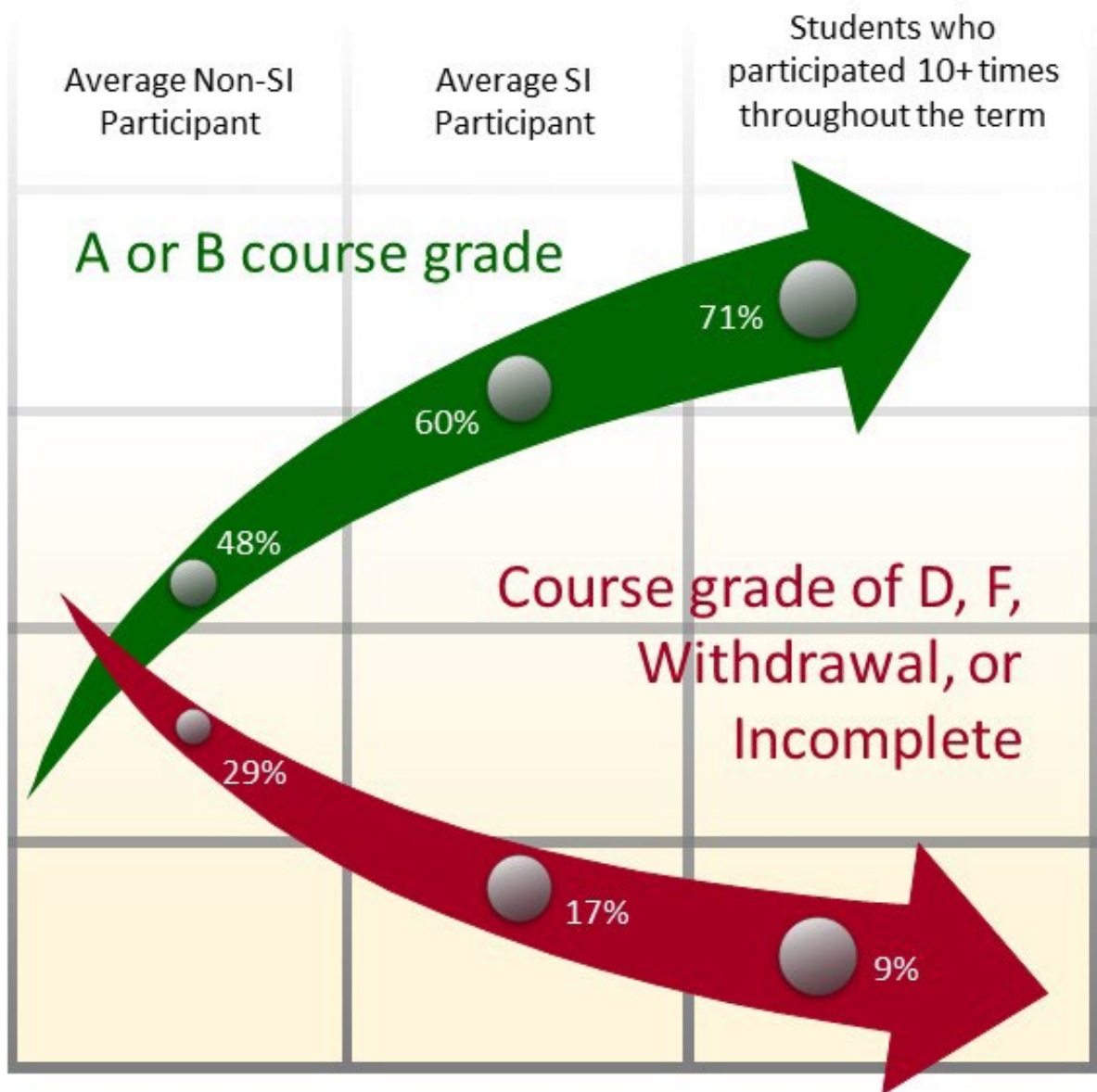
SI is open to all students enrolled in the corresponding content course. SI sessions are limited to 20 students to maintain a small group environment. Seats are filled on a first-come basis.

Are there notable trends among students who choose to participate in SI?

According to a report by the Office of Institutional Research on SI trends at CSUSB:

- Full-Time and course-repeating students attended more SI sessions than their counterparts.
- No significant difference was found on SI participation across ethnic groups.
- Matched sample data analysis demonstrated statistically significant associations between SI participation and course success (higher course GPA and lower DFWI-rates) compared to non-SI participants regardless of course, gender, ethnicity, student level, Pell grant status, cumulative GPA, high school/transfer GPA, full/part-time status, and course repeat status.

Is SI an effective academic support model for CSUSB students?



** Based on averages of all SI supported courses during the fall 2022 term*

What learning strategies are typically used in SI sessions?

- Identifying Key Concepts
- Paired Problem Solving
- Teaching to Learn
- Visual Mapping
- Informal Quizzes
- Note Processing
- Sequencing
- Jigsaw Text Review
- Interactive Games
- Study Planning and Techniques
- Practical Application

Who are the SI Leaders?

SI Leaders are undergraduate (sometimes graduate) students who have previously been successful in the corresponding content course or an equivalent course in the subject area

SI Leaders are employed by the Office of Academic Support and Undergraduate Advising as Instructional Student Assistants and are selected through a screening process from a bank of applicants recommended by the faculty member or department for which they will provide support

Prior to each semester, SI Leaders are trained on designing and conducting SI sessions, small group learning dynamics, general and discipline specific learning strategies, effective test taking skills, etc.

SI Leaders attend all corresponding content course lectures, prepare for and hold 50 min. SI sessions twice a week, and work closely with course instructor and an SI Senior Leader throughout the semester

What are the characteristics of highly qualified SI leaders?

Active understanding of concepts covered in the supported course

Strong interpersonal communication skills

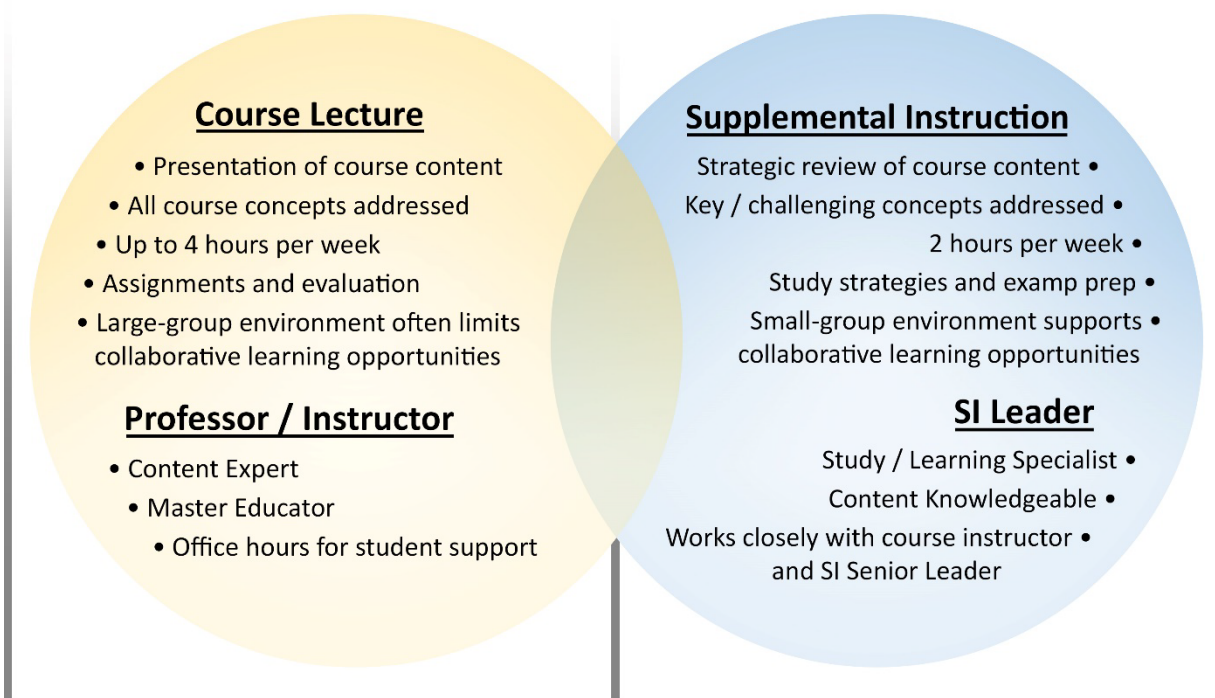
Ability to establish and maintain rapport with students and faculty

Effective personal study habits demonstrated by overall academic success

Exemplary work ethic with experience in independent preparation, task, and time management

Ability to identify, design, and employ effective small group learning strategies relevant to course material

How do course instructors and SI Leaders partner toward student success?





SI Quick Facts for the 2022-23 AY

Supplemental Instruction (SI) Overview

Supplemental Instruction (SI) is an evidence-based, locally-proven method for helping students succeed in challenging courses by providing additional subject-matter discussion, support, and guidance to strengthen critical college skills.

- SI is free and open to all students enrolled in the corresponding course
- SI sessions meet twice a week for 50 minutes each
- Each session is limited to 20 students to create and maintain a small group learning environment

CSUSB SI Support by the Numbers

2022-23 SI Support Breakdown

- 30 SI Leaders (Peer Facilitators)
- 44 unique SI Sessions met twice a week (~1,320 meetings for 2022-23)
- 31 supported courses (124 total sections) across 3 academic colleges
- 3,125 individual student contact hours (average of ~101 hours/course, ~71 hours/SI Session)

SI Program Outcomes

2022-23 Quantitative Data and Analysis

- The DFWI rate among SI participants was approximately half that of non-SI participating students enrolled in the same courses— 30.79% for non-SI participants vs. 15.69% for SI-participants
- SI participants earned an average course GPA of ~10% higher than non-participants in supported course sections (program average)
- Regular SI participation correlates with higher levels of course success— Students who visited SI 15+ times per term failed at less than 4 times the rate of those who participated infrequently (1-4 visits)
- More than 75% of SI participants were underrepresented minority (URM) students

2022-23 Qualitative Feedback

- SI participants rated the following statements according to their experience with the program*
 - SI positively enhanced my knowledge/performance in the content course – 96.55%
 - The SI sessions were helpful – 100%
 - SI helped me develop useful skills that I can apply in other classes – 93.1%
 - The SI sessions were enjoyable – 98.27%
 - I would recommend SI to my friends – 100%
 - I would participate in SI in the future – 98.27%

* Feedback from a sample of Spring 2023 SI participants



What Students, Leaders, & Faculty are Saying About SI

Student Participants

SI participants were asked what they would say to other students who are considering participating in Supplemental Instruction:

- "...go for it! It has been so helpful and has improved my engagement and progress in class."
- "You have someone that knows exactly what you are learning in class and can help you if you have any misunderstanding."
- "It breaks down the material taught in lectures and makes it more understandable."
- "This is the best place to learn techniques on how to study!"
- "It is fun to help other students."
- "Definitely take it, SI has helped me feel very confident and comfortable for my exams."
- "...it's a great way to get involved with people in your class."
- "Don't be afraid to join and ask questions."



SI Leaders

SI Leaders were asked to share personal discoveries they have made as a result of their role with Supplemental Instruction:

- "This role has taught me more about how to manage my time and work with others' schedules and personalities. I've also learned a bit more about my leadership style. I am enjoying... this role, and I look forward to growing as a leader and refining my skill set."
- "I've realized that there's always more to learn, regardless of how well I do in a class on a subject. I think SI taught me that I should always stay curious and humble and work on improving myself."
- "I have the potential to be a leader. I've learned that I can be of help to others, in more ways than I had thought possible, and I can always improve more."
- "Overall, this experience as an SI Leader has been a valuable opportunity for personal and professional growth, teaching me to believe in myself and to confidently pursue my passions and goals."
- "I've learned that I'm very passionate about helping others, and I've found that I really enjoy this role and might consider teaching as an additional career later down the road. I'm sad this was my first and last semester doing SI but I'm glad to have been a part of it!"
- "Throughout the semester, I have gained a newfound sense of confidence in myself and my abilities. ...I have also learned how to effectively engage with students and professors, allowing me to make meaningful connections and expand my knowledge and skills. This, I think I have been able to push myself beyond my perceived limitations, understanding that there is nothing that I cannot achieve if I set my mind to it."

Faculty Partners

Faculty were asked to write letters of support based on their firsthand experience with CSUSB SI:

Jeremy A. Murray, Ph.D. (Professor, History Department – CSBS)

“The impact of SI and SI leaders on the enrolled students has been remarkable. ...Both grades in the class and the overall learning experience in the classes were enhanced considerably, and the peer-to-peer encounters with SI leaders allowed enrolled students to see what it takes to excel and turn around and help fellow students excel too.

In my own classes that included SI, and those of other faculty members, SI leaders and faculty members communicated regularly in person and via email about the course content, required projects and assignments, and more. SI leaders went out of their way to make sure that what they were presenting in their SI sessions was relevant and as helpful and supportive as possible of the mission of the course for which it was assigned. This kind of deep engagement and professionalism allowed me and my colleagues to make the most of SI sessions affiliated with our courses, and in turn, it allowed our SI leaders to understand what goes into planning a successful university-level course. This has been especially helpful for those of our SI leaders who are thinking of teaching history at the university level, and going into the field of academic history studies.

It has been a pleasure and a privilege to work the SI student leaders and the professional SI coordinators here on the CSUSB campus. It is obvious that this program benefits our students enormously, and it is gratifying to watch the program take root here. I have no doubt that the program is becoming a familiar and welcome component in many courses that desperately need this kind of pedagogical support and this boost in student engagement.”

Sonia Perez-Gamboa, M.S (Lecturer, School of Computer Science and Engineering – CNS)

“Over the years, I have had different SI leaders, but all have shown great knowledge in the course, professionalism, and dedication to the SI program. SI leaders make sure to attend every single lecture and take notes, so that they are familiar with the course material and they can prepare proper exercises for the students. My SI leaders always make sure to meet with me at least once a week to further discuss course material. They use this time to ask me if there are any particular topics I want them to focus on during the SI sessions. I also use this time to get feedback from them to know if there is something in particular my students are struggling with. This helps me in modifying my lectures as needed to ensure that I am presenting material in a clear, well-paced manner.



I fully support the SI program not just because of my personal experience with the SI leaders, but also because of the positive experience it has been for my students who participate. With every term that I have had SI, I make it a point to encourage as many of my students to attend. Without even asking, I always get feedback from my students who thank me for recommending they attend, since they report back that they feel as though SI has helped solidify their understanding of material covered in class. If a student is having trouble with a specific topic, the SI session exercises allow them to have more practice and work with their peers to learn the topic in a slightly different manner, and sometimes this is all it takes for it to click for them. For students who already have a solid understanding of the course material, they’ve expressed that SI sessions allow them to explore more difficult practice exercises, further enhancing their understanding. This has

shown that SI sessions can be beneficial to all students, regardless of their level of understanding of the material. Of the students that I know that regularly attend SI sessions, these have been students that succeed in the course and get an A or a B.”

Kate Liszka, Ph.D. (Associate Professor, History Department – CSBS)

“I have been fortunate to work with three different SI leaders while teaching... a large lecture, general education class of 150 students. Very often individual students can get lost in the numbers, and students whose strength is not history often get bogged down in understanding what they need to study. Supplemental Instructors have been an amazing asset to combat both problems. Often students who need extra support reach out to the SI before they would the professor. ...They have had a very influential role on the students.

The three outstanding SI leaders that I had the privilege to work with took the job very seriously. ...I always talked to the SI leaders before, during, and at the end of the course in order to make sure that we were both doing our coordinated best for the students. SI leaders have been invaluable in providing me with critical feedback as to how well the students understand the material and even make suggestions about how I can improve the course all together. They are an amazing group of students to have in the classroom. And I hope that I get to work with an SI leader every time I teach a large-lecture course. They make such a valuable difference.”



Melissa Iyengar, M.S. (Lecturer, Biology Department – CNS)

“Due to the enrollment size of [my] courses, it is challenging to incorporate collaborative learning opportunities for students to practice, learn, and engage with lecture material, learn from peers, and ask questions. Supplemental Instruction allows students to learn critical concepts in small groups in a welcoming and friendly environment. It provides additional educational support to many students by teaching them how to identify and study critical concepts, take notes, and utilize different study strategies. At the beginning of the semester and through the LMS we utilize, Canvas, I also address these concepts. Still, I have found that students are more receptive to advice from a peer than an instructor.

From Fall 2020 to Spring 2022, over 75% of the students that participated in SI for Biology 2230 and 2240 were from underrepresented minorities (URM). The addition of supplemental instruction allows URM students to engage with crucial material, practice, and ask questions in small group settings without fear that it will negatively impact their grades. The SI program has helped many URM students succeed in the course, as DFWI percentages were 15-25% lower for the URM student that utilized the SI program.

Beyond assisting students in the course, the supplemental instruction program has allowed me to reflect on course content and how I present material through regular interaction with the SI leaders. ...The SI leaders share their learning plan for the material and how they presented a concept to students, and I also share small group learning techniques. These interactions allow SI leaders to collaborate with me on teaching techniques, communicate where students struggle, and how we can improve the course and student success rates.”